

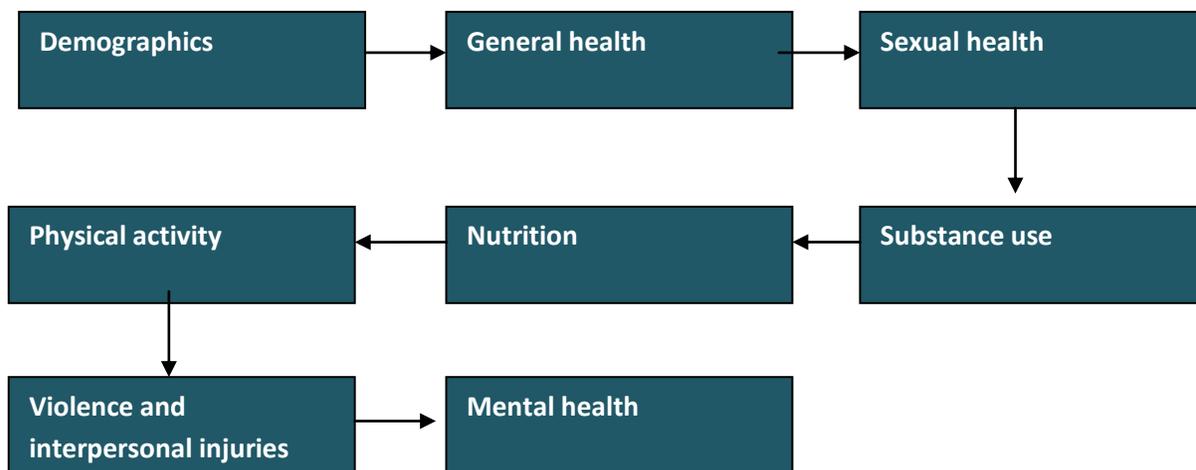
Setting health priorities for the youth population

A reviewing of the national and local literature available for seven youth health topics

Carina Țințaș, Marina Dascăl, Alexandra Onișor

SUMMARY

This document presents the results of reviewing scientific publications and reports presenting data at a national and local level for the following topics:



Duration. This process unfolded during February-March, 2020

Methodology. The document we used to structure the template for the HEALTH priority area is the AH-HA! Report released by WHO in Global Accelerated Action for the Health of Adolescents (AA-HA!): guidance to support country implementation. To search for relevant publications, we used specific keywords that combined the above AA-HA! Generated topics with “adolescents”, “youths”, “Cluj”, “Cluj-Napoca” and conducted a search on PubMed, EbscoHost, Google Scholar.

Limitations. Regarding the socio-demographic, information for our targeted population is scarce, as we were not able to identify data at the national level, such as gender distribution for the age groups, ethnicity for the age groups, residence, and an updated number for the total number of youth aged between 10-24 years old. Regarding the health section, we encountered difficulties in identifying reliable and scientific reports/journal articles about mental health, access to water, sanitation and hygiene, access to health and social services. At the same time, most of the reports/research articles focused on physical activity, nutrition and substance use presented information at the national level and the information provided was very detailed. The most detailed and reliable information was provided in reports by different authorities from Cluj. However, it was difficult to find updated information for 2020, 2019 or even 2018, especially for the LEAP specific age groups. An impressive amount of health related information was available for other Romanian counties but we did not include those results in this report.

Even with the use of specific key terms, the information was limited and scarce for the mental health topic and almost all established search topics. A lot of research on health and health related behaviors is conducted at the Cluj level, but these information is not collected in a publication depository that is easy to access. Moreover, conducting a sound literature review on health at a local level would mean an immense effort which was not schedule in the one month period allocated for the desk research for LEAP.

Main results.

- ❖ Main determinant of health: socio-economic status (+ parental employment, number of family members sharing the same household, mono parental families, parental educational status); 46% of children living in Romania – exposed to poverty and social exclusion
- ❖ Non-communicable diseases: higher in urban environment; main determinants: environmental and lifestyle factors cause 28% of morbidity; 10 major chronic disease cause 72% of morbidity: refractive vices, non-endocrine obesity, posture related defects/diseases, bronchial asthma, muscular hypertrophy, other chronic diseases of the locomotor system, speaking related disorders, psychomotor retardation and limited intellect, spasmophilia, neurotic and behavioral disorders
- ❖ Communicable diseases: higher in rural environment and the highest in institutionalized children; angina, pediculosis, micosis, scabies, acute diarrhea, varicella
- ❖ Substance use: Very problematic during adolescents: mean age of early onset is 12; 41 to 80% consuming at least once; increase in consumption from 2006 to 2018; Romania ranks the 7th and the 8th in frequency of consumption during adolescence
- ❖ Sexual health: very problematic during adolescence; early onset 11-14 years old; 30% are sexually active & 36% use contraceptive measures; 1.68% diagnosed with STD; complete absence of sexual education
- ❖ Nutrition: 46% overweight and 10% obesity; 50% have healthy dietary patterns which decline beginning with 15 years old (yo)
- ❖ Physical activity: absence of physical activity in 63%; lowest in Transylvania (10.57% of 15-24 yo); Ro ranks 22 in terms of frequency of physical activity; frequency declines with age 24% (11 yo) to 13% (13 yo), and to 6% (15 yo)
- ❖ Interpersonal injuries: Ro ranks 14; prevalence: 18% in 2018; higher in boys; increases with age; domestic violence more present in rural environment. Cluj low crime rate; head injuries – high % in 10-18 yo & referral to acute care;

It seems that the most problematic aspect which is not a health category but is related to health is POVERTY. The worst health results are present in children from low socio-economic backgrounds, in children from different minorities such as the Roma minority, in youths living with one single parent, living in households with too numerous family members, living in households where parents are unemployed, living with parents with low educational status or which are migrants.

In term of the non-communicable disease, the most relevant are the first 10 chronic conditions. It seems that most common chronic diseases for children and adolescents aged 7 to 19 are represented by refractive disorders, followed by obesity from non endocrine causes. For the age group 10 to 19, the 10

chronic diseases represents 72.12% of the total disease cases, compared to the other 53 chronic diseases registered, which represents only 27.95% of the total number of cases. The prevalence of dispensed chronic diseases in school medical cabinets, in the 2015-2016 school year, was 32% in Cluj: refractive vices/ ophthalmological related diseases 28.67% , other chronic diseases 27.95%, nonendocrine obesity 10%, posture related defects/diseases, bronchial asthma, muscular hypertrophy, other chronic diseases of the locomotor system, speaking related disorders, psychomotor retardation and limited intellect, spasmophilia, neurotic and behavioral disorders. These are also the most frequent diseases in both urban and rural areas. Those affected most by these conditions are institutionalized adolescents. Another problem related to health refers to the health system. We identified scarce information on hospitalization rates and of access to health care services. This is one area that needs improvements.

With regards to sexual health, a major concern is the early age onset of sexual activity. Sexual activity can be identified in adolescents aged 11 years old. While having a high number of adolescent unwanted pregnancies and a low rate of use of contraceptive methods, sexual education is missing entirely from the educational system. Parental attitudes are the main barrier in incorporating sexual education in the school curricula, sex being a taboo subject inside the family environment.

In terms of substance use, early age onset is still the most concerning issue. Adolescents experiment tobacco and alcohol use beginning with the age of 10 and high percentages of tobacco and alcohol consumption are identified during adolescence. As tobacco and alcohol consumption is promoted through parental consumption, targeting these risky behaviors is still a challenge. With regards to drug use, data is not concerning. However, we know that, when survey, youths avoid reporting drug use. Many initiatives address prevention of substance use. However, prevalence of substance use is almost similar during the last years.

Nutrition is one of the most explored health area at a local level. Many initiatives address the promotion of healthy dietary patterns in adolescents and youths, assess healthy eating indicators and identify knowledge and perceptions regarding healthy eating. At the same time, the prevalence of obesity is concerning in this age group. Consequently, efforts should be directed towards improving interventions.

Physical, emotional and relational bullying is a matter of concern in the school environment and this area is starting to receive a lot of interest. More problematic is the topic of domestic violence, where many adolescents are victims of abuse.

Mental health is the most intriguing area of health as scarce information is available.

RESULTS

Demographics

National level

Number of youths aged 10-24. In 2016, a report from the National Institute of Statistics specified that in Romania out of 19 703 494 people (no. of total population) 3 060 384 were children aged 0 to 14 years old. The adolescent group that is of interest for the current NGOA project (*10 and 14 years old*) represented 5,33% of the total population, more exactly 1 050 036 (INS, 2017). As the European Commission reports, in Romania live 3 288 155 young people, 48.4% being represented by young men and 51.6% by young women (European Commission, 2020). Out of the total number of young people, the same source mentioned that 5.4% were aged *15 to 19* and 5.3% were aged *20 to 24* (European Commission, 2020). A report from 2014 indicated that out of the total number of people living in Romania (21.6 million), **the population aged 10-24 represents 16% of the total population**, more precisely 3.5 millions (The State of World Population 2014).

Social inequalities. Social inequalities can be measured by using various indicators such as social exclusion or poverty related risks, and can also be associated with numerous disadvantages transmitted from one generation to another (European Commission, 2017). According to the European Commission, in 2015, approximately 46% of children >16 years old were exposed to poverty related risks or social exclusion in Romania (European Commission, 2017).

The poverty among children served as a topic of interest for many organizations worldwide, Saved the Children (Ro., Salvați Copiii) representing one Romanian organization confronting this big alarming issue. One report specifies that due to social inequalities, in Europe, over 26 million children were exposed to poverty related risks or social exclusion (Salvați copiii, 2016). Poverty affects children throughout their entire lifespan (Salvați copiii, 2016). **High risk children are those living with one single parent, living in households with too numerous family members, living in households where parents are unemployed, cases where the parents have low educational status or are migrants** (Salvați copiii, 2016). The same source mentioned that **material deprivation and educational poverty** affects the development and well-being of children since their early childhood, so the investments in the educational and care sector are crucial (Salvați copiii, 2016). Romanian children can be considered at risk due to the fact that **the degree of coverage of the child care system is under 10%**, and additionally, more than 50% of Romanian children attend preschool education (Salvați copiii, 2016).

Local level

In 2016, a report made by the National Institute of Statistics investigated the status of population taking into account aspects such as residence, age groups, genders or counties which people from Romania

were living in. In Cluj, it was reported a number of 31959 children between 10 and 14 years (*16403 boys and 15556 girls*), out of which 19823 were living in urban areas, while 12136 living in rural ones. 31336 children were recorded in the 15 to 19 age group (*15939 boys and 15397 girls*), their distribution being more accentuated in the urban area 18560, compared with 12776 in the rural area. In regard to the 20 - 24 age group, the report mentioned a total of 34830 youths (*17705 male and 17125 female*), a big proportion having an urban residence 21628, compared to 13202. According to the National Institute of Statistics, in 2016, in Cluj, out of 31959 children between 10 and 14 years, 16403 were boys and 15556 girls. For the 15 to 19 age group there were registered 31336 children, 15939 boys and 15397 girls. 34830 youths, out of which 17705 male and 17125 female were mentioned in the study for the 20 to 24 years age group.

Social inequalities

❖ PATA RÂT - *case study 2019*:

This study document explored the vulnerability regarding the living conditions of the Roma population and their interests towards them. It is mentioned that Para Rât area is one of the largest ghettos from our country, where over 70% of the population is of Roma ethnicity, almost 2000 souls live there daily, hundreds of them being children. It was observed that a family had between 3 and 7 children and most people were related to each other. One of the most important facts mentioned was that families' homes were at a very close distance from the garbage dump and infectious waste landfill.

The schools where the children usually go are those from the localities Cara and Cojocna, the children being taken every morning by bus, which is owned by the organization of the Inter-Community Development Association Cluj Metropolitan Area (organization within the city hall). The report states that, before being taken to school, the children are washed at the mobile unit of this organization, which is located in Pata Rât. After school, they are brought back to the unit, where they receive a meal and are helped with their homeworks.

❖ Pata Rat Rubbish Dump (*Small Steps Project*):

This short article mentioned how the Small Steps Project was working with The United Nations Development Programme (UNDP) providing emergency interventions and projects on the Pata Rat dump, undertaking a process of implementing a country wide housing and inclusion project. It is mentioned that, in Pata-Rat, the horrific conditions in which children and families live are on the same level as some of the poorest countries SSP works in. It is considered that the way in which the Romani community and their children are living in as a clear violation of human rights.

Communicable and non-communicable diseases

National level

According to the national report *Evaluation of chronic morbidity in children and youths* (2017) study from 2017, the national prevalence of chronic diseases for children aged 0 to 19 was 15.86%. This prevalence was based on cases registered at the school medical cabinets during the school schedule, between 2016 and 2017. This national report - which included data regarding children living in both rural and urban areas - presents that, between 2016-2017, 31137 children were hospitalized in the Cluj county and 93779 received medical check-up. For 2016, a similar prevalence of chronic diseases (16.46%) was reported by the *National Institute of Public Health* (2017). Moreover, the prevalence of hospitalized children for chronic diseases in the Cluj county in the period 2016-2017 was 33.2% (National Institute of Public Health, 2017). The same source mentioned that the most common 10 hospitalized chronic diseases in school medical cabinets in the period 2016 - 2017 were the following (National Institute of Public Health, 2017):

Types of hospitalized diseases	Number of cases	Prevalence %
1. Refractive vices/ ophthalmological related diseases (Ro., Vicii de refractie)	84140	4.71%
2. Non endocrine obesity (Ro.,Obezitate neendocrina)	29580	1.65%
3. Posture related defects/diseases (Ro.,Vicii de postura)	27063	1.51%
4. Bronchial asthma (Ro.,Astm bronsic)	12187	0.68%
5. Speaking related disorders (tulburări de vorbire)	9959	0.55%
6. Muscular Hypertrophy (Ro.,hipotrofie ponderala)	9581	0.53%

7. Psychic retardation and limited intellect (Ro.,retard psihic și intelect de limită)	8644	0.48%
8. Spasmophilia (Ro.,spasmofilie)	7986	0.44%
9. Neurotic and behavioral disorders (Ro.,tulburari nevrotice si de comportament)	7522	0.42%
10. Other chronic diseases of locomotive apparatus (Ro.,alte boli cronice ale ap. locomotor)	6752	0.37%
Total	203414 = 71.89% of the	total cases of disease

The prevalence of hospitalized chronic diseases in Cluj county in the period 2016 - 2017, reported on age groups (National Institute of Public Health, 2017) is the following:

- prevalence for children aged **7 - 11 years old**: 30.65% ;
- prevalence for children aged **11 - 15 years old**: 39.36% ;
- prevalence for children aged **15 - 19 years old**: 47.5%.

A report published in 2018 by the National Institute of Public Health assessed the impacts of environmental and lifestyle related factors on the health status of children and adolescents in different communities, using for the data collection phase information gathered from 592.551 subjects. The findings from the national level revealed a number of 166.768 cases of chronic diseases, representing a general morbidity of 28.1%. In urban settings the mortality prevalence is more present, out of 489356 examined children from urban settings 31% suffered from a chronic disease, while in rural settings, out of 103195 subjects examined 14.6% confronted with chronic problems (National Institute of Public Health, 2018). This report shows that in 2017-2018, the most frequent chronic diseases in urban and rural settings were the following:

Disease	Urban %	Disease	Rural %
Refractive vices/ ophthalmological related diseases (Vicii de refractie)	7.8	Refractive vices/ ophthalmological related diseases (Ro., Vicii de refractie)	1.9
Non endocrine obesity (Obezitate de cauza neendocrina)	3.6	Non endocrine obesity (Ro., Obezitate de cauza neendocrina)	1.6

Deform. castig. ale CV (Sechele rahitism)	2.4	Muscular Hypertrophy (Ro., Hipotrofie ponderala)	1.5
Rachitic deformities (Sechele rahitism)	1.7	Statural Hypertrophy (Ro., Hipotrofie staturala)	1.2
Muscular Hypertrophy (Hipotrofie ponderala)	1.6	Chronic diseases of tonsils and of adenoid vegetations (Ro.,Afectiuni cronice ale amigdalelor si a vegetatiilor adenoide)	1.1
Speaking related disorders (Tulburări de vorbire)	1.1	Chronic anemia due to iron deficiencies (Ro.,Anemia cronica prin carenta de fier)	0.9
Statural Hypertrophy (Hipotrofie staturala)	1.1	Mild mental retardation (Ro.,Intarzieri mintale usoare)	0.6
Deformities of members (deformari castigate ale membrelor)	1.0	Speaking related disorders (Ro.,tulburări de vorbire)	0.6
Chronic diseases of tonsils and of adenoid vegetations (afectiuni cronice ale amigdalelor si a vegetatiilor adenoide)	1.0	Rachitic deformities (Ro.,Sechele rahitism)	0.55
Bronchial asthma (Astmul bronic)	0.8	Behavioral and adaptation disorders (Ro.,Tulburari de comportament si adaptare)	0.54

As we can see in the table above, at the national level, **the most common chronic diseases for children and adolescents aged 7 to 19 are represented by refractive disorders, followed by obesity from non endocrine causes. These are also the two most frequent diseases in both urban and rural areas.**

Another relevant national report for the general health of children, adolescents and youths from Romania is the *Surveillance of the health of children through epidemiological triage after vacations (Ro., Supravegherea stării de sanatate a copiilor prin triajul epidemiologic după vacante - Raport Național 2017)*. This report describes the national situation regarding the children' health status using data obtained after an epidemiological triage made in 2017 (National Institute of Public Health, 2017). The epidemiological triage conducted at a national scale (“the triage after the summer holiday”) included a number of 2.150.770 children and adolescents, out of which 556.002 children were having a rural residence and 1.594.768 an urban one (National Institute of Public Health, 2017). A high number of children examined during the epidemiological triage contributed to a better surveillance of the health status of children from the school units, by detecting various conditions and by establishing special measures for cases of sick or germ carriers children. A beneficial aspect is represented by an increase of examined children by triage, from 928.923 examined children in the school year 2007 - 2008, to 2.150.770 in the school year 2017 - 2018 (National Institute of Public Health, 2017). Out of the total examined children, a number of 21 198 children were diagnosed with infectious-contagious and parasitic diseases (in percentage - 0,986%) - and out of the diagnosed cases 14 369 (0,901 %) in the urban areas, 6 829 (1.228%) in the rural areas. The same source mentioned that the **distribution of cases with diseases was the highest in orphanages (4.43%)** (National Institute of Public Health, 2017).

According to this report, the most frequent communicable diseases in school units are the following:

Disease	Prevalence %
Angina (Ro., anginele)	0,471%
Pediculosis (Ro., pediculoza)	0,349%
Mycosis (Ro., micoze)	0,057%
Scabies (Ro., scabie)	0,011%
Acute diarrhea (Ro., boala diareica acuta)	0,004%
Varicella (Ro., varicela)	0,001%

Furthermore, it is mentioned that during seasonal epidemiological conditions, the pathology is dominated by acute upper respiratory tract infections, conditions found, actually, at each school age (National Institute of Public Health, 2017). As a conclusion, according to this report, the number of examined children during epidemiological triages remains high, the prevalence of infectious and parasitic diseases being higher in the triages after the winter holiday (22 633 diagnosed cases) then in those after the

previous summer holiday from 2017 (21 198 diagnosed cases). Data analysis by types of conditions shows that angina occupies the first place, followed by pediculosis and mycosis, a common aspect also in the previous years (National Institute of Public Health, 2017).

Cluj level

- ❖ National health report of children and youth in Romania 2018:

The report states the fact that, at the national level, the prevalence of chronic diseases for children between 0 and 19 years old, records registered at school medical offices was 16.46% (compared to 15.5% in 2015). It is stated that the proportion of the first 10 chronic diseases represents 72.12% of the total disease cases, compared to the other 53 chronic diseases registered, which represents only 27.95% of the total number of cases. **The prevalence of dispensed chronic diseases in school medical cabinets, in the 2015-2016 school year, was 32% in Cluj (one of the highest values, after Arges with 35.13%), compared to the national value of 16.46%.**

In the children and youths collectivities, the structure of the dispensed chronic morbidity is represented by the following diseases: refractive vices/ ophthalmological related diseases 28.67% , other chronic diseases 27.95%, nonendocrine obesity 10%, posture related defects/diseases, bronchial asthma, muscular hypertrophy, other chronic diseases of the locomotor system, speaking related disorders, psychomotor retardation and limited intellect, spasmophilia, neurotic and behavioral disorders.

The analysis of the prevalence of the chronic diseases dispensed in the school medical offices in the 2015-2016 school year, taking into account the educational degree, shows that the highest value is registered in the students from the secondary school - 21.37%.

In conclusion, from the reports received from the school medical offices in the recent years, it appears that the prevalence of chronic diseases that can be dispensed in children and young people remains high.

- ❖ Evaluation of chronic morbidity by dispensarization in children and youth collectivities national report 2018 (Ro., Evaluarea morbidității cronice prin dispensarizare in colectivitățile de copii și tineri raport national 2018):

This report assessed the prevalence of dispensed chronic diseases in each county from Romania, concluding that in 2017, in Cluj it were registered 40920 dispensed children, out of which 9557 were examined, the prevalence of chronic diseases rising up to 42.82%.

It was mentioned that in Cluj, the prevalence of dispensed chronic diseases in school medical cabinets in the 2017-2018 school year, in the 11 to 15 years age group was 83.52% and in the 15 to 19 years age group was 41.81%. This report stated, once more, that the most frequent registered chronic diseases in these collectivities are: refractive vices, posture related defects/diseases, non endocrine obesity, bronchial asthma, speaking disorders.

- ❖ World Vision Research Study, 2016

This research began in April 2016, and included a sample of 2,205 adults from households in the 105 villages and communes in which World Vision carries out projects in Vaslui, Ialomița, Vâlcea, Dolj, Olt and Cluj. The research also used information collected from a sample of 2,573 children and young people aged 7-18, as well as from doctors, teachers and social workers and local authorities - mayors or local councilors, from the same localities. The research, which follows the main indicators on child welfare, such as health status, education, community participation and child protection, shows in the 2016 edition

a slight improvement of the indicators compared to 2014, but the situation of the child is far from satisfactory. **Poor school outcomes, inadequate nutrition and health risks are some of the major problems faced by children in rural areas.**

- ❖ Study regarding life quality aspects on a group of pupils, children and adolescents.

The instrument included 45 questions divided into five main sections: general data, family data, personal life aspects, importance given to different relevant life aspects and satisfaction regarding different life aspects. The instrument was approved by the Educational Inspectorate of Cluj County, and was applied in 2006-2007 school year to a sample of children in 5th to 12th grade from "Mihai Eminescu" Cluj High School. **The main factor out of the socio-economic determinants that influences quality of life of children questioned is family income.** For a third of subjects the family income was reported below national average family income, which was around 524 euro in 2007. The study reports that the percent might have been higher because 37.74% of children didn't know what to answer when reading the question. 73.55% of children were examined by a physician in the previous three month because of a medical condition, percent registered in an assumptive healthy population. Between 70% and 95% mentioned that they are satisfied or mostly satisfied with the important life aspects on which we have questioned them - things owned, own health, things accomplished in life, relations with family and friends, own safety, things done with other persons and own happiness. 4.19% of children stated that they are mostly unsatisfied, unhappy or deplorable regarding their own happiness.

- ❖ Activity Report-Ministerul Sănătății Direcția de Sănătate Publică a județului Cluj

The prophylactic medical examinations of the balance of the state of health are carried out annually for preschoolers (at the entrance to the kindergarten), for 1st graders, for 4th graders, for students enrolled in the secondary school (8th graders), for students enrolled in high school (10th grade) and the second year of the professional school, both in the environment urban as well as rural. Regarding physical development and morbidity. In the 2017 - 2018 school year, a number of 31422 pupils were examined, compared to 23081 between 2016- 2017. In 2018, **32.32% were disharmonically developed regarding the weight in relation to the height** (in 2017: 29.51%) and 66.24% are harmonically developed (compared to 70.49% in 2017). The values are very close in the 2 years, but the tendency of dispersion of the values to the average is accentuated. Children with medium development indicators are fewer and more children with large and small indicators.

- ❖ Romania: facing the challenge of translating research into practice – policy and partnerships to promote mental health among adolescents

Based on results from the 2006 Romanian HBSC survey, public policy concerning adolescent mental health should focus on three broad objectives: (1) preventing social exclusion of vulnerable groups (children and adolescents from low socioeconomic backgrounds, Roma ethnicity, teenagers with disabilities or with delinquent behavior) by offering information, promoting acceptance of individual and group differences, encouraging interaction and providing equal opportunities; (2) providing help to support major life transitions (all the physical and psychological changes that are characteristic of adolescence, entering high school and deciding on a future career) by making prevention and counseling services available; and (3) sustaining community development efforts to create friendlier neighbourhoods.

Morbidity

- ❖ Activity Report: Ministry of Health - DSP CLUJ (Ro., Ministerul Sănătății - Direcția de Sănătate Publică a județului Cluj

The prevalence of morbidity in children and adolescents (age group TBA) obtained at the medical examination in 2018 was 34.45% (46.57% in 2017). It was higher in urban areas than in rural areas. The rank of the main chronic conditions:

- ✓ refractive defects - 10.60% in 2018 (14.22% in 2017),
- ✓ rachitis - 7.94% (10.42% in 2017),
- ✓ deformations of members - 7.06% (8.37% in 2017),
- ✓ deformations of the spine - 6.62% (9% in 2017),
- ✓ non-endocrine obesity - 4.33% (6.13% in 2017),
- ✓ bronchial asthma - 2.31% (2.77% in 2017),
- ✓ speech disorders - 2.15% in 2018 (3.05% in 2017),
- ✓ other diseases of the circulatory cardio-systolic system - 2.11% (3.7% in 2017)

- ❖ Development strategy of Cluj-Napoca municipality 2014-2020

In 2013 Cluj had 164 family doctor offices, 555 medical offices of dental medicine and 146 pharmacies. In the municipality of Cluj-Napoca there are 12 public hospitals and 12 private hospitals.

- ❖ Activity Report-Ministerul Sănătății Direcția de Sănătate Publică a județului Cluj

- 17 public hospitals;
- 25 private hospitals;
- 353 family medicine offices;
- 306 pharmacies;
- 60 specialized medical centers;
- 25 medical laboratories;
- 270 private dental offices and medical centers;
- Public county ambulance service;
- 10 private healthcare providers;
- 8 home care providers.

Sexual Health

National level

According to WHO reports, statistical evidence shows that the onset of sexual life begins earlier and earlier, especially in industrialized countries and also, the rate of sexually transmitted diseases in adolescents has significantly increased. Romania ranks fourth in a decreasing order for the frequency of 15 year old adolescents who have had sexual intercourses (National Institute of Public Health, 2013).

- ❖ A relevant report for the status of sexual health in Romanian adolescents is the *National Report of Health in Children and Youths 2013 (Ro., Raportul Național de Sănătate a Copiilor și Tinerilor 2013)*.

This report included the results of the National Synthesis 2012 that focused on identifying risk behaviors in students (Ro., „Identificarea, cuantificarea și monitorizarea comportamentelor cu risc pentru sănătate la elevi”). It is mentioned that in most regions of the country three out of ten sexually active students used contraceptive methods in their last sexual intercourse. In Transylvania this percentage was 36,18. The frequency of unwanted pregnancies was the most present in cases of girls in the 12th grade. About one in ten sexually active students had their first sexual intercourse at ages between 11 and 14. Two out of one hundred sexually active high school students aged 15 and approximately nine out of one hundred aged 18, consumed alcohol or drugs prior to their last sexual intercourse. At the national level, three out of one hundred sexually active students have been diagnosed with STDs (National Institute of Public Health, 2018).

- ❖ Another relevant source with regards to sexual health is the *National Synthesis conducted in 2018 on identifying, quantifying and monitoring risk behaviors in students (Ro., Identificarea, cuantificarea și monitorizarea comportamentelor cu risc pentru sănătate la elevi (fumat, consum de alcool, droguri, comportament alimentar, sexual, activitate fizică, agresivitate fizică - National Synthesis 2018)*.

The investigations were carried out on 8057 students from the high school cycle, from the counties of Romania (46,47% girls and 53,6% boys); in Transylvania being assessed 2044 subjects (25,3 %) (National Institute of Public Health, 2018). This report included questions grouped on six areas of interest: smoking, alcohol / illicit drug use, aggressive self-aggression (suicide attempt), sexual behaviors, eating behaviors and physical activity. The report initiates its premises on data obtained in HBSC study 2013-2014, source according to which, Romania ranks sixth regarding the frequency of 15 years old sexually active boys. At the national level, the monitoring process revealed that 31.67% of high school students had sexual intercourses, most commonly in 11th and 12th grades (National Institute of Public Health, 2018).

Nationally, 25.1% high school students with constant sexual activity used contraceptive methods in their last sexual intercourse. In terms of prevention, the most commonly used contraceptive was the condom: Transylvania 20,94%; Banat 20,18 %; Moldova 27,09 % and Muntenia 20,99 %. At the national level, compared to 2016, the frequency of subjects who used a condom as a contraceptive method decreased from 24.95% to 21.86% (National Institute of Public Health, 2018).

A risky sexual behavior, respectively unprotected sexual contacts or multiple partners can lead to serious social or medical consequences such as unwanted pregnancies, which can further on increase the frequency of abandonment or sexually transmitted diseases. In Romania, the frequency of sexually active high school students who were diagnosed with various sexually transmitted diseases was 1.68%, in Transylvania 1.37%. On the other hand, 7.68% of the sexually active high school students had their first sexual intercourse at the age ≥ 17 years: 15.4% at the ages between 15 and 16 years, and 7.68% at the ages between 11 and 14 years. The frequency of high school students who consumed alcohol or drugs prior to their sexual intercourses decreased slightly by 1.02%, compared to 2016 (National Institute of Public Health, 2018).

Cluj level

- ❖ Development strategy of Cluj-Napoca municipality 2014-2020

The Public Health Authority of Cluj-Napoca reports that half of the high school students had sexual experiences, the frequency increasing from one school level to another, reaching the maximum in the 12th grade. Moreover about 30% use contraceptives, 25% other methods, 25% condom, 20% do not use any method

- ❖ Gender differences in sexual and reproductive health education in the family: a mixed methods study on Romanian young people

In 2013–2014, 1,359 people aged 18–30 years were randomly selected from urban areas covering the main university centers of Romania, and they completed a questionnaire with 60 items regarding socio-demographic data, family, sexual behavior and health risks.

Exploring the issues of sexual and reproductive health discussed with parents according to gender revealed that there was a **greater concern in families to address issues of sexuality with girls**. The manifestation of any form of sex education in the family was positively associated with a healthy sexual debut, both for women and men. The results showed that lack of sex education in the family decreased the likelihood of a healthy sexual debut, both in women and in men. In men, **receiving information about sex at a younger age reduced the chance of a healthy sexual debut**. Younger women and men were more likely than older women and men to experience a healthy sexual debut. Qualitative results revealed that sexual and reproductive health talks were generally initiated by young people, usually involved a parent of the same gender and often occurred after events in the sexual lives of young people (after first menstruation/after sexual debut).

Among the 60 conducted interviewed participants, 35 women who had begun their sexual lives were identified. The age at which these women first obtained information about menstruation was 10–11 years old, and the most common age at menarche was 12 years old. Almost a third of the women had received information about menstruation at the time of or after menarche, and a quarter of the women had received it a year before their first menstruation. Most women received information about the menstrual cycle from their mothers, or the discussions with their mothers were preceded by conversations with other women in the family (an elder sister, aunt, grandmother) or with people at school (classmates, a teacher, or a biology teacher). Some women first learned about menstruation from older friends who had already experienced it. In over half of the cases, the discussion on the menstrual cycle was initiated by the daughter.

In regard to the 11 surveyed men who had started their sexual lives, more than half had received their first information about FSE at 12 years old, which was approximately 1 year later than the most common age at which women received their first information about menstruation. Over a third of the men reported that they had their FSE a year after receiving preliminary information about FSE. In three cases, the men did not remember the age of their first FSE. Most commonly, men had obtained their first information about FSE from friends in their neighborhoods or from older friends.

Other sources of information were school, the Internet, the family physician and, only in one case, the father. More than half of the men had not approached this topic with their parents.

Over a third of the surveyed women began their sexual life and received their first information about preventing pregnancy at the age of 14. Schools were the first source of information about pregnancy prevention for half of the interviewed women. The discussion about pregnancy prevention was most frequently approached by teachers (the biology teacher and/or a class teacher), by members of the medical staff (the school nurse or doctor, a gynecologist or a sex education class given by a physician), and by representatives of NGOs and companies with the aim of preventing pregnancies and STIs and promoting sexual hygiene in schools (e.g., Always brand). In over a third of the cases, mothers were the main source of information concerning pregnancy prevention. In only two cases, women stated that the source of information on this subject was the Internet. It is worrying that over a quarter of the women had never talked with their parents about pregnancy prevention. Only in four cases had the women discussed this issue with both parents.

Regarding their first information about pregnancy prevention, most (nearly half) of the men received it a year later than most of the surveyed women, i.e., at 15 years old. The primary sources of information on pregnancy prevention were schools and parents (four cases each); one man mentioned his friends as a source of information, and another mentioned the Internet. However, half of the interviewed men had not approached this topic with their parents.

Among the 46 interviews with the subjects who had begun their sexual lives, 41 used a condom during their FSI; in one case, pills were used; and in two cases, protection was not used, as it was the wedding night. Regarding the favorite method of protection, in most cases, the man or both partners were in charge of the decision to use it. Over three-quarters of the young people who had started their sexual lives talked to their partner about contraception before their FSI.

Most of the young people admitted that discussions with their parents about sexual life were difficult because of the embarrassment they felt in revealing intimate experiences.

❖ Maternity perspective in adolescents mothers

This study included 20 adolescent mothers from Cluj. The selection criteria were as follows: the young woman having given birth to a child at the age of adolescence, being between the ages of 15 and 21 years). The data collection method chosen was the semi-structured interview. The interviews lasted approx. 75 minutes and were made during 2011.

Authoritarian parental style, taboos related to discussing topics such as sexuality, reproduction, reproductive control have made disclosure even more difficult. The greatest anxiety usually involved her revealing herself to the paternal figure in the family ("although I have never been beaten, I am more afraid of him than of my mother").

As for the young mothers who had attended school and came from middle-class families, they seemed quite scared to talk about their sexuality and contraceptive methods, indicating that were often informed about them by themselves because parents or teachers were reluctant to provide information. The appearance of a pregnancy in adolescence is, as we have seen, natural in the Roma community. The real problem regarding the maternity at the age of adolescence in certain deprived communities from the socio-economic point of view and in which the Roma ethnicity prevails is given by the class differences. Study results contradict the assumptions that adolescent mothers relate much less to their children. Adolescent mothers feel that sometimes they are considered inadequate in this maternal role and it seeks to "prove" its competence. The relationship of adolescent motherhood with certain factors of individual, family members would be the subject of interdisciplinary research: the incidence of conditions such as depression, anxiety, personality disorders in adolescent mothers, the incidence of domestic violence in the families of adolescent mothers.

- ❖ Assessment of health risk behaviours and their interrelationships among young people from two counties of Romania

A cross-sectional study was conducted between November 2003 and February 2004 among 1,598 young people, aged 11–25 years, from two counties—Cluj and Hunedoara— situated in the north-western part of Romania. In Cluj-Napoca the study was also carried out among university students randomly chosen from 8 dorms belonging to the 4 main universities of the town: 40 girls and 40 boys living in the selected dorms were randomly chosen from each university.

The study sample consisted of 630 junior high school students aged 11–15 years (324 boys and 306 girls, 498 from the urban area and 132 from the rural area), 568 senior high school students aged 15–19 years (281 boys and 287 girls, 325 from the urban area and 243 from the rural area) and 400 university students, aged 19–25 years (200 boys and 200 girls).

One third of senior high school students and university students reported having had sexual relations before the age of 18, with no statistically significant differences between the two groups. Precocious sexual intercourse was also more frequent among boys than girls both among senior high school students and university students

Substance use

National level

Tobacco use

- ❖ A relevant report for the status of tobacco use in Romania youths is the *National Synthesis conducted in 2018 on identifying, quantifying and monitoring risk behaviors in students (Ro., Identificarea, cuantificarea si monitorizarea comportamentelor cu risc pentru sanatate la elevi (fumat, consum de alcool, droguri, comportament alimentar, sexual, activitate fizica, agresivitate fizica).*

Analyzing the different trends in the world and in Europe, in Romania there is **an increase in the consumption of cigarettes in adolescents and youths**. Official estimates at national level showed that 41.2% of the students aged 13-15 in Romania have smoked at least once in their lifetime and 13.5% are current smokers. The report states that in Romania, various nationally representative studies estimate that between 5-10% of adolescents aged 15 smoke daily. According to the international report of the WHO study - HBSC 2013/2014, Romania ranks 7th (out of 41 countries), in a decreasing order, in terms of the frequency of 15-year-old students who smoke at least once a week, 17% of girls and 20% of the boys which completed the questionnaire reporting this health risk behavior. According to the report, in Romania we can observe a constant evolution from 2005/2006 (12%) to 2017/2018 (19.88%) of the frequency of 15 year old girls who smoke at least once a week. The results revealed that 3.0% of the students smoked the first cigarette under or at the age of 8, 15.20% between 13 and 14 years and most, 18.16%, between 15-16 years. At the national level, 4.94% of the students smoked more than 10 cigarettes per day during the last 30 days prior responding to the questionnaire, this figure representing the proportion of the students targeted to become nicotine addicts.

Alcohol use

- ❖ A relevant report for the status of alcohol consumption in Romanian adolescents and youths is the *National Synthesis conducted in 2018 on identifying, quantifying and monitoring risk behaviors in students (Ro., Identificarea, cuantificarea si monitorizarea comportamentelor cu risc pentru sanatate la elevi (fumat, consum de alcool, droguri, comportament alimentar, sexual, activitate fizica, agresivitate fizica - National Synthesis 2018):*

In Romania, the proportion of 16-year-old adolescents who consumed at least once alcohol was 77.9%. According to the international report of the WHO study - HBSC 2013/2014, Romania ranks 8th out of 41 countries, in a decreasing order, as regards the frequency of 15-year-old students who have consumed alcohol at least once a week, 30% of boys and 10% of girls which were surveyed reporting this health risk behavior. Nationally, the distribution of students who reported to drink occasionally was: 29.73% in the 9th grade, 33.90% in the 10th grade, 35.49% in the 11th grade and in the 12th grade 36.86%. In terms of the age at which the students first consumed alcohol, the results show that: 5.68% consumed the first sip of alcohol under the age of 9 years, 4.77% between 9-10 years and 3.97% over 17 years. In this report it was also monitored, the alcohol use in schools. The national average frequency of high school students

who consumed alcohol at school 1-5 times, in the last 30 days prior completing the questionnaire, a smaller value compared to 2016.

- ❖ Another relevant source is the *National Report Concerning the Health Status of Romanian People 2017 (Ro., Raport Național privind Starea de Sănătate a Populației României 2017)*:

In Romania, the amount of alcohol consumed, expressed in liters, of **pure alcohol per person in the population over 15 years, in 2015, was among the largest from the European Union, with a value of 12.9 liters, compared to the EU28 average of 10.2 liters**. Among teenagers: In the HBSC study, weekly alcohol consumption is reported by 21% of boys and 9% of girls between the ages of 11 and 15, the prevalence of consumption increasing with age, so, at 15, 31% of boys and 11 % of girls reported that they consume alcohol daily. At the age of 15, 29% of boys and 12% of girls reported they had at least two episodes of drunkenness in life, a phenomenon present in adolescents 11 and 13 years old, but in a significantly lower percentage.

- ❖ Another relevant source is the *National Synthesis 2017 (Ro., Identificarea, cuantificarea si monitorizarea comportamentelor cu risc pentru sanatate la elevi (fumat, consum de alcool, droguri, comportament alimentar, sexual, activitate fizica, agresivitate fizica - National Synthesis 2017*:

According to ESPAD 2011 data, **80% of Romanian adolescents (14-19 years) consumed alcohol at least once in their lifetime**, a value which decreased from 2007, being also below the average of ESPAD countries (87%). According to this study, 50% of adolescents started drinking before the age of 13, while 60% of parents are convinced that their children started drinking or only consuming alcohol after the age of 18. Alcohol is accessible to adolescents, and its consumption is generally unknown to parents. 40% of adolescents stated that they consumed alcohol because it is "fun", and 50% think they "forget about problems". Furthermore, 36% of adolescents have a pattern of excessive alcohol consumption (≥ 5 drinks at one time), slightly increasing compared to 2007, when the value was 33%. The report mentioned that the procurement of alcoholic beverages is relatively easy (by not complying with the legal framework regarding the sale of alcohol) and in plus, there are points of sale of alcohol near schools. The trends and characteristics of alcohol consumption in adolescents in Romania correspond to the patterns registered at European level for the same age groups. The excessive consumption is declining and is also below the European average, unfortunately, the age of onset of consumption has decreased and in plus, there is a tendency to increase alcohol consumption in the female population.

Drug use

- ❖ A relevant report with regards to drug use in Romanian adolescents is the *National Synthesis from 2017 (Ro., Identificarea, cuantificarea si monitorizarea comportamentelor cu risc pentru sanatate la elevi (fumat, consum de alcool, droguri, comportament alimentar, sexual, activitate fizica, agresivitate fizica - National Synthesis 2017*:

In Romania, the prevalence of drug and ethnobotanical use is among the lowest in Europe. Impact studies on illicit drug use, in Romania and other countries in the European Community area, indicate the need to intensify selective interventions in the school environment.

Marijuana. Regarding the frequent drug use, the situation was as follows: at the national level, about 1.85% students consumed marijuana in their lives 20 to 100 times, frequency lower with 0.12% compared to the value recorded in previous year - in Transylvania the percentage was 2.17%. The frequency of high school students who reported that consumed marijuana 1–2 times in the standard range * (%), in relation to sex and education level in Transylvania -> 9th grade: boys 2.43% and girls 0%; 10th grade: boys 0.55% and girls 0%; 11th grade boys 5% and girls 1.41%; 12th grade boys 3.95% and girls 1.29%. Out of the total students who frequently used drugs within the standard 30-day interval before completing the questionnaire, 0.95% were consumed drugs at school, a value with 0.17% more than in the previous year. In Transylvania was the geographical area where it was registered the highest frequency of drug use at school. With regard to the procurement of drugs, the supply of drugs was evaluated within the school units. The following data were obtained: of the students who admitted that they frequently used drugs, 13.38% confirmed that they were offered or sold drugs in school - in Transylvania the percentage being 5.7%.

Heroin. The results of drug use monitoring revealed that 0.52% of high school students in Romania experienced the drug (heroin) 1-2 times in their lifetime, the distribution by geographical area being 0.62% from Transylvania, 0.58% in Muntenia, 0, 45% in Moldova, 0.33% in Banat. The frequency of high school students who consumed heroin 1-2 times in their lifetime(%), in relation to the level of schooling in Transylvania was: 9th grade 0.77%; 10th grade 0.24%; 11th grade 0.76%; 12th grade 0.73%.

Methamphetamine. According to the study results, the monitoring of illicit drug use revealed that about 0.77% of high school students in Romania experienced the drug (methamphetamine) 1-2 times in their lifetime, the distribution by geographical area being: 0.93% Transylvania, 0.66% Muntenia , 1.11% Moldova, 0.25% Banat. The frequency of students who consumed methamphetamine 10-40 times in life in Transylvania: 0.99%

Cocaine. In Romania, the results showed that about 1.22% of high school students experienced cocaine 1-2 times in life, the distribution by geographical area being 1.43% Transylvania, 0.95% Muntenia, 1.56% Moldova, 1, 0% Banat. It should be mentioned that in Romania, from the group of students who tried cocaine 1-2 times in life, about 0.73% consumed the drug within 30 days before responding to the questionnaire - in Transylvania the percentage was 0.93%.

Ethnobotanicals. At the national level, the frequent consumption of ethnobotanical substances was 1.27%, with 0.38% lower compared to 2014. In Romania, approximately 1.99% of high school students consumed ethnobotanical substances 1-2 times in their life, the distribution by geographical areas being 1.55% in Transylvania, 1.82% in Muntenia, 2.21% in Moldova and 2.58% in Banat. The frequency of consumers of ethnobotanical substances decreased nationally (in each four geographical regions). In Transylvania, the frequency of consumers decreased by half, from 3.14% in 2014, to 1.55% in 2016.

Cluj level

Tobacco use

❖ World Vision Research Study

The research used information collected from a sample of 2,573 children and young people aged 7-18, as well as from professionals (doctors, teachers, social workers) and local authorities (mayors), from the same Vaslui, Ialomița, Vâlcea, Dolj, Olt and Cluj. Incidence of smoking among adolescents aged 12 to 18

increased from 7.3% in 2014 to 9% in 2016 (1 in 10 smoked), while the incidence of alcohol consumption remained constant at 21 % (1 in 5 consumed alcohol).

❖ Study on the social norms that influence the risk behaviors of adolescents in Romania 2014

The quantitative research component of this study included 1870 pupils enrolled in gymnasium and high school (5th to 12 grade). The age of the onset for cigarette uptake is 14 years old. The prevalence of smoking in adolescents aged of 10 to 13 from Cluj-Napoca is 15%. Moreover, the prevalence of smoking among questioned adolescents aged 14-18 is high, 63% of them smoking. This prevalence is only a slight lower compared to adolescents of the same age from Bucharest - 66% and from Bacău - 65%.

A high prevalence of smoking in the peer group was reported in adolescents aged 10-13 years. Of the total sample from Cluj-Napoca, 66% of adolescents reported knowing at least one adolescent of their age who smokes. Also, for four out of five cities (Bacău, Cluj-Napoca, Iasi and Constanta), a higher prevalence of smoking is present in adolescent girls compared to adolescent boys. Moreover, adolescent girls consider smoking "cool".

❖ Active and passive smoking among high school and primary school children

The study included 630 high school students aged 11-15 (324 boys and 306 girls, 498 urban and 132 rural) and 568 high school students aged 15-19 (281 boys and 287 girls, 325 from urban area and 243 from rural area). About one third of primary school pupils (30.6%) and two thirds of high school students (64.1%) admitted that they smoked at least once in their lives. Among the primary school pupils, active smoking in the last month was declared by 7.8% of them while the percentage of high school students who admitted smoking in the last month was higher, reaching 32.2%. About 61% of the primary school children, respectively 70% of the high school students, said that someone had smoked in their presence in the last week in the house where they live. Moreover, a quarter of the children were exposed daily to cigarette smoke in their own home. Regarding the exposure to passive smoking in various public places, 58% of primary school pupils, respectively 87% of high school students, said that other people smoked in their presence in places other than their own home. Among middle school children, a close association between active smoking and exposure to cigarette smoke in their own home and in public places was observed. This relationship was also confirmed among high school students, both in terms of passive smoking in their own home and in public places.

❖ The habit of smoking in children and adolescents in several schools from Cluj

This study involved two central and one peripheral schools in Cluj, 462 pupils-190 from secondary school and 272 from high school. 74 students (16%) out of the total participants reported that they currently smoke. From the secondary school participants 4% reported they were smokers and out of the high school participants 1 out of 4 were smokers. However, 30% out of the secondary school participants and 45% out of the high school participants mentioned that they smoked at least one cigarette. 25% of the students have both parents smoking, 23% have the father smoking, and in 10% of them the mother is the one who smokes. The highest percentage of smokers was from families where both parents smoked.

Most of the subjects were Orthodox (82%), but only 16% were smokers. The highest percentage of smokers (50%) was registered by the Reformed participants, followed by Roman Catholics (25%) and Greek Catholics (23%). No smokers were registered in the other religions such as Jehovah's Witnesses,

Baptists, the Lord's Oath, Protestants. The peripheral school had the highest percentage of smokers (32%). Compared with boys, the numbers of female smokers (2.5%) and ex-smokers (16.5%) were lower.

Girls enrolled in secondary schools prefer to borrow or ask someone else to buy their cigarettes, but most of the boys both cigarettes by themselves. Girls enrolled in high school, girls get rid of inhibitions more than half of them being no longer embarrassed to buy their own cigarettes. Most high school students bought cigarettes by purchase or borrowing, while high school students were stealing cigarettes (3% of the 111 high school students).

- ❖ Assessment of the level of use and knowledge of adolescents about electronic cigarette – A pilot study in Cluj-Napoca Area, Romania

This study involved 664 teenagers from 3 high schools from Cluj-Napoca. It seems that 98% have had knowledge about electronic cigarette especially from friends (75%), internet (11%) and parents (6%). 44% used both electronic cigarettes (dual users) and from non smokers only 31% used it. The main reason for use was curiosity (69%) Adolescents considered that electronic cigarettes have economic and health advantages (47%), but also disadvantages (53%).

- ❖ Why do Romanian junior high school students start to smoke?

This study involved 504 junior high school non-smokers from Cluj-Napoca-13-14 years old. Strong peer influence and lower self-efficacy in refusing smoking was associated with an increased probability of becoming a smoker 9 months after the baseline. Moreover, a higher intention to smoke in the next years was associated with smoking initiation. Likelihood of starting smoking was not associated with attitudes regarding smoking. In this study, the results did not confirm the influence of parents who were smokers on the initiation of smoking.

- ❖ Smoking Prevention for Adolescents in Romanian Schools:

The study's first objective was to assess the frequency and content of school-based anti-smoking education received by Romanian adolescents aged 14-15. Secondly, the study aimed to evaluate to what extent the implementation of a specific 5 lessons smoking prevention program influences the quality of anti-smoking school education among Romanian adolescents.

The investigations were performed in twenty schools from Cluj Napoca, Romania, which were randomly assigned to the control and experimental conditions, resulting in 55 participating classes from the seventh grade (28 in the control group and 27 in the experimental group).

The experimental group participated in a school-based smoking prevention program consisting of 5 lessons. The control group participated only in the standard anti-smoking education offered by their schools. According to the study, six months after the program implementation, students from both experimental and control groups filled in a questionnaire, assessing several issues regarding their exposure to anti-smoking school education in the last year.

The study results concluded that, among the control group, around one quarter of the subjects did not benefit from any educational activities regarding smoking prevention in the last year. Therefore, the majority of the junior high school students from this group who had such lessons declared that they participated in 1-2 lessons. Actually only around 20% of the control group students had at least three lessons of smoking prevention at school in the last year.

On the other hand, among the experimental group, all subjects benefited of at least 1-2 lessons. The majority participated at antismoking communication at school during at least three lessons and one third benefited from even more than 5 lessons.

❖ Evaluation of a peer-led smoking prevention programme for Romanian adolescents

The study sustained that smoking among Romanian adolescents represents an important public health problem and the fact that during the past 20 years, smoking prevention education programmes for adolescents in Romania contained many weaknesses: (i) most programmes focused only on knowledge transfer regarding the dangers of smoking; (ii) most programmes were implemented irregularly and for a short period of time and (iii) programme evaluations were absent.

The goal of this study was to assess the effects of a school-based smoking prevention programme that used both a video and peer-led discussion groups among junior high school students aged 13–14 years, from Cluj Napoca. According to the study, twenty schools were randomly assigned to the control and experimental conditions, resulting in 55 participating classes from the seventh grade (28 in the control group and 27 in the experimental group).

The programme consisted of five weekly sessions of 45 min each and was translated from an effective Dutch programme. This programme used a video-peer-led strategy and was adapted to the Romanian situation and culture by using different cartoons and recording scenes for the video that matched the Romanian context of 13- to 14-year-old adolescents.

Regarding the final sample, it consisted of 1071 students (523 in the experimental group and 548 in the control group) who participated in both measurements and their mean age was 13.7%. The study concluded that The programme resulted in significant preventive effects on smoking behaviour. At T2, there were 4.5% new regular smokers in the experimental group, whereas 9.5% of the non-smokers at T1 became regular smokers at T2 in the control group.

According to the study, at post-test, students in the experimental group were significantly less convinced of the advantages of smoking than students from the control group. Adolescents in the experimental group also reported significantly higher levels of social self-efficacy and more negative intentions to smoke than those from the control group.

Regarding the study process evaluation, the conclusion was that students rated the programme positively, as well as its activities and materials, such as the video and the manual with cartoons. Working in groups was also positively evaluated. The peer-led approach and the assistance received from their group leader, as well as the help received from the teachers got positive scores from the students.

As a conclusion, the evaluation of the Romanian peer-led smoking prevention programme reveals that 9 months after the initiation of the study, the programme resulted in a significant effect: regular weekly smoking onset was 4.5% in the experimental group compared with 9.5% in the control group. The risk of students from the control group to become smokers was two times higher than those of students from the experimental group. Therefore, additional baseline predictors of smoking were a positive intention towards smoking and low self-efficacy in refraining from smoking in several social situations.

❖ Exploring smoking in Romanian adolescents: prevalence, predictors and meanings of smoking

According to the study, smoking is known to be initiated during adolescence, making this age group a relevant target for intervention. The study included a representative sample of 1562 Romanian teenagers, aged 15, out of which 971 (62.2 %) were girls and 591 (37.8%) boys, who completed questionnaires in their classrooms. The study involved also a qualitative part, semi-structured interviews being conducted by a trained interviewer with 30 students (14-15 years old) from three schools based in Cluj-Napoca.

The survey' results showed that almost half of the sample of 15 year olds declared they had once tried out smoking (48.5%). However, when, looking at the frequency of cigarette use, 12% of the participants said they currently smoke every day and a large percent of the sample described themselves as being non-smokers (80%). In what concerns the age of smoking onset, 18.5% from the 15 year olds sample said they had their first cigarette when they were 13 or younger.

Therefore, a larger proportion of boys (54%) in comparison to girls (45.2%) mentioned having tried smoking once. Also, significant gender differences emerged also in smoker status, where 52.1% boys declared they smoke every day, whereas 47,9% girls said they smoke on a daily basis.

Data from the content analysis of the semi-structured interviews revealed that the participants mentioned several reasons for taking up smoking, ranging from internal ones like boredom or curiosity to external ones such as peer pressure and sharing cigarettes with friends. Some adolescents considered that they started smoking as a personal choice, motivated by "being bored" and "being curious" about what it would feel like to smoke.

On the other hand, interviewed teenagers also referred to external reasons for taking up smoking as a habit. For example, they talked about "sharing with friends", smoking being one factor that united the peer group and gave them something to do together in spite of existing social economic barriers. Mostly girls talked about raising money to buy cigarettes and sharing them among friends, but also boys mentioned sharing cigarettes as an activity that brings students of different social backgrounds closer together:

The study mentioned as well the fact that the participants also talked about their motivation to keep on smoking even when they were aware of the negative health consequences. The ones who were smokers described smoking as an addiction, as a "habit" that they cannot give up, even though some mentioned wanting to do so or having tried without being successful. However, others explained that "they can give up smoking at any time", but choose to go on smoking willingly because they "are not addicted" and can control their cigarette use. Permissive parental rules were also presented as a cause of young peoples' smoking, as one boy described his experience related to his parents giving him money for cigarettes.

❖ Gender differences regarding the alcohol–tobacco relationship among Romanian adolescents—a longitudinal study

The objective of this study was to assess cross-sectional and prospective relations between alcohol and tobacco use among Romanian adolescents, giving special attention to possible gender differences.

The data were obtained from a two-wave 1-year longitudinal study carried out among 403 Romanian senior high school students from Cluj Napoca, aged 15–17 years (mean age 15.9).

According to the study, questionnaires were used to assess smoking behaviour and alcohol use.

The study results showed that 22.6% of the girls and 33.6% of the boys were smoking at least once a month at T1. At T2 the smoking prevalence increased to 28.9% among girls and to 42.3% among boys. Moreover, the prevalence of alcohol use at least once per month increased from 18.8% to 25.6% among girls, and from 51.8% to 64.2% among boys. Both smoking and alcohol use were significantly more frequent among male subjects than among female subjects at T1, as well as at T2. The increase in prevalence of smoking and alcohol use between the two waves was apparent both among girls and boys. At both measurements alcohol use was more prevalent than smoking among boys, while among girls it was the other way around.

Furthermore, the results showed that the interrelationship alcohol–tobacco use is subject of gender differences. At both waves, among girls smoking without use of alcohol was more frequent than alcohol use without smoking, while among boys it was the other way around.

Drug use

Development strategy of Cluj-Napoca municipality 2014-2020: Regarding drug use, a study conducted on students from the city of Cluj-Napoca revealed that 9% of the respondents consumed at least once in their life a certain illicit drug. However, regarding the perception on their own consumption, 78.8% of those who have used illicit drugs do not consider consumption as being problematic. As a distribution by age groups, of the 50 people assisted for drug use in 2011 at the level of Cluj-Napoca, 67.4% were between the ages of 15 and 24 years

The Strategy of Cluj-Napoca Municipality in the domain of health 2014: In Cluj County, in 2011, about 206 persons were treated in the emergency departments of the reporting units in Cluj County, for medical problems because of the consumption of psychoactive substances. The majority were young and very young: 63% were under the age of 24.

The Public Health Authority of Cluj-Napoca: drug and ethnobotanical consumption: 21% from 3% in 2001; the most commonly used drug was marijuana.

The Strategy of Cluj-Napoca Municipality in the domain of health 2014: Compared to 2010. in 2011, the number of young people admitted to Psychiatry Clinics as a result of ethnobotanical consumption increased by 20%.

Study on the social norms that influence the risk behaviors of adolescents in Romania 2014: for the girls from Cluj-Napoca, the first experience of marijuana use occurred almost a year earlier than the average (at 14 years). It is reported that marijuana is the main drug used by adolescents (14-18 years old) in Cluj-Napoca

Children and adolescents' toxicomania: The main objective of this study was to investigate the psychological related comorbidities which are associated with substance use (drugs) disorders. 60 subjects who admitted to having consumed, at least for recreational purposes, were interviewed between May 2004 and May 2008. The median age of the study subjects was 15.13 years.

The study results showed that the average age at onset of drug consumption is 12.58 years for boys and 12, 82 years for girls. The drug consumption is represented by: 28.33% use of polysubstances, and in equal percentage of 20%, the consumption of marijuana and inhalants. 93.33% of the participants stated that they use the drugs for recreational purposes or to be accepted by the group of friends; none of them claimed that they use them to relieve certain psychiatric symptoms or unpleasant emotional states (although this option was included in the test). A remarkable point highlighted in the study was that 36.7% of the subjects come from an organized and non-conflictual family, while 63.4% of them have family conflict, going to the situation of abandonment of the child.

The relationship between religiosity and drug-use among adolescents: The aim of the research carried out on a representative sample in Romanian, Hungarian and German classes in Cluj among secondary school students (N= 1.047) was - on addition to the data collection referring to the epidemiology of smoking habits, alcohol and drug use to clarify the role of religiosity from the predictors of drug-use. The religious denomination, religious upbringing, public and private worship, religious self-esteem, as well as the INSPIRIT-scale (Index of Core Spiritual Experiences) were used to identify intrinsic religiosity. The measured low level of extrinsic religiosity led to higher proportion of drug-users. The findings suggested that among students with high levels of intrinsic religiosity there is significantly lower level of drug-use.

Risc factors for tobacco, alcohol and drug consumption among adolescents from Cluj-Napoca (a PhD Thesis Summary): The phenomenon studied in this paper refers to the risk factors and protective factors in the consumption of tobacco, alcohol and drugs among adolescents. The research was carried out on a representative sample of 1105 participants, aged between 14 and 22, students from 31 high schools and post-high schools in Cluj Napoca. The average age of the participants was 16.85 years. In terms of gender distribution, the sample consists of 516 girls (46.7%) and 586 boys (53%). 0.3% of the participants did not declare their gender.

Regarding tobacco use, the study mentioned that 21.8% of the surveyed adolescents stated that they smoked daily. 23% of them used alcohol several times a month and 10.5% said they have used at least once a classic drug. Half of those who used drugs tried cocaine or heroin.

The study concluded that the group of friends has the strongest influence on adolescents when it comes to tobacco, alcohol or drug use, whether we are talking about constructive / educational activities with them or spending time in clubs, bars or cafes. Therefore, adolescents who did not benefit from parental support, parental control, parental interest or in families whose harmony was low will consume more tobacco, alcohol or drugs.

Alcohol use:

According to the Health Behavior study in School Children, 2009/2010, Among children and adolescents in Romania, alcohol consumption is also problematic, among 15-year-olds in Romania, 18% of girls and 47% of boys have gone through at least twice an episode of acute ethanol poisoning (drunk).

The Public Health Authority of Cluj-Napoca reports that 65% of the lot occasionally consumes alcoholic drinks with high frequency, 2-3 days.

Study on the social norms that influence the risk behaviors of adolescents in Romania 2014:-(The quantitative research component-1870 pupils in grades V-XII) Regarding the context of the onset of alcohol among children aged 14-18 the following situations are most common: times when they want to drink alcohol as a way to obtain pleasure (for example, Cluj-Napoca 60 %), a party (Cluj-Napoca 46%) or with a group of friends (Cluj-Napoca 52%). Other facilitating situations are the presence in a bar / restaurant / club, curiosity, the need to belong, the weekend or the lack of supervision. At the same time, the presence of parents is an important factor in facilitating the start (Cluj-Napoca 20%). Its use as an emotional regulator also appears in times of depression (Cluj-Napoca 6%) or anxiety (Cluj-Napoca 7%), the very relevant values being those that reflect the desire to feel pleasure (Cluj-Napoca 60%).

Adolescents aged 14-18 estimate that parents know that they consume alcohol (Cluj-Napoca - 34%), a percentage close to considering them as ignorant in this aspect (Cluj-Napoca - 29%). There are also a significant number of adolescents who cannot assess the degree of knowledge of their parents regarding their own alcohol consumption, respectively 22% in Cluj-Napoca.

Analyzing opinions about how positive or negative alcohol consumption is, the results revealed that most adolescents aged 14-18 find it harmful (for example, Cluj-Napoca - 51%). They believe that those of the same age and friends consider it less dangerous (Cluj-Napoca - 28%), as opposed to parents, who are evaluated as strongly disregarding alcohol consumption (Cluj-Napoca - 60%).

Regarding the occasional and moderate alcohol consumption, adolescents between 14 and 18 years old tend to support it (Cluj-Napoca - 35%), thinking that those of their age, including friends are even more supportive (Cluj-Napoca - 41%, respectively - 45%).

Alcohol Consumption within Students (611 students between the ages of 18 and 29, from different university centers: Cluj-Napoca, Iasi, Bucharest, Constanța)

1. Beer is the student's favorite alcoholic beverage.
2. The age of 17-18 years represented the age of onset of alcohol consumption for most students.
3. The favorite place for students to consume alcohol is represented by parties, but a significant percentage of students consume alcohol at home, without being banned/punished by their parents.
4. Many parents of the questioned students consume alcoholic beverages; a third say that their father consumes alcohol and a quarter say that both parents consume alcohol.
5. Students use alcohol to relax, to feel good in the society or because they like its taste.
6. It is noteworthy that the percentage of girls who have drunk once is significantly higher than boys.
7. One third of the boys have drunk several times in their lives, and almost 3% of them get drunk weekly.
8. Advertising in alcoholic beverages is intrusive, supported by almost three quarters of the subjects.

9. A significant percentage of subjects have never been criticized by parents for drinking, which indicates ignorance and lack of concern for the future of children.

Compared to the whole group of students, doctors are more convinced that alcohol is harmful to health.

Nutrition

National level

- ❖ National Report on the Health of the Population 2017 (Ro., Raportul Național al Stării de Sănătate a Populației 2017):

Body Mass Index: The indicator reflects the proportion of adults with BMI 30 and above. According to *'Ancheta Stării de Sănătate prin Interviu'*, conducted by the National Institute of Statistics in 2014, 46.4% of the resident population aged 18 and over was overweight (BMI between 25 and 29.9), and 9.4% suffered from obesity (BMI over 30). Compared with the previous health study, conducted in 2008, the proportion of obese people increased from 7.6%. In 2014, in Romania, the proportion of food consumption at least once a day, in the population over 15 years, was the lowest from European Union with a value of 28.8%, compared to the EU28 average of 55.7 %. In the same years, in Romania, the proportion of vegetables consumption at least once a day in the population over 15 years, was the lowest compared with other countries from the European Union, with a value of 29.6% compared to the EU28 average of 50.1%.

- ❖ National Report on the Health of the Children and Youths from Romania 2017 (Ro. Raportul Național de Sănătate a Copiilor și Tinerilor din România 2017):

According to this report, between 2013-2014, in Romania, the prevalence of overweight and self-reported obesity was present in 10% of girls and 21% of boys aged 15 years, according to the Health Behavior in School-Aged Children (HBSC) study from 2013-2014. The report includes also data from the National Synthesis 2016 (Ro., „Identificarea, cuantificarea și monitorizarea comportamentelor cu risc pentru sănătate la elevii din România”) - a study which involved 7750 high-school students aged 14 to 18 (3328 boys and 4222 girls). It was reported that, in 2016, the highest percentage of overweight was recorded in girls aged 14 -13.89% and the lowest at 18 years - 5.86%. According to the results regarding obesity, the highest value was observed at 14-year-old girls - 1.85%, and the lowest value for 18-year-old girls - 0.78%. Overweight cases of boys were most registered in the 14-year age group - 21.28% and being less present in the 15-year age group - 14.24%. The report also included data regarding obesity, the most remarked value in 17-year-old boys - 3.55% and the less present 15-year-olds - 2.12%. The prevalence of overweight boys is slightly increasing from 16.48% in 2014, to 16.90% in 2016, while for girls it is registered an increase from 6.96% in 2014, to 8.92% in 2016.

- ❖ National Synthesis 2017 (Ro., Identificarea, cuantificarea și monitorizarea comportamentelor cu risc pentru sănătate la elevi (fumat, consum de alcool, droguri, comportament alimentar, sexual, activitate fizică, agresivitate fizică)

At national level, 89.53% of students consumed fruits according to the Guide Pyramid, during the interval of applying the food frequency questionnaire. At the regional level, the highest frequency of fruit consumers was registered in Transylvania - 92.38%, and the lowest frequency of 86.24% was in Banat. The consumption of fast food products had, nationally, a frequency of 60.19%, Banat and Moldova being the geographical areas where the frequency of consumption exceeded the national average value, while in Muntenia and Transylvania frequencies were lower than the national average. At the national level, the

screening process of nutrition revealed a maintenance of the major deficits of milk consumption. The frequency of milk consumers decreased by 1.28%, compared to the value recorded in 2014.

Cluj level

- ❖ The Strategy of Cluj-Napoca Municipality in the domain of health 2014-2020

At the level of Cluj-Napoca, the Health Behaviors for Children and Adolescents in Romania: food behavior and physical activity provides data on the prevalence of obesity and overweight and on dietary patterns. This study was carried out in 2010 by the Romanian Association of Health Psychology on a sample of 7500 students aged between 11 and 15.

In 2011 in the city of Cluj-Napoca 22% of boys aged 11 years were overweight, 14% of girls 11 years old were overweight, 10.4% of boys aged 13 years old were overweight, 10.7% of 13-year-old girls were overweight, 21.7% 15-year-old boys and 8.4% 15-year-old girls were overweight.

Daily fruit consumption drops significantly from 11 years to 15 years for both genders. Boys 15 years old consume significantly less fruit than girls 15 years old. The percentage of boys who reported daily fruit consumption ranges from 21% (15 years) to 47% (11 years) and the percentage of girls from 39% (15 years) to 49% (11 years). 40% of children have inadequate fruit consumption.

The consumption of sweet carbonated beverages: 50% of young people consume carbonated drinks with added sugar. The percentage of girls who consume sweet carbonated drinks daily ranges from 35% (11 years) to 44% (13 years), and to 19% (15 years) and the percentage of boys from 36% (11 years) to 50% (13 years) and 27% (15 years). Consumption is more prevalent among children (both girls and boys) from families with high socio-economic status.

An average of 57% of adolescents have breakfast on a daily basis. The percentage of children who say they NEVER eat breakfast is alarmingly high and ranges from 20% (boys, 11 years) to 32% (girls, 15 years). If at this percentage, the number of children who eat breakfast only 1-2 times / week (which is 15% on average) is added, it turns out that about ½ of the students need a health education focused on the importance of breakfast. Compared to 2006, in 2010 a significant drop in eating breakfast for 13-year-olds is observed. The frequency of breakfast differs significantly between the sexes in the 15-year-old group, with girls having a lower consumption rate than boys.

The consumption of sweets is significantly higher among girls, and that of chips and fries among boys. The percentage of girls who consume sweets daily ranges from 44% (11 years) to 56% (13 years), and 43% (15 years) and the percentage of boys from 46% (11 years) to 50% (13 years) and 37% (15 years). Daily consumption of French fries and chips is present in about 20%

- ❖ World Vision Research Study, 2016

Half of the parents cannot offer children a minimally acceptable diet (food from each food group), and 74% of families have had difficulty providing children with quality nutrition.

Adolescents' needs towards school-based nutrition interventions (Data was collected from two urban schools from Cluj-Napoca, Romania. 32 adolescents aged 11 to 14 years old attended focus group discussions.)

Participants were able to easily name healthy foods, what these should or should not contain and that some methods of preparation can influence the nutritional properties of food. Some of them could also use specialized concepts to define food and most of them acknowledged the importance of healthful eating in relation to disease prevention and to a healthy lifestyle. However, this knowledge was not reflected in attitudes and behaviors, as other studies also point out. Adolescents reported a negative attitude towards healthy food, a preference for the unhealthy one and a resistance to the idea of changing their eating habits. These attitudes were justified by the fact that unhealthy foods are more palatable or more convenient and by the longstanding eating habits reinforced by peer norms, family or the environment.

Nutrition interventions should address adolescents' passions (e.g. sports) and their concerns (e.g. body image, educational achievement), should use visuals and stories to present information and should increase adolescents' self-efficacy in making food choices, should teach adolescents how to have a balanced diet, should make healthy eating an acceptable behavior in the group, should involve parents through home-based activities.

Nutritional status and eating disorders among medical students from the Cluj-Napoca University centre-
(A cross-sectional study was conducted during the 2015–2016 academic year, including medical students from all study years, by an online questionnaire.)

Regarding the basic parameters of nutritional status, the students were, on average, 60.9 ± 12.7 kg body weight, 168.5 ± 8.5 cm height and 21.3 ± 3.3 kg/m² BMI. Normal weight was recorded in 72.5% of students. Overweight was found in 4.4% of female students. The obese students corresponded to the first two obesity classes, without differences between genders. Underweight persons were found only among the female students. Overweight (including obesity) was associated with the male gender, low academic performance, being smoker and binge drinking. In contrast, underweight individuals were less frequently overtaking alcohol through binge drinking and more rarely practicing sports. 57 persons with eating disorders were observed, represented 25.7% of all students.

The Psychology of Nutritional Behaviour and Children's Nutrition Education: Target group was separated into three categories: children aged between 10-12 years old (92 persons), teenagers aged between 13-15 years old (90 persons) and young people aged between 20-22 years old (104 persons).

Consumption of fresh fruits and vegetables (frequency per day). Teenagers consume one serving of fruit and one or rarely two servings of vegetables per day. Children have reduced the number of servings of healthy foods with increasing age. Thus teenagers prefer to consume fast food, as well as sweets (waffles, biscuits, croissants) instead of vegetables or fruit. Young people aged 20-22 years old stated that they eat one meal of fruit and vegetables per day.

Consumption of juices (fresh, natural, artificial) The consumption of fresh or natural juices is lower than that of artificial carbonate juices. A percentage of 32.6% of children consume fresh juice at least three times a week. Many of them (52.2%) prefer to drink natural juices. In the group of teenagers, lower

percentages have been observed - only (11.1%) prefer to consume fresh fruit juice. Many teenager respondents (54.4%) prefer natural juices. Among young people there appears an even more dramatic reduction in the consumption of fresh and natural juices. As such, only 7.7% consume fresh fruit juices and only 38% prefer juices, the rest of them (54%) choosing to drink artificial carbonated juices.

Favorite type of food (pasta, meat and meat products, sweets, vegetables and fruits) In this matter, a clear distinction by age could not be made. All respondents prefer to consume pasta, sweets, meat and meat products, fruits, while vegetables occupy the last place in the top of preferences. This is alarming given the tendency to consume high glycemic index foods (pasta and sweets) instead of vegetables that are rich in vitamins and antioxidants. As regards the consumption of fruits, the most popular are: bananas, grapes, pears, as opposed to apples, grapefruit, lemons and oranges. Once again we can observe that sweet fruits are favoured, because they have a higher glycemic index.

A significant increase (1.5 additional portions) in the consumption of vegetables and fruits was observed with the children who always eat with their family.

Eating between meals As regards eating between meals, it is known that we need two snacks per day. For most respondents (46.2% to 66.3%) these snacks consist of fruit or fruit yoghurts. But 33.7% of children, 52.2% of teenagers and 53.8% of young respondents prefer to consume pastries and sweets between meals. According to this research it results that 80% of the young respondents prefers to eat pop corn, candy or chips when they watch TV or work for several hours at the computer.

PREVALENCE OF OBESITY AND OVERWEIGHT AMONG SCHOOL CHILDREN IN CLUJ-NAPOCA

The study included 7904 school children of all grades (grade 1 to grade 12) from 20 schools in Cluj-Napoca. The weight, height and body mass index (BMI) were recorded for each child. The global prevalence is 8.29% for obesity and 12.84% for overweight. Analysing prevalence on age sub-groups, the highest prevalence was found within the 7 to 10 years old group: 13.31% for obesity and 15.99% for overweight. Within total population as well as within each age group, males registered a higher prevalence of obesity than females. The lowest prevalence for both obesity and overweight was found in the over 14 years old group. The results of this study place Romania among the countries with an average prevalence of obesity. If compared according to International Obesity Task Force, which includes obesity in overweight as the BMI over 85th percentile, the prevalence would be of 21.13%.

Individual and familial factors associated with fruit and vegetable intake among 11- to 14-year-old Romanian school children- A cross-sectional survey by means of anonymous questionnaires was conducted among 361 school children, aged 11–14, from Cluj-Napoca, Romania (April–May 2011).

The results showed that 170 (47.1%) children declared they ate fruit daily. The recommendations of eating at least two portions of fruit every day were met by 161 (44.6%) students, without statistically significant differences between students from the fifth and the sixth grade, or between boys and girls. Moreover, 29.1% students ate even less than one portion of fruit daily. Consumption of vegetables every

day was declared by 39.6% children. Only 9.1% students met the recommendations of eating at least three portions of vegetables every day; no statistically significant differences were noticed based on school grade or gender. Moreover, 74.5% of the students ate less than two portions of vegetables daily, while around half of them ate even less than one portion per day.

Knowledge of the recommended number of daily servings of fruit and vegetables and higher self-efficacy in eating fruit and vegetables daily were positively associated with higher consumption of fruit and vegetables. At the same time, fruit preference influenced positively the consumption of fruit. The familial factor associated with vegetable intakes was the perceived behavior of the mother. Regarding fruit intake, it was higher among children who declared higher fruit availability at home.

Gender differences in the magnitude of the associations between eating disorders symptoms and depression and anxiety symptoms. Results from a community sample of adolescents:

The study explored gender differences in the prevalence of emotional (depressive symptoms and anxiety symptoms) and eating behaviors (bulimia nervosa and anorexia nervosa) symptoms and determined the strength of their co-occurrence in a community sample of adolescents aged 12- to 19- years old.

Participants were adolescents (n =706), aged 12- to 19- years old. The study showed that adolescent girls presented more severe symptoms of AN, BN, anxiety, and depression compared to adolescent boys. However, when compared the magnitude of the association between EDs and depression and anxiety, both boys and girls presented statistically significant correlation between depression and AN, depression and BN, and anxiety and BN. Moreover, the strengths of these correlations were similar in boys and girls

Physical Activity

National level

- ❖ National Synthesis 2018 (Ro., Identificarea, cuantificarea si monitorizarea comportamentelor cu risc pentru sanatate la elevi (fumat, consum de alcool, droguri, comportament alimentar, sexual, activitate fizica, agresivitate fizica):

Physical activity positively influences the physical, mental, cognitive and social development of children and adolescents, helping to prevent overweight and obesity, type 2 diabetes and also to prevent them from adopting health risk behaviors such as smoking, alcohol and drug use. According to the latest EUROBAROMETER, which aimed at collecting data regarding practicing physical activities among the population of the EU28, in Romania 63% of the respondents stated that they never do sports or do not generally practice any kind of physical activity. According to the same EUROBAROMETER 472, regarding the population aged 15-24, in Romania, only 11% of the respondents stated that they practice sports or physical activities 5 times a week or more often, while 31% of them reported that they never practice sports or other physical activities.

On the other hand, regarding the physical activity in adolescence, Romania ranks 22nd in a decreasing order of the frequency of 15-year-old students who performed at least one hour of moderate-to-high intensity physical activity every day (a frequency recorded in a series of 41 states). In Romania, the difference between genders, the report mentioned that it was an almost double percentage (21%) of boys who practice moderate-intense physical activities at least one hour each day, compared to girls (11%). Of the four geographical areas in which the study was conducted, the highest frequencies of students who did not participate in the physical education classes were registered in Banat (22.66%) and Muntenia (15.72%), while **in Transylvania were the lowest frequencies, respectively 10.57%**. The distribution of the frequencies of students who did not participate in the physical education classes, by educational level, indicated a relation of direct proportionality between the value of the frequency and the educational level. In other words, at the national level the highest frequencies were registered at students in the 12th grade in all 4 geographical areas

The report also mentioned that, nationally, 58.94% of the students participated in 1-2 hours of physical education / week, the value being with 1.3% higher than 2 years ago, when the value reported was 57.64%. At the national level, in relation to the level of education, the frequency of the students who carried out 1-2 hours of physical education / week was the highest in the ninth grades in 3 of the 4 geographical areas in which the study was conducted, while in Transylvania the students of 12th grade reported the highest levels of participation among all classes and level of education

Cluj level

- ❖ The Strategy of Cluj-Napoca Municipality in the domain of health 2014

At the city level Cluj-Napoca there is a documentation of the number of schools equipped with the necessary infrastructure to carry out physical education and sports activities (sports halls, logistics, sports grounds). There are 74 schools out of which 31 schools are equipped with sports hall, 40 schools with gymnasiums and / or sports courts and 3 schools without sports hall, gymnasiums and sports grounds. Starting with 2006 and until 2014, at the level of the city of Cluj-Napoca, a number of 23 operational

programs have been submitted that aimed at facilitating physical activity by promoting physical activity, developing the infrastructure necessary for doing physical activity, etc. 65% of the projects were completed, 13% partially and 21% of the projects started were not completed

❖ The Strategy of Cluj-Napoca Municipality in the domain of health 2014

At the level of Cluj-Napoca, data related to physical activity are provided by the study of Health Behaviors for Children and Adolescents in Romania: eating behavior and physical activity, carried out in 2010 by the Romanian Association of Health Psychology on a sample of 7500 students aged between 11 and 15 years. The intense daily physical activity for a minimum of one hour decreases considerably according to age. The percentage of girls who perform intense physical activity daily ranges from 24% (11 years) to 13% (13 years), and to 6% (15 years) and the percentage of boys from 32% (11 years) to 29% (13 years) and at 17% (15 years). Walking is carried out in a significantly larger proportion. The percentage of girls who perform this physical activity daily ranges from 68% (11 years) to 72% (13 years), and 50% (15 years) and the percentage of boys from 72% (11 years) to 68% (13 years)) and 45% (15 years). The percentage of children who use bicycles as a means of transport to school is very low, especially among girls, varying between 1% and 4% in all age categories.

At national level, 57.64% of the students participate in 1-2 hours of physical education / week, which is 1.68% less than 2 years ago, when 59.32% were reported. The national frequency was exceeded in Banat (58.99%) and Moldova (64.27%). In Transylvania the lowest value was recorded, 52.94%.

❖ The Public Health Authority of Cluj-Napoca

Almost 20% do not participate in physical education hours and only 4% of high school students participate in sports activities

The use of internet and its relationship with the involvement in physical activity among Romanian school children from urban and rural areas. A cross-sectional study was conducted in May 2014 in two schools in Cluj-Napoca and one school in Cuzdrioara among 187 adolescents aged 11-15. A percentage of 92% of subjects declared that they used internet for several purposes (information searching, email, social media, playing games). It was observed that statistically significantly more adolescents from rural areas declared that they did not use internet compared to adolescents from urban areas (15.9% vs 4%). Around half of the subjects used internet less than 1 hour/day and around one quarter declared the use of internet between 1-2 hours per day. More than 80% of the subjects had used internet in the last month for getting information for a school activity or homework, half were interested in searching information about socio-cultural events, while one third were interested in information regarding a healthy lifestyle (nutrition, physical activity, body weight, smoking prevention). Only one quarter of the participants followed the recommendations of performing at least one hour of moderate to intense physical activity daily. The results show that there was no statistical association between the time spent using internet/day and the time spent for physical activity daily.

Effects of physical activity on the quality of life (a PhD Thesis Summary): According to the document, the general strategy of the research conducted in Cluj in 2010, consisted in investigating the students' opinions regarding the practice of organized physical exercises, the adults opinions regarding the practice of physical activity and opinions on the results, on the situation of physical education and sport in our country. The accomplishment of the study's first objective was done by obtaining quantitative data from 277 students (sports practitioners on a regular basis and non-practitioners) who studied in urban and

rural gymnasial schools and highschoools from Cluj. The results of the study concluded that, generally, all eight categories of subjects (organized sports practitioners - non-practitioners; high school students - high school students; rural - urban; girls - boys) positively appreciate the effects of sport on health and the quality of human relationships. The study mentioned that out of these subjects, 42% were enrolled in an extracurricular sports institution. Therefore, it is stated that there is a positive correlation between practicing sport in the adolescent's family and his or her choice for practicing a sport on a regular basis. Along the same lines, there was also a significant association between the profession / education of parents and the option for practicing certain sports (football, volleyball, handball, swimming - the most common sports). It was stated that almost 42% of high school student athletes (from both areas of residence), considered that the choice of practicing a sport is not influenced, taking this decision alone (followed by parents with 27%). Similarly, 75% of the students from gymnasial schools did not consider that their opinions regarding the topics of the lifestyle related to the practice of physical exercises are not influenced by anybody, the following percentage corresponding to the alternative "friends" (26.5%) and family (20%). On the other hand, the report mentioned that it was registered a reduced frequency of influence of the sports teachers, which was mentioned most often (8%) in the urban environment, at the gymnasium, then also in the urban environment, at the high school (6%).

PHYSICAL ACTIVITY AND OBESITY IN A SAMPLE OF SCHOOL CHILDREN FROM CLUJ-NAPOCA, ROMANIA:

This study aimed to examine the relationship between physical activity and obesity in a sample of schoolchildren from primary and gymnasium level from Cluj-Napoca city, Romania. According to the study, tests were made on a group of 237 schoolchildren from "Sigismund Toduta" High-school, the testing sessions taking place in two successive years. The majority of study participants reported a good and very good health status, and only a small minority reported a mediocre health status.

The sedentary activity such as a staying long time on computer is not dominants according to the reports of study participating subjects. The study results showed that the female school children used more physical exercises for attaining an ideal body weight, and their practice was higher for the main school children. The results revealed that the school children with a higher body mass index practiced more extracurricular exercises and the school children who spent more hours for studying in school were implicitly more sedentary and for that reason they have a higher body weight.

The study concluded that around 30% of school children from the Music High School "Sigismund Toduta" did not participate in physical education classes, and around 30% of children obtained different kinds of exceptions (including medical exceptions with the aim to skip sport classes). Therefore, the sedentary lifestyle was generated by the fact that children participating in the study declared that they stayed more then 2 hours on the internet or on TV, and above 38% preferred a sedentary lifestyle watching on TV. It was also need to be mentioned that above 65% of children under study had a normal body weight, 7 % were over weight and only 3 % were obese (BMC between a minimum of 13, 79 and a maximum 37, 37)

Environmental influences on physical activity Romanian youths' perspectives:

According to this study, despite the numerous benefits of physical activity (PA), the percentages of children and youth reaching the recommended PA levels are still low. Environmental attributes were

shown to influence children and youth PA. The aim of the study was to explore the perceived influence of (built, social, school, community) environmental factors on youth (transportation, leisure time, school based) PA attitudes and behavior. The study included a number of 54 high-school students, 18–19 years old, subjects who participated in 5 focus-group interviews in Cluj-Napoca. The study concluded that there is a preponderance of influence of the built environment, followed by social environment: family and friends on youth's PA attitudes and behavior. Lack of knowledge about community programs and school physical education/PA related culture and policy negatively influenced students' reported PA attitudes and behavior. On the other hand, personal motivation and feelings of enjoyment and self-efficacy can support youth PA. Another study conclusion is represented by the fact that social support for PA has to be backed-up by PA supportive built environments, so the PA promotion community programs targeting youth should be more diverse and better advertised

Violence and Injuries

National level

- ❖ National Synthesis 2018 (Ro. Identificarea, cuantificarea si monitorizarea comportamentelor cu risc pentru sanatate la elevi (fumat, consum de alcool, droguri, comportament alimentar, sexual, activitate fizica, agresivitate fizica)

According to a source mentioned in this report (HBSC 2013/2014), Romania ranks 14th in a descending order regarding the frequency of boys with acts of aggression, out of a series of 41 states. The report mentioned that in a 12-month interval before the subjects' examination, the national frequency of high school aggression was 17.39%, with 0.16% higher than the value recorded in 2016 (National Institute of Public Health, 2018). The frequency of students who were aggressive at school was 8.07%, the value being with 3.47% higher than the one registered in 2016 (4.60%). The frequency of students who carried weapons (for defense or attack) within the standard 30-day interval prior completing the questionnaire was 4.47%, a decrease with 0.70% compared to 2016. Nationally, the analysis of aggressive behaviors in high school students in relation with sex and educational status revealed that the frequency of this type of behavior decreases progressively with the level of schooling from 9th grade to 12th grade, for both sexes (National Institute of Public Health, 2018). The frequency of students who have been fighting in the last 12 months in Transylvania: 9th graders 11.88% girls and 27.63% boys ; 10th graders 14.02% girls and 26.02% boys ; 11th graders 10.31% girls and 24.12% boys ; 12 grade 10.85% girls and 24.11% boys (National Institute of Public Health, 2018). The study concluded that the tendency of the frequency of adolescents with aggressive behavior, was ascending between 2007 and 2018 (National Institute of Public Health, 2018).

Cluj level

- ❖ The Public Health Authority of Cluj-Napoca

35% of the students questioned fight in school, 10% of them admit to carrying (white) weapons at school.

- self-aggression: about 4% had suicidal intentions

- ❖ Active screening of suicide risk in an adolescent population

A total of 1143 pupils from 9th grade aged between 14 and 16 from around 16 high schools in two counties in North-Western Romania were screened for suicidal ideation and behavior, depression, anxiety and a number of risk-taking behaviors: non-suicidal self injury, unhealthy eating behavior, sensation seeking & delinquent behavior, substance abuse, increased exposure to media, limited social relationships, bullying, and truancy. Suicidal behavior in adolescents is commonly associated with anxiety and a number of risk-taking behaviors, which may be used as warning signs while actively screening for suicide risk in adolescent populations. Although a high number of at-risk pupils were identified at

baseline, no completed or attempted suicides were recorded in the assessed sample at 3-months follow-up.

Frequency of Bullying Behaviours in Secondary Schools in Cluj-Napoca-A survey on bullying was completed by 264 students (141 girls and 123 boys; 112 students from grades 5-6 and 152 students from grades 7-8) with an age range between 10 and 14 years old. Out of the 264 students surveyed, 33.8% reported bullying others "once a week or more often", 60.8% "sometimes" (once or twice and sometime), while only 5.3% reported "never" bullying others. Girls tend to bully others more often than boys as 43.6% of the girls reported bullying other students "once a week or more often" as compared to 22.8% of the boys. At the same time, bullying frequency varies with school levels. Bullying was seen to occur more often among children in higher grades than among those in lower grades.

VIOLENCE PREVENTION AMONG TEENS THROUGH SPORT ACTIVITIES- This research was performed on a sample of 458 randomly selected teenagers aged between 12 and 14 years from 5 schools of Cluj-Napoca. The research methodology consisted of a self-reported questionnaire regarding their age, gender, class, locus of control, self-esteem, aggressiveness, anxiety, pro-social behavior and relation with peers. Of the 438 students in our sample, 274 (62.6%) practice sport and 163 (37.2%) do not practice any extracurricular sport activity. ANOVA did not reveal any difference between boys and girls in practicing extracurricular sport activities. There were no significant differences in their school performances according to their sport participation. This finding is neither good nor bad. There are studies that suggest that athletic participation is related to positive educational outcomes, but there are also studies that consider that sports takes up a large amount of the participants' time, which affects their school preparation. We did not find any statistically significant relation between those two variables. No significant relation was found between sport practicing and bullying behavior. Among those positive effects, they found evidence for a positive relation between sport and self-esteem and a negative one between sport and bullying behavior

Needs & Resources Assessment REPORT November 2018-In Cluj Napoca, there is no specific data on VAC and no comprehensive data on the existing services. Additional information obtained by conducting seven semi-structured interviews guided by the INSPIRE framework and analysing policy and legislation documents, revealed that in Romania and in Cluj particularly, there are strong laws and policies to protect children and families against violence. However, not enough is done to implement these policies and meet victims' needs due to a variety of structural (poor interdepartmental communication, lack of integrated services, isolated and local initiatives rather than coordinated actions, lack of comprehensive statistics on intimate partner violence and perinatal partner violence), financial (poor financing of the system) and mentality-related (normalizing intimate partner violence and harsh disciplines of children) barriers. Still, as one of the most dynamic and economically developed cities in Romania, Cluj-Napoca is at the forefront of combating violence against children by employing various financial support schemes and moving up on the public agenda the need of developing services targeted for victims of violence. Also, the presence of NGOs in Cluj-Napoca is visible, as they are constantly lobbying for and supporting the anti-violence public discourse. Crime Index in Cluj-Napoca is 21,49 according to a public survey site, which places Cluj among the very low crime cities in Romania. In 2015, Cluj was the European capital of Youth and it is largely perceived as being one of the friendliest and safest cities across South East Europe.

SAVE SOLUTIONS AGAINST VIOLENCE IN EUROPE VIOLENCE AGAINST CHILDREN IN ROMANIA-The Social and Medical Services Department of the Municipality of Cluj-Napoca, Romania presents age distribution for domestic violence cases during 2013 and 2014 segregated by gender and residency. The highest prevalence of domestic violence was found in the age group 0 to 13 years old living in rural areas.

Paediatric head injuries treated in a children's emergency department from Cluj-Napoca, Romania- Incident cases of head injuries that sought care from December 2008 to October 2010 at Children's Emergency Hospital Cluj-Napoca were evaluated. The main outcome was transfer or admission to advanced care. Among the 3053 patients aged 0 to 19 treated in the Children's Emergency Department, 1541 (50.5%) were treated for a head injury, of which 991 (64.4%) were male and 548 (35.6%) were female. Children aged 0–4 comprised 44.6% of the head injuries, and children aged 10–14 and 15–19 each comprised 16.0%. Overall, 62.3% of children treated for head injuries required advanced care beyond the Emergency Department.

Compared to young children, children aged 10 through 14 and children aged 15 through 19 were almost twice as likely to be referred for advanced care. A large majority (92.7%) of head injuries were unintentional. Although only 7.3% of head injuries were intentional, children with intentional injuries comprised 8.6% of those who required advanced care. The highest proportion of head injuries occurred in homes (64.4%) followed by streets and highways (14.0%) and institutions (8.6%). Children injured in homes comprised 60.8% of those who required advanced care. Children injured in streets and highways comprised 17.9% of those who required advanced care but only 7.4% of those who did not. The distributions of place of occurrence varied significantly by those who did and did not require advanced care. The most common mechanisms of head injury were falls (39.9%) and struck by or against an object (33.0%). Road traffic (10.9%) and cutting/piercing (8.0%) injuries were also common. Road traffic head injuries accounted for 15.5% of children that required advanced care and only 4.0% of the ones who were released. Falls accounted for a higher percentage of children who needed advanced care than among those who didn't require advance care, while a higher percentage of children injury by being struck by or against an object were released when compared with those who needed advanced care

Mental Health

National level

- ❖ National Report on the Health of the Population (Ro., Raportul Național al Stării de Sănătate a Populației 2017)

Mental illnesses: In this report it is mentioned that the data on the incidence and prevalence of psychiatric illnesses is underestimated in the periodic reports. After analyzing the dynamics of the incidence cases of mental and behavioral disorders, registered in the family doctors' offices in the period 2007-2016, the results showed an increase from 1005.5% inhabitants in 2007, to 1181.6% inhabitants in 2016. The most significant decreases in the prevalence rate of mental and behavioral disorders were in Cluj - from 2354.1% inhabitants to 2056.5% inhabitants, Braila - from 2042, 6% inhabitants in 1986, 9% inhabitants, Mures - from 1536.6% inhabitants to 1533.9% inhabitants (data on general population)

- ❖ National Synthesis 2017 (Ro., Identificarea, cuantificarea si monitorizarea comportamentelor cu risc pentru sanatate la elevi (fumat, consum de alcool, droguri, comportament alimentar, sexual, activitate fizica, agresivitate fizica)

Suicide or suicidal ideation: At the national level, data analysis revealed that about 7.93% of high school students investigated had suicidal thoughts in the 12 months prior to the investigation. In other words, the report stated that in Romania, almost 8 out of 100 high school students had suicidal ideation. Suicidal ideation was predominantly registered in girls, the frequency of suicidal ideation being smaller in the 11th and 12th grade. At national level, almost 6 out of 100 students have made a suicidal plan; and 5.95% of them had suicide attempts. Nationally, 2.5% of high school students who have attempted suicide needed medical care afterwards. Compared to 2014, the value decreased by 0.44%. Suicide attempts that required medical care were more frequently reported in boys in the 12th grade and girls in the 9th grade.

Cluj level

- ❖ Development strategy of Cluj-Napoca municipality 2014-2020

The prevalence of mental illness in 2011 in Cluj County was 2.39 per 100 inhabitants. Compared to 2010, the prevalence of mental illness increased by 0.07. In 2011, in Cluj County there were 2095 new cases of people suffering from mental disorders, the incidence decreasing by 157.7 per 100,000 inhabitants. Of the total number of new illnesses diagnosed in the population over 15 years of age in Cluj-Napoca, 0.53% are mental illnesses

STRES ȘI DEPRESIE. DE LA ADAPTARE LA PSIHOLOGIE (PhD Thesis Summary):

This study reported data gathered from 1143 Romanian adolescents who were randomly chosen from Cluj and Maramureș county. Data on family stressors, family financial situation, mental health, physical health and interpersonal relationships were collected. Stressors related to mental status were assessed by asking adolescents if they think that they have emotional, concentration, behavior or relational difficulties that disturb them and / or interfere with home life, friendships, classroom learning or leisure

activities. In addition, adolescents were asked how often they feel stressed. According to the study' results, 22.7% of the adolescents reported the presence of daily hassles related to their family environment, 7.8% reported the presence of stressors related to their physical health, 59.6% reported the presence of stressors related to their mental status, 41.9% reported the presence of stressors related to the financial status of their family, and 4.4% of them reported being bullied. The study concluded that long acting stressors that seem most important for Romanian adolescents are the financial difficulties of their family and psychological difficulties. No gender difference in reporting being bullied are present, and this phenomenon seems rather rare in Romania.

For the list of resources used in this review, please write an email at alexandra.onisor@publichealth.ro

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