



SUICIDES IN DRUG ADDICTS - CAUSES OF DEATH IN DRUG ADDICTS BY MATERIALS OF DEPARTMENT OF FORENSIC MEDICINE AND DEONTOLOGY, UNIVERSITY HOSPITAL "ALEXANDROVSKA" – SOFIA

T. Kiryakova*, Al. Alexandrov, M. Goshev, D. Nikolov, I. Brainova, At. Christov, St. Hristov

Department of Forensic Medicine and Deontology, Medical University, Sofia, Bulgaria

ABSTRACT

A statistical study was performed on 224 cases of death of people with history of drug abuse, subjects of forensic medical examination between the years 2006-2010 in the Department of forensic medicine and deontology, Sofia, in order to determine the cases where the subjects have committed suicide and their cause of death.

Key words: Suicide, drug addicts, causes of death

INTRODUCTION

Substance abuse is a very important social problem. It affects mainly young people. The number of drug addicts on the territory of the Republic of Bulgaria constantly increases. Many people start using drugs to avoid physical or emotional pain, to provide themselves with a way to cope with life's realities, to feel better, or as a cure for their unwanted feelings. [2] However the usage of drugs may lead to drug dependence, increased risk of illnesses due to the toxic effects of drugs and the poor living conditions and health habits of drug addicts, or even death [3].

METHODS AND MATERIALS

A detailed statistical study of the causes of death was made in the Clinic of Forensic Medicine and Deontology between the years 2006-2010. For this period of time we examined 5594 autopsy cases and we found that in 224 of them, there was a history of drug use and a drug use prior to death. [1] The materials used in the study are forensic autopsy, chemical and toxicological analysis with the technique of thin layer

chromatography, UV-spectrophotometry and immunoassay, of biological samples, such as blood, urine, standard first (stomach, small intestine and their contents) and second paths (liver with gall bladder and kidney), and in some cases – brain tissue and cerebrospinal fluid, taken during autopsy.

RESULTS

In the year 2006 there were three cases of falls from heights with forensic evidence of suicide. The first case has shown the presence of heroin with foreign matters (Codeine and Spasmalgon), the second - of Tetrahydrocannabinol (THC) and Spasmalgon, and the third - only of heroin. [1]

In the year 2007 there were eight cases of drug addicts that have committed suicide by hanging, by falling from high places, by shooting themselves with a gun in the head and by taking high doses of medication. In the cases of hanging the medical examination has proven the presence of cocaine and amphetamine in combination with alcohol. In the case where the death is a result of a gunshot in the head the biological samples demonstrated the presence of heroin and in the case where the death is a result of fall from height- the presence of THC. In the cases of poisoning with medications the chemical

**Correspondence to: Teodora Kiryakova, MD, Medical University, Sofia-1431, Bulgaria, Department of Forensic Medicine and Deontology, 2 Zdrave str., Tel: +359+29230765, Fax: +359+29230412, E-mail: tgk_85@yahoo.com*

studies have demonstrated the presence of Lexotan, Luminal, Neurolax and Solian. [1]

In the year 2008 were examined three cases of drug addicts that have committed suicide by hanging, where the chemical exams demonstrated the presence of cocaine, by falling from high places, with the presence of cocaine in combination with alcohol and by taking high doses of medications - Tranxene, Midazolam and Rivotril in combination with alcohol. [1]

In the year 2009 there were four cases of drug addicts that committed suicide by hanging (with proven presence of methadone in combination with alcohol), by shooting themselves with a gun (with proven presence of Rivotril in combination with Spasmalgon),

and by taking high doses of medications (Midazolam in combination with alcohol, and Amitriptyline) [1].

In the year 2010 were recorded two cases of suicide due to falls from heights, where the deceased were under the influence of heroin.

DISCUSSION

The statistical study has shown that for the period between the years 2006-2010, suicide is the second most common cause of death among drug addicts, after the acute intoxication with drugs. Out of 35 cases with proven violent cause of death of people with a history of drug use, in more than half of them – 20 cases, the subjects have committed suicide.

AUTOPSIES IN THE DEPARTMENT OF FORENSIC MEDICINE AND DEONTOLOGY 2006-2010

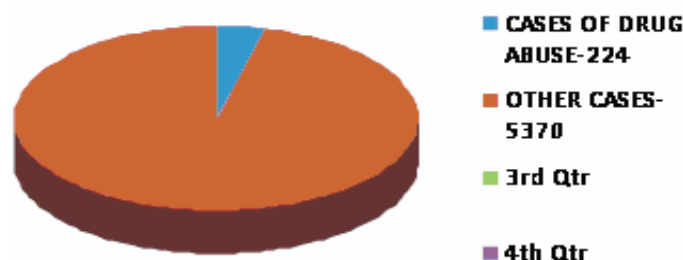


Figure 1. Autopsies in the Department of Forensic medicine and Deontology

CASES OF VIOLENT DEATH



Figure 2. Cases of violent death

CASES OF SUICIDE

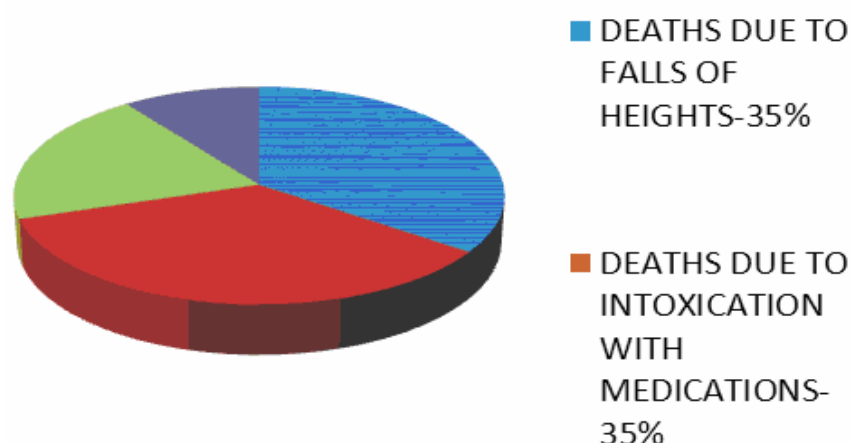


Figure 3. Cases of suicide

Age distribution is as follows: 40% between the age of 25-29, 15% each between the age of 16-19, 30-34 and 35-39; 10% between the age

of 40-44; and 5% between the age of 20-24 (**tabl. 1**).

Table 1. Drug addicts – age distribution

AGE BETWEEN	NUMBER OF CASES	%
16-19	3	15
20-24	1	5
25-29	8	40
30-34	3	15
35-39	3	15
40-44	1	10

In 35% of the suicides, the cause of death is due to falls from height. The percentage stays the same in the cases where the death is a result of an intoxication with medications (in all cases the subjects have a history of continued drug use). In 20% of the cases death is a result of mechanical asphyxia by hanging and in 10% - a gunshot wound in the head.

It is also observed that in 57.1% of the cases in which death is the result of falls from heights, subjects have been affected by heroin and/or alcohol, 28.6% were under the influence of THC and 14.3% - of cocaine. In addition in 50% of the cases, where the cause of death was mechanical asphyxia by hanging, the subjects were under the influence of cocaine with or without concomitant use of alcohol and 25% of the cases demonstrated the presence of

amphetamines and methadone, in combination with alcohol. Furthermore in the cases of intoxication with medication, the subjects used a variety of drugs to commit suicide – Lexotan, Neurolox, Luminal, Solian, Dormicum, Tranxene, Rivotril, Amitriptylin (14,28% each). The case where the cause of death is due to a gunshot in the head, the subject was under the influence of heroin.

CONCLUSION

In more than half of the cases of violent deaths the subjects have committed suicide. Usually drug addicts decide to end their lives by jumping from high places, administering high doses of medications, by hanging or shooting themselves. Most of the deaths occur in the age group between 25-29 years. In most cases the reason for their suicide remains unclear.

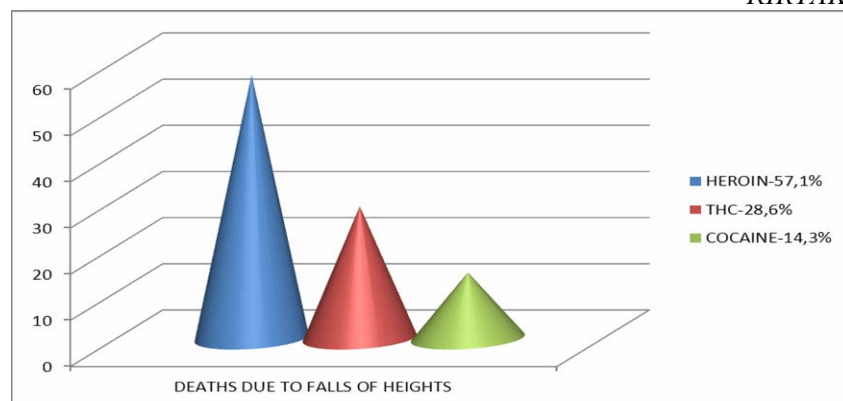


Figure 4. Death due to falls of heights – drug influence

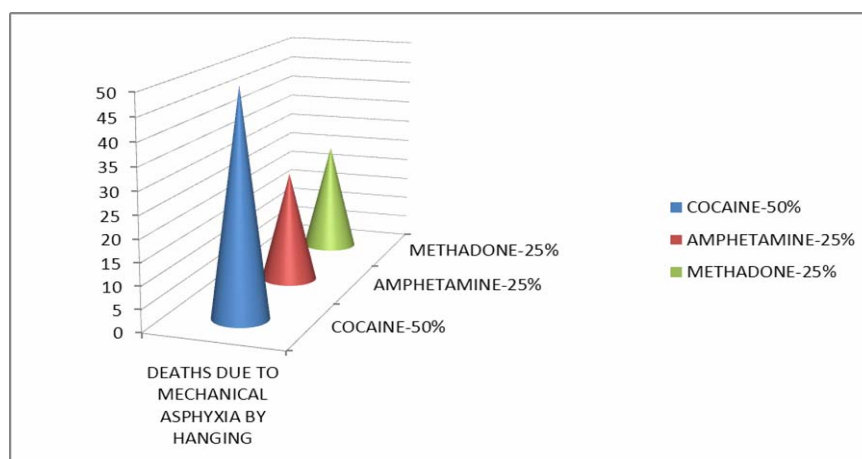


Figure 5. Death due to mechanical asphyxia by hanging – drug influence

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