SOCIAL PROJECT «AVTOTREZVOST» (AUTOSOBRIETY) AS A MODEL OF PRIMARY PREVENTION OF DRINKING AND DRIVING

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Abstract: *The article gives analysis of the key road crash death and injuries data associated with drinking and driving in 2010-2015 in the Russian Federation. It proves necessity of preventive work aimed at reducing the number of cases of driving while intoxicated among students in driving schools. The article presents information about the social project "Avtotrezvost" ("Autosobriety") and suggests a methodology of primary prevention of driving while intoxicated with alcohol, drugs or other substances among driver schools students within the framework of the Order N 343n of 15.06.2015 of the Russian Ministry of Health.*

Keywords: *Road crash death and injury prevention; road crash; road crash trauma; drinking and driving; blood alcohol concentration (BAC); drinking and driving prevention.*

A number of factors determined the beginning of a new educational project aimed to prevent drinking and driving in Russia in 2013. In 2013, the federal government started reforming the Russian driver schools education curriculum. Also in that year, the "Improvement of Road Safety 2013-2020" federal target program was launched, providing a perfect opportunity to put forward a drink driving module that could be included in novice driver courses. The Federal Program continued a multifaceted approach to road safety envisaging among other improvements the education and training system for drivers [1]. In 2011-2013 official statistics revealed negative trends in road crash data associated with drinking and driving (table 1).

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Table 1. *The dynamics of absolute and relative number of road crash data related to drinking and driving in 2010-2015 in Russia [2]*

Year	Absolute numbers of road crashes, deaths and injuries in road crashes associated with DD						Proportion in relation to the overall numbers (%)		
	Road crashes		Killed		Injured				
	abs.	rel. (% to the previous year)*	abs.	rel. (% to the previous year)*	abs.	rel. (% to the previous year)*	Road crashes	Killed	Injured
2010	11845	-	1954	-	17280	-	5,9	7,4	6,9
2011	12252	3,4	2103	7,7	17900	3,6	6,1	7,5	7,1
2012	12843	4,8	2103	0	18679	4,4	6,3	7,5	7,2
2013	13581	5,7	2314	10	19385	3,8	6,7	8,6	7,5
2014	16517	21,6	3420	47,8	23245	19,9	8,3	12,7	9,2
2015	16360	-1	3997	16,9	22544	-3	8,9	17,3	9,8

*Note: * - «-» marks negative growth in percent as compared to the previous year.*

The figures in table 1 show that in Russia for the period 2011-2013 both the absolute and relative number of road crashes associated with drinking and driving (in the overall structure of road crashes) were growing. In 2014 the growth of relative number continued with a slight decrease of the absolute numbers of "drunk" road crashes and the number of injuries in them by 1 and 3 percent respectively.

We would like to highlight three significant factors from our analysis of the data.

Firstly, in 2015 the total growth of fatal "drunk" road crashes continued for drivers of private cars as well as for professional drivers, which, in turn, indicates the need to introduce a system of additional "quality controls" such as pre-trip capacity examinations aimed, among other things, to identify intoxication of professional drivers [3; 4; 5]. In the period of 2010-2015 in Russia the annual number of fatalities in road crashes related to driving in a state of intoxication, almost doubled (from 1 954 to 3 997 persons).

Secondly, despite a slight decrease of absolute number of drunk driving related road crashes and injuries, the proportion of drink driving in the overall structure of road crashes continued growing. Thus, the proportion of road crashes associated with drinking and driving and the number of fatalities and injuries in 2010-2015 in Russia increased from 9 % to 8,9 %, from 7,4 % to 17,3 % and from 6,9 % to 9,8 % respectively.

Thirdly, the increasing number of road crashes connected with intoxication have occurred while at the same time there has been an overall decreasing number of road death and injuries during the past three years in Russia (*table 2*).

Table 2. *The dynamics of absolute and relative number of road crash data in 2010-2015 in Russia [2]*

Year	Total N of road crashes		Total N of killed		Total N of injured	
	abs.	rel. (growth in % in relation to previous year)*	abs.	rel. (growth in % in relation to previous year)*	abs.	rel. (growth in % in relation to previous year)*
2010	199 431	-	26 567	-	250 635	-
2011	199 868	0,2	27 953	5,2	251 848	0,5
2012	203 597	1,9	27 991	0,1	258 618	2,7
2013	204 068	0,2	27 025	-3,5	258 437	-0,1
2014	199 720	-2,1	26 963	-0,2	251 785	-2,6
2015	184 400	-7,7	23 114	-14,3	231 197	-8,2

*Note: * «-» marks negative growth in percent as compared to the previous year*

As follows from the data presented above in 2013-2015 in Russia there was an overall annual decrease of the number of killed in road crashes: from 28 thousand in 2012 to 23 thousand in 2015, and injured from 258,6 thousand in 2012 to 231,2 thousand in 2015.

Thus, the analysis in the field of road safety trends conclusively demonstrates the need for the introduction of additional measures aimed primarily at reducing the frequency of cases of driving in the state of intoxication, which, in turn, will reduce the number of "drunk" crashes and their consequences [6]. In these circumstances, primary prevention activities appear as the most appropriate, since the policy of strengthening the administrative sanctions proved only to be moderately effective for a short term [7, c. 69-94]. The international experience shows that measures increasing the term of driving license suspension lead to an increase in the number of cases of driving without a license [8]. In 2015 in Russia, among novice drivers (less than 2 years of driving experience) in road crashes with injuries and/or fatalities, the number of people driving under intoxication and those who refused a medical test was more than 10 % (table 3).

Table 3. *Absolute and relative number of road crash death and injuries, including cases of drinking and driving, among novice drivers in Russia in 2015 [2]*

Категория водителей	Road crashes		Killed		Injured	
	abs.	rel. (%)	abs.	rel. (%)	abs.	rel. (%)
Drivers with less than 2 year experience of driving	14 473	100	1 540	100	20 206	100
- incl drinking and driving	1 163	8	231	15	1 687	8,4
- incl those who refused to take a medical tests	325	2,3	9	0,6	473	2,3
Drivers with less than 2 year experience of driving intoxicated or refused to take a medical tests	1 488	10,3	240	15,6	2 160	10,7

The data shows a rather small number (2 percent) of refusals to take a medical test among novice drivers as compared to all drivers [7, c. 69-94]. This proves the conclusion that novice drivers are more responsive to the strengthened measures of administrative sanctions responsibility [7, c. 111, 126]. This finding predicts a higher effectiveness of preventive work among novice drivers as compared to older and more experienced drivers who might have had “positive” experience of driving while intoxicated. Thus, a group of young and inexperienced drivers is of greatest interest for primary prevention efforts to reduce drinking and driving. The most simple and efficient way to carry out this work is to ensure a preventive effect at the stage of training of this category of drivers in driving schools by supplementing the model programs of vocational training of drivers [9].

In 2013 a draft training module targeting drinking and driving was developed in Russia for driver candidates at driver schools. The development of the module was made possible with support of the International Alliance for Responsible Drinking (IARD). A partnership within the framework of a social project between IARD, Moscow Automobile and Road State Technical University (MADI) and other participants was a natural outcome from the Commitments made by global producers of beer, wine and spirits. These Commitments to reduce harmful drinking include a provision that "the decision of each person about drinking or not drinking must

comply with the law, safety and personal responsibility… this decision can only be taken with availability, knowledge and understanding of the facts" [10]. In 2013 considering the law that prohibits drinking and driving [11] and to ensure "availability, knowledge and understanding of facts" the authors of the project developed the following: a training module aimed to reduce drinking and driving; a methodology of promoting the module to driver schools; a trainer's book with a lesson plan; thematic slides and video clips; a guidebook on how to work with special glasses simulating a state of a drunkenness called "Fatal Vision"; tests and instructions on measuring the effectiveness of the training; hand-out materials and a set of messages like "alcohol and driving do not mix".

Launched in several driver schools in Smolensk region with support of Smolensk Humanitarian University and the Public Council at the Smolensk Department of the Russian Internal Ministry the project was named "Avtotrezvost" ("Autosobriety"). At the beginning of 2014, the results of the first workshops for driver school teachers, the public polls and surveys on drinking and driving issues in Smolensk region, student tests before and after the lesson, interviews with focus groups of students, teachers and experts, allowed further developmentof the project methodology.

With regard to the implementation of the training module, we would like to highlight several important points.

Firstly, the low cost. The project structure can be divided into three levels: the project coordinator, a work group of like-minded people (the authors of the manual and materials, staff and representatives of driving schools, researchers), and a support group comprised of journalists, volunteers, and corporate representatives (transport and insurance companies, trade centers, restaurants, etc.), as well as representatives of the authorities. In this case, material remuneration for participation in the project is provided for a project coordinator, who is also responsible to teach the training module (6-8 academic hours during one day) and for the project experts who help to upgrade the module according to the latest changes. Expenses for public information campaigns and other events to support the module in driving schools can be agreed upon and divided with regional partners.

Secondly, introduction of the training module in a driving school curriculum does not require any additional approvals from the parent organizations. A driving school director's order is enough to make changes in the basic curriculum cycle under the subject "Psychophysiological aspects of a driver's activity."

Thirdly, all training materials include positive information without photos or images of road crashes and their consequences.

The training module "Avtotrezvost" is a 2 to 4-hour interactive course that includes a lecture, practical exercise, group work and discussions. It includes four parts: statistics (official data on road crash death and injuries, including those related to drinking and driving in the world, in Russia, and in the respective region); alcohol and driving (alcohol influence on a human body); drinking and driving and the law (legal consequences of drinking and driving); drinking and driving and society (personal position and responsibility).

The practical part (exercises) is based on the use of special devices –"Fatal Vision" glasses which simulate behavior of a person under the influence of alcohol. While wearing the glasses a

driver candidate gets personal experiences of the dangers of drinking and driving as he/she observes distortion of object shapes, misperceives distance, and loses reaction rate.

As a result, three simple steps are required to introduce the project into a driving school: make changed to the curriculum, get one or two teachers trained, and obtain the so called “Fatal Vision” glasses provided by the project sponsors.

Wide public support for the project in Smolensk region lead to a quick project development that allowed to begin the project promotion to other Russian regions. In 2015 the new module was actively used in 31 driving schools in four regions (Smolensk and Ulyanovsk regions, in the cities of Sterlitamak and Kursk) where more than 7000 students received additional knowledge on drinking and driving risks.

In October 2016, the project was launched in Moscow at a conference held in one of the oldest Russian Universities – MADI, where prominent Russian scientists, lawmakers, experts, directors of driving schools, business representatives and journalists witnessed the presentation of the second edition of the “Avtotrezvost”. Trainer’s bookwhich emphasizes prevention of drinking and driving as well as highlights the risks of use of some medical drugs that can influence a driver’s behavior. The participants agreed to conduct a research project in Moscow aimed to assess the effectiveness of the new module. Two workshops for 30 driving schools teachers who had followed the conference began delivering the “Avtotrezvost” lessons for candidates to drivers in Moscow in November 2016.

In addition to the training module in driving school, “Avtotrezvost” project includes information campaigns for drivers and wider population aimed to prevent drinking and driving and to reduce tolerance of this phenomenon in the society. These campaigns included: "I am for Avtotrezvost" on the Day of the City of Smolensk; distribution of information leaflets in the traffic police checks on the roads in Smolensk and Ulyanovsk; flash mob and handing out flyers in shopping centers of Ulyanovsk; special events on the Day of Remembrance for Road Traffic Victims in Sterlitamak; a campaign "The Sober Drive!" in a city park in Smolensk; a three-week campaign "PitNelzyaRulit" together with a popular bar and a taxi company on New Year’s Eve holidays in Smolensk. Many other supportive activities reinforce the “Avtotrezvost” message of raising awareness of the risks associated with drinking and driving.

As mentioned above, the project is rather economical. However, with the funding provided by the sponsors alone it is not possible to spread the project throughout the entire territory of the Russian Federation. Considering that the Russian Ministry of Health Order N 343n of 15.06.2015 "On organizing and conducting health education on the prevention of driving under alcohol, drugs or other toxic substances" [12] envisages engagement of medical workers (medical doctors-psychiatrists-narcologists) in drivers professional training, it seems appropriate to use the training module "Avtotrezvost" and its materials (posters, video clips, handouts, etc.) at the state and municipal narcological institutions.

To carry out such an approach is possible as follows: Firstly, the project coordinator conducts a remote training for a group of psychiatrists, narcologists (1-2 physicians from one institution) in a subject territory (region). Secondly, the materials of "Avtotrezvost" project are transferred in an electronic form to the relevant institutions based on a Memorandum of Understanding (MoU) that, among other, includes the rights for the non-commercial use of

these materials.

In conclusion, the results of trends in road safety discussed in this article indicate the need to introduce and intensify new methods of preventive work. The most promising is the realization of this work among the students of driving schools and the use of the existing training materials from the “Avtotrezvost” program.

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