# DEGREE OF URBANIZATION AND SUBSTANCE USE AMONG SLOVAK ADOLESCENT BOYS AND GIRLS IN 2010

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#### BACKGROUND

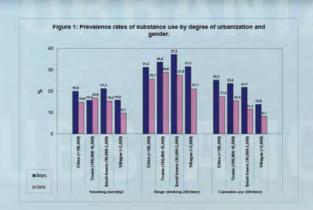
The degree of urbanization is an important factor regarding adolescent substance use due to differences in accessibility of substances and in gender patterns. However, these relationships may change over years. The aim of this study is to compare different types of adolescent substance use according to the degree of urbanization in boys and girls separately.

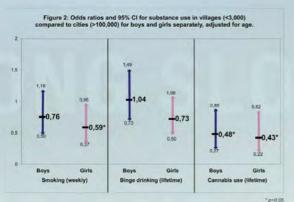
#### **METHODS**

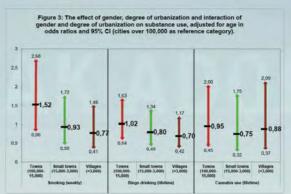
Data were collected as a part of the cross-sectional Health Behaviour in School-Aged Children project in 2010. The sample consisted of 3674 adolescents from 8th and 9th grades of Slovak elementary schools (47.7% boys, age 14.98, SD 0.7). Simple odds ratios for smoking, binge drinking and lifetime cannabis use according to four degrees of urbanization were calculated for both genders separately. The joint effect of degree of urbanization and gender was also assessed.

#### **RESULTS**

Lower smoking prevalence rates were found among girls from villages compared with their counterparts from cities (OR0.59;Cl 0.37-0.95). In binge drinking, no differences were found in any gender. In lifetime cannabis use, prevalence rates in the villages were lower among both boys (OR 0.48;Cl 0.27-0.85) and girls (OR 0.43;Cl 0.22-0.82). The joint effect of degree of urbanization and gender was only significant in smoking. No differences regarding substance use were found between cities compared to towns and smaller towns.







#### CONCLUSION

Among girls the degree of urbanization was related to substance use in smoking and cannabis only while differences were found only between the highest and the lowest degree of urbanization. Villages seem to remain a less risky environment compared with cites and towns regarding cannabis initiation.

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## PARALLEL SESSION 2: MODERATED POSTER **PRESENTATIONS**

Thursday, 10 November, 16:00-17:00

### 2.A. Urban health

#### Associations between availability of public transport and commuting physical activity Sune Djurhuus

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#### Background

Few studies have described public transit as connectivity parameter in studies of physical activity. Distance to and connectivity of public transport are determinants of walking and biking to stops/stations and thus important parameters when studying commuting physical activity. This study investigates the associations between public transport availability and self-reported commuting physical activity in the Capital Region of Denmark.

#### Methods

Cross-sectional data on self-reported distance to work and daily commuting duration using bike or walking is obtained from The Health Survey questionnaire "How are you 2010" in the Capital Region of Denmark. A stratified random sample of 95,150 inhabitants aged 16+ were asked about physical activity and 52.3% responded. Socio-demographic variables are obtained from national registers. Public transport data containing geocoded stops and timetables are obtained from the register Rejseplanen.dk. Geographical Information System (GIS) will be used to calculate distances to public transits and create network neighbourhoods to exam association to patterns of commuting physical activity. Principal Component Analysis will be performed on public transport variables to identify main components of variance. Data will be analysed by multivariate regression analysis with duration of commuting physical activity as outcome and public transportation availability as exposure variable. Control for potential confounders as socioeconomic factors, age and gender will be conducted.

#### Results

Preliminary results show that 90% of the population either walk or bike when commuting in Copenhagen City Centre. In some rural areas the proportion of inhabitants who walk or bike when commuting is as low as 55%. 33% neither walk nor bike to work when the distance to work is more than 10 km as opposed to 15% for distances less than 10 km. Further results on the effects of public transportation will be presented.

#### Conclusions

Commuting physical activity seems more prevalent in areas of high availability of public transport. Proximity of public transport may be important for commuting to/from stations/ stops. Whether higher connectivity and availability of public transportation increases commuting physical activity needs to be further investigated.

#### Are area-level and individual-level socioeconomic factors associated with self-perceived health in adult urban citizens?

Martina Behanova

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<sup>2</sup>Institute of Public Health - Department of Social Medicine, Faculty of Medicine, PJ Safarik University, Kosice, Slovak Republic in the EURO-URHIS 2 project on behalf of the SAVEZ

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Background

Residents living in deprived neighbourhoods have been shown to report poorer health. This may be due to both the socioeconomic (SE) characteristics of these residents and of the areas where they live. Evidence on Central European countries is lacking, however. This study aims to assess the association of area-level and individual-level SE factors with poor self-perceived health (SPH) among urban citizens in Slovakia.

#### Methods

Data on SPH, annual household income and educational attainment was collected using a self-administered postal questionnaire within the project co-funded by the European Union (EURO-URHIS 2) in the two largest cities in Slovakia, Bratislava and Kosice. Potential respondents were randomly selected from the files of the Population Registry Office and stratified by age (19-64, ≥65) and gender. The results of this study are based on the EURO-URHIS 2 preliminary data. The overall response rate was 39% (n = 1155). Respondents lived in 31 neighbourhoods. SE data on the neighbourhood level (unemployment rate, % of primary educated and university educated citizens) was obtained from the 2001 census. Multilevel logistic regression analyses were used to explore the association of individual-level and area-level SE factors with poor SPH.

#### Results

Residents with primary and secondary education (p < 0.01, OR = 2.03 - 1.9, 95% CI 1.15-3.59; respectively) and with lower household income (p < 0.01, OR = 2.64-2.53, 95% CI 1.61-4.16) reported poor SPH more often when compared with respondents having a university education and a higher household income. Respondents from areas with low SE characteristics did not report poor SPH more often than those from the better off areas (MOR = 1.28, var = 0.069, CI = -0.02-0.16). Furthermore, differences in poor SPH between neighbourhoods did not vary significantly (0.093; CI = -0.01 - 0.2).

#### Conclusions

In these two Central European cities, area-level SE characteristics were not associated with the SPH of residents, whereas individual SE factors such as education and household income were. This lack of area-level effects deserves additional study.

#### Degree of urbanization and substance use among Slovak adolescent boys and girls in 2010 Lukas Pitel

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#### Background

The degree of urbanization is an important factor regarding adolescent substance use due to differences in accessibility of substances and in gender patterns. However, these relationships may change over years. The aim of this study is to compare different types of adolescent substance use according to the degree of urbanization in boys and girls separately.

#### Methods

Data were collected as a part of the cross-sectional Health Behaviour in School-Aged Children project in 2010. The sample consisted of 3674 adolescents from 8th and 9th grades of Slovak elementary schools (47.7% boys, age 14.98, SD 0.7). Simple odds ratios for smoking, binge drinking and lifetime cannabis use according to four degrees of urbanization were calculated for both genders separately. The joint effect of degree of urbanization and gender was also assessed.

#### Results

Lower smoking prevalence rates were found among girls from villages compared with their counterparts from cities (OR0.59;CI 0.37-0.94). In binge drinking, no differences were found in any gender. In lifetime cannabis use, prevalence rates in the villages were lower among both boys (OR 0.52;CI 0.30-0.91) and girls (OR 0.37;CI 0.19-0.71). The joint effect of degree of urbanization and gender was only significant in smoking. Almost no differences regarding substance use were found between cities compared to towns and smaller towns.

#### Conclusions

Among girls the degree of urbanization was related to substance use in smoking and cannabis only while differences were found only between the highest and the lowest degree of urbanization. Villages seem to remain a less risky environment compared with cites and towns regarding cannabis initiation.

#### Urban-rural differences in parental knowledge of factors influencing oral health of Russian preschool children

Mikhail Pastbin

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#### Background

Earlier studies in Northwest Russia have reported that about 90% of children at the age of 12 have dental caries.

To compare parents' views on the oral health of preschool children in a regional capital and in a rural setting in Northwest Russia.

A cross-sectional study was conducted in two randomly selected kindergartens in the city of Arkhangelsk (population 350 thousand) and the only kindergarten in the village of Emetsk. Self-administered 22-item questionnaire was distributed among 150 and 70 parents in Arkhangelsk and Emetsk, respectively. The questionnaire covered issues on parental knowledge and attitudes towards oral health of children as well as self-reported status of own health. Urban-rural differences were assessed using chi-squared tests.

#### Results

Altogether, 101 (67%) and 48 (69%) parents in Arkhangelsk and Emetsk participated, respectively. Most respondents were females (92% vs. 83%, p = 0.260) aged between 25-34 years (65% vs. 55%, p = 0,260). Higher than secondary education was registered among 58% of parents in the city and in 15% of parents in the village (p < 0.001). Nearly all parents (90% vs. 83%, p = 0.236) reported that teeth of young children should be brushed twice a day. Both urban and rural parents (45% vs. 62%, p = 0.053) were wrong in choosing the appropriate position for effective supervision of tooth brushing of their children. Rural parents were more often unsure (29% vs. 49%, p = 0.021) if their child's toothpaste contained fluoride. Altogether 79% and 91%, p=0.063 of parents did not know how much fluoride it should contain. Parents answered (19% vs. 43%, p = 0.002) that their child had been given a sweetened baby bottle of comforter at night. Respondents (60% vs. 30%, p = 0.001) supposed that a child's first dental visit should take place when the first baby tooth had appeared, while (36% vs. 60%, p = 0,006) thought it should take place after all teeth were present. Conclusions: The low level of parental knowledge on oral health, especially in the rural area, indicates a need for distributing accurate information about factors influencing oral health of children in Arkhangelsk region. Poor knowledge may be partly responsible for the very high prevalence of caries among children in Northwest Russia.

#### Comparison of cardiovascular drugs consumption between City of Zagreb and Lika-Senj County Daniiela Stimac

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#### Background

To determine the differences in outpatient consumption of cardiovascular medicines between the smallest and the poorest Croatian region, Lika-Senj County, and the largest and the wealthiest region, the City of Zagreb, and what causes them.

#### Methods

The data on the number of packages and the purchase price for each medicine have been obtained from all pharmacies in Lika-Senj County and in the City of Zagreb. The DDD/TID was calculated for every medicine in accordance with its code name, ATC/DDD index of the World Health Organization (WHO) for 2010. The quality of drug prescribing within the group of cardiovascular medicines was assessed using the Drug Utilization (DU90%) method and the adherence of the DU90% segment to the guidelines for prescribing individual medicine groups. The statistical significance of differences in results between the City of Zagreb and Lika-Senj County was tested using the chi-square test at the level of statistical significance p < 0.05.

#### Results

The utilization comparison of the five most often prescribed drug groups in Lika-Senj County has shown statistically significant differences when compared to the City of Zagreb  $(\chi 2 = 28.93, df = 4, p < 0.001)$ .) Utilization of cardiovascular drugs is three times more in Zagreb than in Lika-senj County. The largest differences in the consumption are in the C09 group, which shows the largest consumption in both analyzed regions, and the smallest in the group with the lowest consumption, C02. Within the DU90% segment in the City of Zagreb there are 22 drugs, and in Lika-Senj County 20 drugs. The larger number of drugs within the DU90% segment shows evidence of greater diversity and, to a larger extent, individualized approach to therapy choice in the City of Zagreb.

#### Conclusions

The total outpatient consumption of cardiovascular medicines in the City of Zagreb and Lika-Senj County differs significantly. The consumption, quality of prescribing medicines and cost/DDD in the City of Zagreb is higher than the consumption in Lika-Senj County. In the City of Zagreb, newer and more expensive medicines are prescribed to a higher extent.