

## **IX. SUMMARY**

### **Introduction**

Psychoactive substances intoxication among children and adolescents constitutes a current problem. The dynamics of fast changes in this area indicates the need to repeat studies on poisoning, especially among the young generation. The conducted research gives us an answer to the scale of the problem of using psychoactive substances.

### **Objective**

The aim of this study was to analyze the causes, circumstances and clinical course of poisoning in children and adolescents from Olsztyn and the surrounding area, which require hospitalization, over a three-year period.

### **Material and methods**

The study was retrospective. The material of the study was the data contained in the medical records of pediatric patients hospitalized at the Regional Specialized Children's Hospital in Olsztyn in the period from January 1, 2016 to December 31, 2018, due to poisoning of psychoactive substances. The study included a group of 303 patients aged 0-18 years, diagnosed with intoxication with psychoactive substances.

The following factors were analyzed: the route of taking and the influence of psychotropic drugs on the human body, symptoms of intoxication, the relationship between the use of psychoactive substances and the occurrence of chronic diseases, and the determination of stimulants used by underage patients. The analysis also took into account the influence of environmental conditions such as the child's place of residence, place, type of substance taken and the time of intoxication (month), the influence of age, gender and family structure.

### **Results**

In the analyzed period, 303 pediatric patients were hospitalized due to intoxication with psychoactive substances, which constituted 0.45% of all hospitalized patients. The mean age of the patients was  $14.83 \pm 2.88$  with a median of 15.5 years. Among them there were 158 (52.15%) girls and 145 (47.85%) boys from 0 to 18 years of age. The gender distribution in particular years was similar ( $\chi^2=1.91$ ,  $p < 0.38$ ). More than half of the random events, 64.7%,

are in children from 0 to 12 years of age. Over 12 years, in most cases, 94.4% were deliberate events. The distribution of event types in age groups was significantly different ( $\chi^2=62.1$ ,  $p<0.0000001$ ).

## CONCLUSIONS

1. Among children, poisoning occurs most often outside the home (party, public place, plot, park). Among the psychoactive substances used by adolescents, drugs and alcohol dominate. The largest number of alcohol poisoning occurred in June, while poisoning with other psychoactive substances dominated in March, June and August.
2. In the analyzed period, the most common alcohol consumption was among adolescents between 15 and 16 years of age, while poisoning with other psychoactive substances most often occurred between 17 and 18 years of age. Gender and family structure do not affect the frequency of the psychoactive substance used.
3. Among the symptoms of poisoning, disturbances of consciousness, visual disturbances, loss of consciousness, somnolence, coldness and disturbance of the equilibrium gait were observed.
4. Among children and adolescents, poisoning with psychoactive substances occurs most often through the ingestion. Taking these substances has a negative effect on the body of a young person.
5. A significant influence of the occurrence of comorbidities on the type of intoxication with psychoactive substances was found. Patients with one comorbid disease use psychoactive substances more often than the others, while patients with more than one comorbid disease use psychoactive substances and mixed drugs. Patients without comorbidities are more likely to consume alcohol.
6. Underage patients declared the use of stimulants such as alcohol, cigarettes and drugs.