P526 EMOTIONAL AND PERSONAL FEATURES OF ADOLESCENTS WITH OVERWEIGHT AND OBESITY

Lyubov Rychkova, Vladimir Polyakov, Anyuna Kosovtseva*. *Scientific Centre for Family Health and Human Reproduction Problems, Irkutsk, Russian Federation*

10.1136/archdischild-2019-epa.861

Aim To identify the most significant emotional and personal features of adolescents with overweight and obesity.

Methods The analysis included 279 subjects: 198 adolescents with normal body weight, 81 – with overweight and obesity. The study was conducted from January 2015 to April 2016 in the rural areas of the Republic of Buryatia (Russia). Evaluation of the growth and weight parameters of adolescents was carried out using reference WHO values by AnthroPlus calculator. The body mass index (BMI) was calculated as weight (kg) divided by height (m)². Body weight was considered excessive with a BMI >85th percentile of distribution for a given sex and age, obesity was established with BMI >95th percentile. Each adolescent was asked to complete the following questionnaires: The State-Trait Anxiety Inventory (STAI) – Russian version, Buss-Durkee Hostility Inventory (BDHI), reduced Minnesota Multiphasic Personality Inventory (Mini-MMPI), Pediatric Quality of Life Inventory (PedsQL) 4.0 Generic Core Scales.

Results Significant differences were found only in the Mini-MMPI questionnaire. The values of Mini-MMPI 5 scale (sentimentality, sensitivity, vulnerability) are significantly lower in adolescents with overweight and obesity compared to adolescents with normal body weight (1.13 and 2.57, respectively ($P = 0.001$)). Similar data were found in relation to the Mini-MMPI 0 scale (introversion) (1.06 and 1.74, respectively ($P = 0.021$)). In both groups the values do not exceed the normative level and are not an accentuation of the character.

These personal features of adolescents with overweight and obesity are manifested in greater extroversion, sociability, openness, and activity of personal position. This adolescents are less inclined to 'withdraw into themselves' in a situation of stress, choosing a different way to control negative emotions. Such adolescents are outwardly less vulnerable, able to quickly switch from a negative situation. Adolescents with normal body weight perceive emotions differently. They are more closed and susceptible to the environment and negative situations.

Conclusion Adolescents with overweight and obesity are more extraverted and less sensitive. The comprehension of the association of extroversion and obesity is consisted in the regulation of excitement in extroverts. Extroverts further increase the level of arousal through food intake. In addition, extroverts are characterized by external type of eating behavior. The external attractiveness of food and other sensory eating signals are a stimulus to the consumption of food.

P527 A FRAMEWORK DOCUMENT TO FACILITATE HEALTHY WEIGHT FOR CHILDREN AGED 0–6 YEARS IN IRELAND

¹Phil Jennings*, ²Fionnuala Cooney. ¹Department of Public – HSE, Tullamore, Ireland; ²Department of Public – HSE, Dublin, Ireland

10.1136/archdischild-2019-epa.862

Internationally, obesity is recognised as a major public health challenge. Currently in Ireland we have a significant problem

with 19% of 3 year olds overweight, with a further 5% obese. Among 5 year olds, 15% are overweight and 5% obese. There is a social gradient evident with prevalence of overweight and obesity being 6%–7% higher in schools in disadvantaged areas. The adverse consequences of childhood obesity can be lifelong and intergenerational. The total lifetime costs of childhood obesity in the Republic of Ireland are estimated to be €4.6 billion. A reduction of the body mass index (BMI) by just 5% in our population has been estimated to reduce the lifetime cost of childhood overweight and obesity by €1.1 billion. A *Healthy Weight for Ireland Obesity Policy and Action Plan 2016–2025*, has set a target of a 0.5% per annum reduction in excess weight in children and a 10% closing of the gap between socio-economic groups.

A multidisciplinary *Healthy Weight for Children* (HWfC) working group has been convened by the Health Service Executive (HSE) with representatives from the Healthy Childhood programme, the Healthy Eating Active Living programme, TUSLA/the Child and Family Agency, *safefood* and academia. Using international and local evidence, this group has informed and supported the development of a framework document with the purpose of providing a strategic direction to facilitate healthy weight among children in Ireland with a strong focus is on prevention among 0–6 year olds, inclusive of the preconception and antenatal periods.

A portfolio of recommendations is presented under 10 defined areas for action. Central to the process is the need for a focus on a population level approach in prevention with a coherent, consistent and equitable process that is informed and quality assured with an inbuilt evaluation and monitoring system. Interventions for healthy behaviours are to be targeted at critical periods in the life-course, especially during interactions with services in the healthcare, childcare, social care and education sectors. Additional supportive interventions are necessary in the areas of legislation, mass communications/social marketing, community-based interventions and supplementary targeted supports for those most in need. Leadership, governance, monitoring and evaluation are identified as crucial for successful implementation.

This framework document is underpinned by the principle that government and society have a moral and legal responsibility to act on behalf, and in the best interests of children in reducing the risk of obesity through protecting children's rights to health.

P528 LIPID METABOLISM, INSULIN RESISTANCE AND NAFLD IN OBESITY

İlhan Hazer, Hilmi Onur Kabukçu, Murat Yağcı, Zeynep Ertürk, Gonca Kılıç Yıldırım, Birgül Kirel*. *Eskişehir Osmangazi University, Faculty of Medicine, Department of Pediatric Endocrinology, Eskişehir, Turkey*

10.1136/archdischild-2019-epa.863

Obesity, insulin resistance (IR) and non-alcoholic fatty liver disease (NAFLD) are the major components of the metabolic syndrome. On the other hand, it is known that primer hypolipidemia is associated with increased prevalence of NAFLD.

We evaluated the associations of IR and NAFLD with lipid metabolism parameters in 357 obese children and adolescents (199 girls, 158 boys) from their hospital records. The LDL-C levels were compared to the reference LDL-C levels according to age and sex. The patients were divided into three groups