## Topical Issues Of Road Safety In The Kyrgyz Republic

# Amanai Akmatova<sup>1\*</sup>, Egemberdi Toktorov<sup>2</sup>, Adel Babaeva<sup>3</sup>, Alim Bazhikbaev<sup>4</sup>, Markilen Babaev<sup>5</sup>

<sup>1</sup>Jurisprudence and Law Enforcement Activities Cycle, Finance and Law College, Osh State University, Osh, Kyrgyzstan

<sup>2</sup>Jurisprudence and Law Enforcement Activities Cycle, Finance and Law College, Osh State University, Osh, Kyrgyzstan

<sup>3</sup>Department of Oriental Studies, Osh State University, Osh, Kyrgyzstan

<sup>4</sup>Jurisprudence and Law Enforcement Activities Cycle, Finance and Law College, Osh State University, Osh, Kyrgyzstan

<sup>5</sup>Department of Pedagogics and Elementary Education, Osh State University, Osh, Kyrgyzstan

\*Corresponding author: Amanai Akmatova

\*Jurisprudence and Law Enforcement Activities Cycle, Finance and Law College, Osh State University, Osh, Kyrgyzstan

#### **Abstract**

Road accidents are caused by low discipline of road users, which leads to injury and death of hundreds of people. The work focuses on the main factors of accidents including road users' low discipline with drivers' low qualification. Road safety laws, especially those addressing five key road safety hazards such as speed, drunk driving and motorcycle helmets, seat belts, contribute to improving road users behavior by reducing crashes, injuries, child restraints and deaths. We took into account statistics, where we examined the reasons why people are dying. Authors believe that it is not necessary to fight the accidents consequences, but to eliminate causes. This article notes that the greatest positive changes in road user behavior occur when traffic safety laws are supported by robust and sustainable enforcement and public awareness. Authors especially note that road user's trust and respectful attitude is necessary, which is the postulate in solving road safety problems.

**Keywords:** road traffic accident, safety, law, risk factors, speed, accident, crime, risk.

### I. Introduction

Road transport system is becoming increasingly complex due to the digital revolution rapidly introducing a vast, well-established, and regulated road transport system (Kitchin, 2014; Stevenson & Bhalla, 2020). Road safety is affected by objective and subjective factors including strip condition, vehicles features, people quantity at the time of the incident, highway arrangement and weather conditions (Rubtsova, 2021).

Traffic fatality level prediction was analyzed in Kazakhstan for 2019-2021 on the basis of precise visualization of obtained results (Igissinov et al., 2020)

In Kyrgyzstan the standardized rate of death from motor vehicle collisions remains higher than for the region of central Asia, as it was increased by more than 60% between 2000 and 2005 and reached 17.43 per 100 000 people in 2006

(Artikova et al., 2011). As a result of judicial and investigative practices, the causes of road accidents are the inattention of drivers on the roads, non-compliance by drivers and pedestrians with Road Rules in the Kyrgyz Republic. Recently, situations have become more frequent when drivers tritely ignore traffic rules (Akmatova, 2021).

Kyrgyz Republic law dated from February 21, 2019 No. 29 "On the Road Safety" defines the legal framework for ensuring road safety in the Kyrgyz Republic territory. The objectives of this law are to protect the life, health and citizens property, protect their rights and legitimate interests, as well as protect the society interests and the government by preventing traffic accidents and reducing the severity of their consequences. Over the past four decades or more, there have been a large number of regional and global road safety initiatives.

Special Program "Decade of Action for Road Safety from 2011 to 2020" was adopted by the United Nations in 2010. According to report, 1.25 million people die each year on the world's roads, and this number has not changed since 2007. Against the backdrop of rapidly rising levels of motorization, this stabilization, despite the projected increase in deaths, indicates that progress has been made. However, these efforts to reduce road traffic deaths are clearly not enough to achieve the international road safety targets of Sustainable Development Goals promoting the creation of 'inclusive, safe, resilient, and sustainable' cities and human settlements (Heydari et al., 2019; Abebe, 2022).

In January 2017, the United Nations adopted an internal system-wide road safety strategy that aims to reduce the number of road traffic deaths and injuries by 50 percent by 2020, in line with the goals of the Decade of Action for Road Safety (United Nations, 2020).

Question for proceeding of legal documents were considered that will become basis for development of traffic rules, in addition, some legal documents that will establish standards for active and passive vehicle safety. When considering the historical perspective of legal documents, the following issues can be especially noted:

- Convention on Road Traffic, 1949, supplemented by the Protocol on Road Signs and Signals, 1949. 94 Contracting Parties worldwide. Vienna Convention on Road Traffic, 1968. 67 Contracting Parties worldwide, Vienna Convention on Road Signs and Signals, 1968. 56 Contracting Parties worldwide;
- 2) The 1971 European Agreement supplementing the 1968 Convention on Road Traffic. 31 Contracting Parties;
- 3) 1971 European Agreement supplementing the 1968 Convention on Road Signs and Signals. 29 Contracting Parties;
- 4) Additional Protocol on Road Markings, 1973 to the European Agreement, 1971, supplementing the Convention on Road Signs and Signals, 1968. 24 Contracting Parties.

The Vienna Conventions, which have a global scope, have replaced the 1949 Convention and its Protocol for acceding countries. These Conventions, which are more complete and more adapted to modern traffic conditions, have been supplemented by the European Agreements, the provisions of which are even more developed and more stringent for the European countries that have ratified them. Significant changes were made to these legal documents in 1993 and 2006 years.

In 2006 and affecting the Vienna Conventions, supplementing them by the European Agreements and the Protocol on Road Markings, provides for the adaptation of existing provisions (in particular with regard to national and international driving permits, as well as the distinctive sign on vehicle registration numbers) and the inclusion of new provisions regarding in particular, topical issues such as the use of a mobile phone while driving, the maximum permitted level of alcohol while driving and safety in tunnels.

#### 2. Research methods and materials

In this article descriptive study was performed and road safety topical issues were analyzed in Kyrgyzstan. Literature and government law analysis has shown additional provisions for road safety issues. Number of road accidents were registered according to the Osh regional department of the General Directorate for Road Safety Ministry of Internal Affairs in the Kyrgyz Republic.

#### 3. Results and discussion

With documents containing these changes, in addition to the legal documents, WP.1 also manages two Consolidated Resolutions on road traffic (R.E.1) and on road signs and signals (R.E.2), which supplement and detail the provisions of the Vienna Conventions and the European agreements. These Consolidated Resolutions are currently being fully revised. The publication of the revised resolution RE1 is scheduled for the end of 2008 year. After that, it will need to be distributed as widely as possible around the world.

To this end, in addition it is planned to translate the Consolidated Resolution, in to English, French and Russian, into 3 more official UN languages (Arabic, Chinese and Spanish). In March 1958, the Federal Republic of Germany proposed an agreement under the auspices of the United Nations Economic Commission for Europe (UNECE) to facilitate the adoption of uniform conditions for approval and mutual recognition of the approval of motor vehicles equipment and parts. Such an Agreement was concluded on 20 March 1958 and entered into force on 20 June 1959. In addition to active safety issues, it began to deal with issues of reducing the accidents possible consequences for humans (passive safety), environmental issues such as air quality, exhaust pollution (Sager, 2019) and limiting the level of noise exposure from motor vehicles (Li et al., 2016). We especially note that a trusting and Amanai Akmatova 1008

respectful attitude of all road users is necessary, which is a postulate for solving road safety problems. The human factor has a dominant influence on road safety (Bęczkowska & Grabarek, 2021).

In this regard, implementation of measures that can effectively influence the behavior of road users is recognized as one of the main objectives of activities to improve road safety.

In this regard, implementation of measures that can effectively influence the behavior of road users is recognized as one of the main objectives of activities to improve road safety. One of the means to change behavior is to increase the awareness of road users about the dangers that arise on the roads and the risks they may face if they do not follow the established rules. So, based on the data on the government accidents in the Kyrgyz Republic for 2019: "In Bishkek, accidents were registered in 1828 cases, 60 were died and 2280 people were injured. In the Chui region were 928, 121 died, 1614 were injured. In Issyk-Kul region 275 cases were registered, dead were 89 and injured were 548. In the Naryn region 124 cases were registered, killed were 31, injured were 232. In Osh city were registered 383 people, died were 10, injured were 514. In Osh region 383 cases were registered, died were 10, injured were 514. In Osh region 478 accidents were registered, 78 were died, injured were 841. In Jalal-Abad region were 409 accidents, 80 were died and 758 were injured (Report of the Main Road Traffic Safety Inspectorate, 2019).

Currently, a mechanism is required to ensure the road safety, it is a public relations exercise, in particular, which in every respect can contribute to the implementation of road safety companies including press, radio and television. 62 TV programs, 2 radio programs in Kyrgyz, Russian and Uzbek languages were prepared on the TV channels of our country, 12 articles in the headings "Safe City" were prepared on the pages of republican newspapers. One of the important factors that we pay attention to is children's road traffic injuries on the roads of our country. The problem of child injuries associated with road transport (Peden et al., 2008) is mainly due to the extremely low discipline of road users, which leads to death and injury to children.

According to the Osh regional department of the General Directorate for Road Safety Ministry of Internal Affairs in the Kyrgyz Republic: "412 road accidents were registered in Bishkek, 10 children died, 480 were injured. In the Issyk-Kul region registered 85 accidents in which 112 were died. There were 35 accidents in Naryn region, 3 were died, 112 people were injured. In the Osh city 97

traffic accidents, 1 died, 111 were injured. In Osh region 151 accidents, 6 died, 182 were injured. There were 55 traffic accidents in Batken region, 6 died, 61 were injured. In the Jalal-Abda region 111 accidents were registered in which 9 were died and 120 were injured. In total, there were 1210 accidents in the republic, 68 died, 1461 were injured.

Traffic accidents causes are the inattention of drivers, non-compliance by them and pedestrians with the Rules of the Road of the Kyrgyz Republic or their ignorance. In the Bishkek city, road accidents committed through the fault of drivers with experience of up to 1 year were registered as 153 cases in which 9 were died, 230 were injured. In Chui region 71 accidents were registerd, in which 3 were died, 123 were injured. In Issyk-Kul region 18 accidents, 2 died, 35 were injured. In Naryn region 15 traffic accidents, 1 died, 35 were injured. In the city of Osh were 57 road accidents, 0 died, 74 were injured. 102. In Jalal-Abad region 57 road accidents, 9 died, 113 injured. In Talas region 10 road accidents, no deaths, 14 were injured. In Batken region 13 road accidents were registered, 1 died, 24 injured, died were 33, injured were 750".

In order to avoid a traffic accident and causing harm, each road user, no matter whether the driver, passenger or pedestrian, must know and comply with the Road Safety Rules (RSR) in the Kyrgyz Republic. It should be noted that this document directly affects the rights and obligations of drivers and regulates the behavior order that must carried out in traffic conditions (Road Safety Rules, 1999).

The main factors of accidents identified as a result of statistical data analysis on road traffic accidents include the following:

- Low discipline of road users in accordance with the Road Rules, the driver must choose a speed that provides him with ability to constantly control the movement of vehicle to meet the requirements established by the safety rules;
- Pedestrians must move along sidewalks or footpaths, and in their absence along roadsides, cross the carriageway at pedestrian crossings, including underground and elevated ones, and in their absence at intersections along the line of sidewalks or roadsides. If there is no crossing or intersection in the visibility zone, it is allowed to cross the road at a right angle to the edge of the carriageway in areas without a dividing strip and fences where it is clearly visible in both directions. When crossing the carriageway outside the pedestrian crossing, pedestrians, in addition, should not interfere with the movement of vehicles and exit from behind a standing vehicle or other

obstacle that limits visibility without making sure that there are no approaching vehicles. A drunken pedestrian is a misfortune for motorists. Passengers are prohibited from: distracting the driver from driving the vehicle while it is moving; when driving a truck with an onboard platform, stand, sit on the sides or on a load higher than the sides; open the doors of the vehicle while it is moving. Low qualification of drivers causing a high risk of accidents by drivers with little driving experience. Along with widespread cases of deliberate traffic violations, there is ignorance and inability of drivers, especially drivers with little driving experience, to predict the occurrence of critical traffic situations and act competently in them.

It is also important to improve the culture of driving on roads, reducing dependence of behavior on the road from stressful situations.

Prevention reports, statistics, investigative and judicial practice indicate that in the Kyrgyz Republic, for the period from 2009 to 2019 years, the number of accidents increased by 1.5 times. The number of victims in road accidents on average kept at the level of 1037 people per year. Injuries on the roads have almost doubled. In general, over 10 years in Kyrgyzstan, 11553 people died as a result of road accidents, of which 958 were children (Information Center Statistics, 2018).

The General Directorate for Road Safety Ministry of Internal Affairs in the Kyrgyz Republic has developed a concept for the long-term development and optimization of practical activities in its department for 2020 to 2025 years, which reflecting operational situation for ensuring road safety and the operation of road transport on roads in the Kyrgyz republic is not stable and remains difficult.

Most accidents occur on the roads of Bishkek and Chui region. The latter region also shows the highest death rate in road accidents. In the Osh region over the past three years, the number of road accidents has increased by 12%, while the number of deaths has decreased by 9%, but the number of victims has increased by 6%. The statistics on road traffic accidents in Kyrgyzstan studied by the author for 9 months of 2019 testify to the following facts:

- 1) The number of accidents were recorded in 4691 cases;
- 2) Citizens who died in road accidents were 529 people;
- 3) The number of wounded were 7265 people. From the numbers presented, it can be seen that the most common causes of fatal crashes are:
- 1) Violation of the rules for crossing intersections and pedestrian crossings;

- 2) Speeding and non-observance of the distance;
- 3) Exit into the oncoming lane.

As a result, the number of victims on road accidents is many times greater than the number of victims of other transport modes. The presented statistics lead to a situational analysis of incident causes and the need to take appropriate measures. Currently, in the Kyrgyz Republic, the number of vehicles in operation exceeds one million units. The annual increase in imported cars and trucks into the territory of Kyrgyzstan is more than 2,500 units. The average statistics show the fact that there are 2.3 cars per adult citizen of Kyrgyzstan, while in 2019 the total length of roads is no more than 20 thousand km. Modern world practice confirms the conclusion that Kyrgyzstan in its development is at the second stage of economic growth and social security of citizens. The main technical indicator of this stage is the saturation of population needs in vehicles up to 500 units of vehicles per 1000 people. This stage is part of the inevitable process of covering the population with vehicles and, as a result, an aggravation of the situation with prevention, and ensuring road safety, preventing injuries. At the same time, it should be noted that the existing transport network is worn out, has long been overloaded and does not satisfy the real need for the safe operation of transport. The coefficient of exploitation intensity almost in all city roads exceeds the permissible values by 200 to 300%. All this, combined with a constant increase in road transport, extremely poor training of future drivers, and open disregard for rules for operating road transport and traffic, served as a stimulation for a sharp increase in road accidents and the number of their victims.

Preventive measures implemented by the Main Directorate Traffic Safety Ministry of Internal Affairs in the Kyrgyz Republic are currently not capable of fundamentally changing the current situation due to objective factors. The skepticism and irresponsibility of drivers leads to accidents when the driver flees the scene without even helping the victims.

As a result, a fairly large percentage of crimes that resulted in victims' death remain unsolved. This is mainly a consequence of weak organizational interaction of the Government Traffic Safety Inspectorate, operational units, investigation, and most importantly, the complete absence of modern scientific and technical support for investigation of these crimes and sound methods built on the advanced achievements of applied sciences.

In the southern regions of Kyrgyzstan (Osh, Jalal-Abad regions), the main causes of road accidents are caused by drivers of right-hand vehicles made in Japan, the lack of proper technical conditions

Amanai Akmatova 1010

for operation of this vehicle, and their unsuitability for operating conditions on left-hand traffic. During operation, very often drivers do not consider and sometimes even abuse the high technical capabilities of this transport, their maneuverability and speed capabilities.

#### Conclusion

It is also necessary to note the insufficient competence of traffic police officers, investigators involved in the disclosure and investigation of this category of crimes, insufficient availability of modern reference and scientific and technical literature on the topic of investigating road accidents and crimes committed using motor vehicles. The huge public outcry caused by the problems of traffic and the operation of road transport, as well as all the incidents associated with it, served as the root cause of this issue study in scientific and legal literature.

But, according to the author, in most cases, the available sources are hopelessly behind the reality. This is due to the latest achievements of forensic science, and other sciences accompanying the existing methods of investigating crimes as well as the action of the new criminal procedure code, and violations in the Kyrgyz Republic since 2019. Ensuring road safety and vehicle operation is the government task and the government system specialized services. Since motor transport has long been an element of social arrangement in society and an indicator of prosperity among population, therefore, ensuring safety on the government roads is directly dependent on the coordinated functioning of all structural elements of the system.

#### **References:**

- [1]. Abebe, H.G. (2022). Road Safety Policy in Addis Ababa: A Vision Zero Perspective. Sustainability, 14(9), 5318. http://dx.doi.org/10.3390/su14095318
- [2]. Akmatova, A.T. (2021). Current issues of road safety in the Kyrgyz Republic. Law and the Government: Theory and Practice, 6(198), 239-242.https://doi.org/10.47643/1815-1337\_2021\_6\_239
- [3]. Artikova, V., Thompson, M. E., Platonova, E., Pyle, G. F., & Toimatov, S. (2011). Trends in traffic collisions and injuries in Kyrgyzstan, 2003-2007. Bulletin of the World Health Organization, 89(5), 345–351. https://doi.org/10.2471/BLT.10.084434
- [4]. Bęczkowska, S.A., & Grabarek, I. (2021). The Importance of the Human Factor in

- Safety for the Transport of Dangerous Goods. International journal of environmental research and public health, 18(14), 7525. https://doi.org/10.3390/ijerph18147525
- [5]. Heydari, S., Hickford, A., McIlroy, R., Turner, J., & Bachani, A.M. (2019). Road Safety in Low-Income Countries: State of Knowledge and Future Directions. Sustainability, 11(22),6249. http://dx.doi.org/10.3390/su11226249
- [6]. Igissinov, N, Aubakirova, A, Orazova, G, Akpolatova, G, Urazova, S, Tarzhanova, D, Zhantureyeva, A, Kuandykov, Y. (2020). Prediction Mortality Rate Due to the Road-Traffic Accidents in Kazakhstan. Iran J Public Health, 49(1):68-76.
- [7]. Kitchin, R. (2014). Big Data, new epistemologies and paradigm shifts. Big Data & Society, 1(1), 1–12. https://doi.org/10.1177/2053951714528481
- [8]. Li, Q, Qiao, F, & Yu, L. (2016). Risk Assessment of In-Vehicle Noise Pollution from Highways. Environ Pollut Climate Change, 1: 107.
- [9]. Myssayev, A, Meirmanov, S, Rakhypbekov, T, Bulegenov, T, Semenova, Y. (2014). The Characteristics of Road Traffic Fatalities in Kazakhstan's Semey Region, 2006-2010: A Descriptive Retrospective Study. Iran J Public Health, 43(6):760-768.
- [10].Peden, M, Oyegbite, K, Ozanne-Smith, J, Hyder, A.A., Branche, C., Rahman, F., Rivara, F., & Bartolomeos, K. (2008). World Report on Child Injury Prevention. Geneva: World Health Organization; 2008. 2, Road traffic injuries. URL: https://www.ncbi.nlm.nih.gov/books/NBK310645/
- [11].Report of the Main Road Traffic Safety Inspectorate. (2019). Kyrgyz Republic Ministry of Internal Affairs.
- [12].Road Safety Rules. (1999). Amended by the Kyrgyz Republic Government Decrees from March 3, 2009 No. 136, May 28, 2012 No. 329, September 27, 2012 No. 656, October 20, 2015 No. 714, January 16, 2016 No. 9, December 25, 2017 No. 833, October 7, 2019 No. 522, October 31, 2019 No. 588, February 5, 2020 No. 62.
- [13].Rubtsova, M.V. (2021). Road safety in Russia: problems and ways of their solution. Journal of Road Safety, (3), 4-7.
- [14]. Sager, L. (2019). Estimating the effect of air pollution on road safety using atmospheric temperature inversions, Journal of Environmental Economics and Management, 98, 102250. https://doi.org/10.1016/j.jeem.2019.102250

[15].Stevenson, M. & Bhalla, K. (2020). Global road safety: a well-travelled road? International Journal of Injury Control and Safety Promotion, 27:1, 1-2. https://doi.org/10.1080/17457300.2020.1713

439 United Nations. (2022). Decade of Action for Road Safety for 2011-2020 years. URL: https://www.un.org/ru/roadsafety/