

Drugs and traffic safety in Slovenia

Zorec-Karlovsek¹, M.; Susanj², B.

¹University of Ljubljana, Medical faculty, Institute for Forensic medicine, Slovenia; ²Ministry of interior, Police directorate, Traffic Safety sector, Slovenia

Korytkova 2, Ljubljana, SLO –1000, Slovenia

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Abstracts

Already for a number of years we have been following the increasing problem of drug use in Slovenia.

The Legal Regulation enable the police to decree a medical examination with taking of urine and blood samples and the toxicological analyses of biological material in cases of concrete suspicion of driving under the influence. The analysis of data collected in regard of drugs pattern, age, gender of participants in traffic, hour and day of offence, is a contribution to the general epidemiology of drugs in Slovenia as well an interesting review of national specifics and the dynamics of resolving of the drug problem in road traffic. A progress is made in recognition of persons driving under the influence of drugs. A advantage in our work is a small number of population of our country and the knowledge of local factors.

Since the driving licence is becoming more and more a status of a general education the driving under the influence of drugs is very often one of the deeds in which the young drug abusers also appear for the first time as lawbreakers.

Both in cases involving alcohol and even more in cases involving drugs we have noticed an increase of number of traffic participants, who will decide to drive while intoxicated regardless of the amount of penalty. Our efforts for better safety and more humane relationships in road traffic are therefore not directed only in recognition, detecting and sanctioning of driving under the influence of drugs but also in searching the connections and the solutions for possible directing of young delinquents – drug users and drug addicted in programmes of medical and psychological help, treatment and rehabilitation.

Introduction

Legal regulations

On 1 May 1998 a new Road Traffic Safety Act entered into force in Slovenia (1). The essential new features of the law are in its alignment with modern European trends in this area and a stiffening of the penalties for violating the road traffic regulations, including the introduction of a system of penalty points and the cancellation of the driver's licence for the most serious offences.

Article 118 of the law provides: "A driver may not drive a vehicle in road traffic nor begin to drive a vehicle if he is under the influence of drugs, psychoactive medication or other psychoactive substances that reduce his ability to drive".

The driver of a motor vehicle is in violation of the provisions laid down in Article 118 if the presence of such substances is detected in his body by special means, appliances or professional examination. The law does not stipulate maximum values for the presence of drugs or psychoactive substances in the blood: for an offence to be committed it is sufficient that the presence of these substances is detected in the body (i.e. there is zero tolerance).

For this offence the magistrate can impose a minimum fine of SIT 90,000 and 5 – 7 penalty points, or a prison sentence and 5 – 7 penalty points.

The police authority to carry out testing in order to establish the presence of drugs or psychoactive medication is laid down in Article 120 of the Road Traffic Safety Act. This article does not permit "random testing" of drivers and provides that measures may only be taken on the basis of *genuine suspicion*.

A person who is required to undergo this type of test or a professional examination has the opportunity to appeal against the police officer's decision. That objection can be made orally or in writing. The police officer's commanding officer must respond to the objection within four hours. Any such objection does not delay the execution of the police officer's decision. The police officer immediately prohibits a driver who is suspected of being under the influence of drugs or psychoactive medication from continuing to drive and temporarily withdraws his driving licence.

If the person is not prepared to follow the police officer's instructions and refuses to take a test or undergo a professional examination, the magistrate can impose a fine of at least SIT 90,000 and cancel his driving licence, or impose a custodial sentence and cancel the person's driving licence. In other words the magistrate can impose the maximum possible penalty.

If the police apprehend a driver committing this offence or a similar offence (such as drink driving) three times within the space of two years, they submit a proposal for the driver to undergo a medical check-up to establish whether or not that individual is still capable of safely controlling a motor vehicle and whether he should still be allowed to drive.

Figures on driving while under the influence of drugs

The number of offences and traffic accidents soared in 1999, both as a result of the increased presence and use of drugs in society and because the provisions of the new traffic legislation began to be implemented consistently (Table 1).

Table 1: Number of offences involving driving while under the influence of drugs or psychoactive medication and number of related accidents in the period 1994 – 1999.

Year	Number of offences	Number of accidents
1994	54	11
1995	61	11
1996	80	9
1997	80	24
1998	385	38
1999	1039	74

The number of offences includes offences where the presence of drugs was established by analysis of blood and urine as well as offences where the driver refused to undergo a professional examination (for which the possibility is provided in the legislation) and thus attracted the severest penalty – cancellation of all categories of driving licence.

Procedure to establish whether a driver is under the influence of drugs

Police officers base their suspicion leading to them ordering a professional examination (medical check-up and the taking of a blood or urine sample) principally on the basis of the following signs determined upon observation of the driver (2,3,4):

- the driver is driving without due care and attention, fails to observe basic traffic regulations and road markings, and where the result of a breath test for alcohol is negative even though the driver's behaviour is careless,
- the driver is returning from a disco or a party where illegal drugs are often taken (such as a rave party) and his driving is careless,

- changes can be seen in the driver's eyes (for example, dilated pupils that do not react to light, the driver's gaze is vague), the driver behaves excessively calmly or aggressively, or is a known drug user,
- needle marks from drug injections are observed during the control or if drugs, or the means and instruments for taking drugs, are found during a search of the car.

When a driver is suspected of driving under the influence of drugs the police officers immediately ban him from continuing to drive and temporarily withdraw his driving licence.

They take the driver in a police vehicle to an authorised health institution to undergo a professional examination. The examination is carried out by a doctor who records his findings in a report. Blood and urine samples are also taken from the driver after the examination.

A toxicological examination of the blood sample, or the blood and urine samples, is carried out by the Forensic Medicine Institute at the Medical Faculty in Ljubljana for all samples taken anywhere in the country. The results of the sample analysis are then sent to the police station where the case is being dealt with.

On the basis of these toxicological examination results and the doctor's findings the police station then submits a proposal to the magistrate for misdemeanour proceedings to be initiated. The method of establishing whether a driver is under the influence of drugs or medication therefore involves a three-stage procedure: existence of suspicion, medical examination, results of toxicological examination.

Materials and methods

The analysis of offences and related traffic accidents covers the fourteen-month period from 1 May 1998 when the new Road Traffic Safety Act entered into force until the beginning of September 1999.

Between 1 May 1998 and 15 August 1999 the Forensic Medicine Institute received 636 requests for a toxicological examination of blood and urine connected with road traffic cases. The methodology of the toxicological work was presented at the Conference on Road Safety in Europe (5).

At the same time 329 of them also violated other statutory provisions. All of this points to a degree of indifference on the part of people driving while they are under the influence of drugs, both as far as their driving and behaviour in traffic is concerned as well as in terms of their observance of the regulations regulating traffic and driving behaviour.

Results

Structure of offences and causes of accidents

Inappropriate speed was the most frequent factor present in **traffic accidents**. There was also quite a high proportion of accidents involving driving on the wrong side of the road and in the wrong direction, as well as failure to observe right of way. Most of the **offences** could be described as more "passive" offences, such as driving without a licence, driving while under the influence of alcohol, vehicle and load defects, and failure to use a seat-belt or helmet; in other words, displaying a general indifference towards traffic rules. There were far fewer "aggressive" offences such as speeding and failure to observe right of way, driving on the wrong side of the road and in the wrong direction, and driving through a red light.

The consequences of traffic accidents

In the traffic accidents under investigation one person died, seven were seriously injured and 16 suffered minor injuries.

Percentage of various road user groups

The offenders are most frequently car drivers. Car drivers were involved in 94 per cent of cases. Motorcyclists followed with a share of just 5 per cent. All other categories (cyclists, drivers of combined vehicles, goods vehicles, etc) recorded a much smaller presence.

Gender

The share of men and women who were driving while under the influence of drugs is shown in table 2. While the share of offences accounted for by women was just 4.9 per cent, they accounted for a significantly higher proportion (9.1 per cent) of traffic accidents. This points both to the specific characteristics of female drivers who drive while under the influence of drugs as well as the possibly higher but concealed presence of these drivers in traffic. The recorded figures are comparable with the general share of offences and accidents accounted for by male drivers. It should be emphasised that drug-related accidents as a proportion of the total are almost negligible (0.48%), and certainly a lot less than the share of alcohol-related accidents (8.66%).

Table 2: Incidence of male and female traffic offenders and participants in traffic accidents under the influence of drugs (1998-99).

Number of participants (n)	Offences (n)	Accidents (n)
Male	1104	98
Female	55	9

Age structure of offenders and participants in traffic accidents

The largest group of offenders are those aged between 18 and 24, followed by the age group 24 to 34. All the other age groups account for a much smaller proportion of the total .

As far as traffic accidents are concerned the two most prominent age groups changed places. The most frequent age of individuals involved in traffic accidents is between 24 and 34, while the younger groups are more frequently offenders.

Time of day

The offences are almost evenly distributed throughout the day, which indicates that people begin to drive while under the influence of drugs whenever they want, without choosing a particular time to take drugs and drive. Another characteristic is the marked drop in the number of offences detected between 6 and 7 o'clock in the morning. At this time of the day (change of shift with officers coming to work and leaving work) the police are not carrying out controls actively enough and are simply not discovering the offences being committed. The time around 7 o'clock in the morning is among the critical periods for traffic accidents, which indicates that a problem with drugs and medication does exist at this time but the police are not detecting it. In addition, a greater number of accidents would be expected between 2 a.m. and 6 a.m. when most of the young people who have been to discos and parties are returning. By contrast, a larger proportion of accidents occur during the day when traffic is heavy (carelessness and poor driving in heavy traffic) and during the evening.

When interpreting these results we should emphasise that a characteristic for Sundays is that the majority of the offences are discovered before 6 o'clock in the morning, in other words at the time when people are leaving parties, discos, clubs and various other forms of social gathering.

Days of the week

On week days offences are for the most part evenly distributed until Friday, when the number starts to rise.

The largest number of drug-related traffic accidents occurs on Fridays, when people are behaving in a more carefree manner than usual, primarily because of the end of the school week and the working week which means that young people can relax completely and consume alcohol and drugs. On Saturdays and Sundays there are few traffic accidents but the maximum number of offences is recorded.

Location

Most drug-related offences and traffic accidents are recorded on local roads and in towns with a street system, and there are substantially fewer on all other roads.

Frequency of drugs and medication in drivers suspected of being under the influence

The results of the toxicological examinations are shown in the table 3.

Table 3: Detection of drugs and medication in road users

	1998/99
Number of blood or blood and urine samples (n)	636
Samples testing positive for drugs/medication (n)	370
Number of substances detected(n)	606
Number of substances per sample testing positive for drugs/medication	1.64
Frequency of drug/medication detection in positive cases:	
-cannabinoids (%)	52.9
-opiates (%)	30.8
-cocaine (%)	8.4
-amphetamines (%)	17.6
-methadone (%)	29.2
-LSD (not tested)	-
- benzodiazepines (%)	17.3
-barbiturates (%)	-
-others (%)	7.6
Samples also testing positive for alcohol (%)	32

Discussion

The problem of detecting drivers who are driving while under the influence of drugs and medication as well as the problems involved in the difficult toxicological analysis are well known. We have only been dealing intensively with these problems in the last few years.

The Slovenian police force does not yet use rapid testing to detect the presence of drugs in urine, saliva or perspiration. This would allow the police officers more effectively to confirm their suspicion during a roadside check that someone has non-permitted drugs in their body and to decide on further measures on the basis of such test.

We would like to have rapid, reliable, multicomponent testing for the detection of drugs in saliva. We are monitoring the progress of the ROSITA project.

We are developing a methodology for recognising drivers who are driving while under the influence of drugs or psychoactive medication. We are taking the German and Swedish model as our example, with the foundation being the American DRE programme.

A reliable comparison of the results of the toxicological examinations with the results of research in other countries will only be possible when all the procedures and criteria – from the selection of biological material to the evaluation of the results of toxicological examinations – are standardised.

Already we notice a high frequency of cannabinoids, opiates and methadone, a moderate increase in the presence of cocaine and a strong rise in the share of recreational drugs (primarily amphetamine and metamphetamine derivatives). In the case of traffic accidents, benzodiazepines share first place with cannabinoids, but in the case of offences committed they only occupy fifth place, behind cannabinoids, opiates, methadone and amphetamines.

The frequent presence of methadone among drivers of motor vehicles is a consequence of the easy access to various detoxification programmes that are available to heroin addicts, among whom the methadone programme has been used for many years and is well attended. Together with methadone we also find parallel use of other non-permitted drugs or medication. Among the 108 cases in which methadone was detected only 23 cases (21.3%) involved methadone alone, which is only a slightly larger share than the 18.9% that was recorded in the period 1991 – 1997 (5).

We are informing therapists about the phenomenon of multiple drug addiction noted among people on methadone maintenance programmes, and thus trying to explore links that could encourage such people to pursue the goals of the therapy programmes.

Activities are oriented towards checking the safety of road traffic as well as towards preventive campaigns aimed at reducing the harm caused by the use and abuse of drugs and medication. In order to control this situation and to assist in efforts to tackle individual cases we need to establish links and co-operation between departments dealing with drug abuse and develop better contact with the media and the public, along with achieving continuing improvements in expertise.

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