Preventive and Social Pediatrics

457 GENDER AND HEALTH RISK BEHAVIORS IN TRAFFIC AMONG HIGH SCHOOL STUDENTS IN ZAGREB Natko Gereš*, Iva Lukačević-Lovrenčić, Aida Mujkić. *Psychiatric hospital Sveti Ivan Zagreb*

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Risky traffic behaviors among youth potentially lead to serious consequences, injuries or deaths. Young men are particularly at risk.

Growing body of research indicates that the endorsement of traditional masculinity is at the root of the causes of deviant behavior of boys. With National program for road safety due to expire in 2020, there is a need for evidence on the present state of behaviors of youth in traffic in Croatia, using indicators that take into the account the differences between boys and girls and the influence of the prevalent gender norms on these groups.

The goal of the research was to analyze the health risk behaviors in traffic for high school students from Zagreb by sex as well as to test the association between the endorsement of traditional masculinity and risky traffic behaviors among adolescent boys.

Study and included 4094 high school students in the City of Zagreb. Two of the most prevalent risky traffic behaviors were analyzed: the use of seat belts while riding in the front seat of a vehicle and the use of helmets while riding a bike. To compare scores between participants who reported risky traffic behavior and those who did not, we used chi-square test for sex and independent samples t-test for masculinity scale.

Students engage in multiple health risk behaviors while participating in the traffic. Over half of the students report inconsistent seat belt use when riding in the front seat of the car and only 7.5% report ever using a helmet when riding a bike. A significant association was found between sex and inconsistent seat belt use, with male adolescents reporting significantly more risky behavior than their female counterparts. Stronger endorsement of traditional masculinity norms among boys was correlated with less consistent use of seat belts ($p < 0.001$). The difference between male and female students in carrying a helmet when riding a bike was less significant, with results suggesting that the lack of protection when riding may be a part of the general youth culture.

The results in general highlight the prevalent harmful risky traffic behaviors of adolescents. The study highlights the need to further investigate the causes of risky traffic behaviors among youth and intervene at the level of youth culture. The results further suggest the need to design experimental gender-transformative interventions for boys specifically, as a group at a higher risk.

458 PREVALENCE OF SMOKING AND ALCOHOL CONSUMPTION AMONG RUSSIAN ADOLESCENTS Julia Levina*, Leila Namazova-Baranova, Kamilla Efendieva, Anna Alekseeva, Elena Vishneva, Valery Zvonarev. *The Research Institute of Pediatrics and Child Health of the Central Clinical Hospital of the Russian Academy of Sciences of the Ministry of Science and Higher Education of the Russian Federation*

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Objective Smoking is one of the main preventable causes of death, but nonetheless leads to more than 7 million deaths in the world each year. Worldwide, 3 million deaths every year result from harmful use of alcohol. Russia is facing a serious burden of smoking and alcohol consumption, which affects not only adults, but also adolescents. In order to conduct appropriate tobacco and alcohol control policies, it is important to understand smoking and alcohol consumption prevalence.

Methods An analysis of the prevalence of smoking and alcohol consumption was carried out in the research center in Moscow, Russian Federation among 303 adolescents (84 boys and 219 girls) 15-18 years old who participated in a study of the prevalence of allergic diseases according to the protocol of the research program GA2LEN. All participants completed the standardized GA2LEN questionnaire.

Results 25% of respondents (11% of boys and 14% of girls) said they had smoked for as long as a year, among them, most started smoking at the age of 16. 68% of teens who said they were still smoking as of one month ago, smoked 10 cigarettes a day. Among participants who had previously smoked, 55.1% already stopped smoking or started to smoke less, most of them at the age of 18. Among those who stopped smoking, they had smoked 12 cigarettes per day in average. 27% of participants were regularly exposed to tobacco smoke in the last 12 months. 34.2% of respondent's fathers smoked regularly during their childhood, 7.9% of respondents had mothers who smoked regularly during their childhood/before they were born. 3.9% of respondents said that they had been hospitalized before the age of two years for lung disease. We found a statistically significant association between a mother smoking during childhood or before the birth of a child and that child being hospitalized before the age of two years for lung disease ($p = 0.001$).

53% of respondents (14% of boys 39% of girls) said they never drank any alcohol. 31% of participants (7% of boys and 24% of girls) said they drank alcohol less than once a week, 9% of respondents (5% of boys and 4% of girls) said they drank alcohol at least once a week but less than once a day.

Conclusion Further efforts should be devoted to encouraging smoking and alcohol cessation and to develop strategies for preventing tobacco and alcohol use in young patients.

459 THE IMPACT OF TOXIC STRESS ON A DEVELOPING BRAIN Vanja Slijepcevic Saftić*, Gordana Buljan Flander, Ella Selak Bagarić. *Zagreb Child and Youth Protection Center*

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The effects of negative environmental factors in childhood result in neuro-biological changes. Exposed to powerful, negative environment, lead to hyperactivation of the neurological and endocrine system. This state is known as a toxic stress. Symptoms may frequently imitate ADHD and other neurodevelopmental disorders. Hyper-vigilance and dissociation, could be mistaken for inattention. Impulsivity might be brought on by a stress response in overdrive.

The aim of this study was to estimate preliminary results of a multi-disciplinary (Pediatric neurologist, Social worker, Psychologist, Psychiatrist, Speech therapist and special need