

STUDY OF THE PREVALENCE OF OVERWEIGHT IN CHILDREN AND ADOLESCENTS

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Abstract. *The general availability of overweight and obesity among children and adolescents has grown significantly and steadily over the past decades. A significant impact on the level of obesity detection is exerted by both the low alertness of primary care doctors and the attitude of parents to this problem, who for a long time do not pay attention to the obesity of the child, considering it a manifestation of excellent health and development. The prevalence of overweight and obesity among children and adolescents has grown significantly and steadily over the past decades. A significant impact on the level of obesity detection is exerted by both the low alertness of primary care doctors and the attitude of parents to this problem, who for a long time do not pay attention to the obesity of the child, considering it a manifestation of excellent health and development. Thus, obese children and adolescents have an increased risk of not only developing chronic diseases and death, but also a decrease in the level of education and quality of life.*

Keywords: *obesity, overweight, children, adolescents, prevalence, morbidity, endocrine system.*

ИЗУЧЕНИЕ РАСПРОСТРАНЕННОСТИ ИЗБЫТОЧНОЙ МАССЫ ТЕЛА У ДЕТЕЙ И ПОДРОСТКОВ

Аннотация. *Общая вероятность избыточной массы тела и ожирения среди детей и подростков значительно и неуклонно росла в течение последних десятилетий. Существенное влияние на уровень выявления ожирения оказывает как низкая настороженность врачей первичного звена, так и отношение к этой проблеме родителей, которые длительное время не обращают внимания на ожирение ребенка, считая его проявлением отличное здоровье и развитие. Распространенность избыточной массы тела и ожирения среди детей и подростков в последние десятилетия значительно и неуклонно росла. Существенное влияние на уровень выявления ожирения оказывает как низкая настороженность врачей первичного звена, так и отношение к этой проблеме родителей, которые длительное время не обращают внимания на ожирение ребенка, считая его проявлением отличное здоровье и развитие. Таким образом, дети и подростки с ожирением имеют повышенный риск не только развития хронических заболеваний и смерти, но и снижения уровня образования и качества жизни.*

Ключевые слова: *ожирение, избыточная масса тела, дети, подростки, распространенность, заболеваемость, эндокринная система.*

INTRODUCTION

The rapid prevalence of overweight in children and adolescents worldwide has fueled interest in the study of obesity epidemiology. Childhood obesity is a serious problem that puts children and adolescents at risk of poor health. Thus, obese children are at increased risk not only of chronic diseases and death, but also of reduced educational attainment and quality of life. In adult life (21-29 years old), the probability of maintaining overweight and obesity for children aged 6-9 with obesity and overweight increases 10.3 and 18.5 times, respectively, compared to

peers without these risk factors, for children aged 10-14 - 28,3 and 44.3 times, for children aged 15-17 - 20.3 and 32.5 times, respectively. The results of the study allow not only to assess the prevalence of obesity in this age group, but also to develop preventive measures that promote a healthy lifestyle at the family, school and community levels. Overweight and obese children and adolescents are identified during preventive medical examinations in our country. At the same time, the low level of awareness of primary care physicians in identifying such children has a significant impact on the level of obesity diagnosis. The results of studies conducted in recent years show that childhood obesity is more widespread than official statistical reports. At the same time, researchers note the regional characteristics of obesity in children - the variation of these indicators is from 2.3 to 14.5%. The attitude of parents to the problem of obesity in children plays an important role, they ignore the child's obesity for a long time, because it is a manifestation of excellent health and development. In this regard, family doctors and pediatricians who provide primary care should not only diagnose overweight and conduct dispensary monitoring of children of this group, but also form high-risk groups to prevent the development of severe forms of obesity and comorbid pathology.

MATERIALS AND METHODS

The study design was a population-based retrospective study. The conditions of the research were carried out in accordance with the principle of continuous observation, collecting materials from statistical sources and databases. The aim of this study is to compare the prevalence of obesity among children in the region.

The analysis of the general and primary incidence of obesity among children aged 0-14 and adolescents aged 15-17 living in the Syrdarya region was carried out using the data of the statistical form of the report No. 12 according to the order of the Ministry of Health of the Republic of Uzbekistan No. 175 of April 22, 2017 - Rural family polyclinics - " On the basis of the information in the form "On the organization of activities of primary medical and sanitary institutions" the pathological norm indicators of children and adolescents aged 0-4, 5-9, 10-14 and 15-17 years were analyzed.

RESULTS

As a primary outcome of the study, data on the prevalence of obesity in the area's pediatric population were evaluated during preventive health examinations and health care inquiries, taking into account gender and age. The prevalence rate was defined as the number of all cases of the disease per 1000 children of the corresponding age, and the pathological prevalence rate was defined as the ratio of the number of diseases detected during preventive medical examination to the number of examined children. The trends of the processes were determined by modeling the trends with the help of application programs that allow to construct the trend line and its parameters (the equation describing the line, the approximate value of R²). Significance of differences between groups was assessed by Student's t-test. Differences are statistically significant at $p < 0.05$.

First of all, to comprehensively strengthen primary medical and sanitary care, to introduce a completely new system of medical prevention and patronage system, to create a healthy lifestyle and to create an integrated system of providing public health of the population that covers the level of neighborhoods and households, in this regard, first of all, a healthy lifestyle and physical activity appropriate measures were determined for the systematic organization and wide promotion of obesity, in this regard, an increase in the prevalence of

obesity was found in the group of children aged 0-14 years and adolescents aged 15-17 years. Regularity is not only the high rate of obesity in adolescence, but also the rate of growth of this group. Thus, during the study period, adolescents aged 15-17 years showed a three-fold increase in the incidence rate, in the group of children aged 0-14 years it doubled ($p < 0.001$). Estimated coefficients were 0.94 for adolescents aged 15–17 years and 0.72 for children aged 0–14 years.

At the same time, the data presented in the official reporting forms do not allow differential analysis of the prevalence of obesity depending on the age of children, so we analyzed the results of preventive medical examinations of minors in the Syrdarya region for 2017 and the results of preventive medical examinations by age groups in 2019 for preschool children and showed a statistically significant 45.5 percent increase in obesity among elementary school students (ages 5-9), while average declines in the 10-14 and 15-17 year age groups were noted. At the same time, the indicators of pathological damage are significantly higher than statistical data (16.9 and 35.5, respectively) (33.9 sugar in children aged 0-14 years and 61.7 ‰ in adolescents aged 15-17 years). Analysis of age-sex groups showed that obesity is more common in boys aged 5-17 years than in girls, especially in the age group 10-14 years ($p < 0.01$).

We also observe that by 2019, the most significant increase in obesity will be recorded in children aged 5-9 years. Pathological lesions of excess weight showed that 58.2% occurred in children aged 10-14 years, 20.7% - adolescents aged 15-17 years, 15% - 5-9 years old and 6.1% - children aged 0-4 years. In comparison with the results of additional research, the prevalence of obesity in children aged 0-14 years in Syrdarya region was 18.4% higher than in Uzbekistan as a whole (12.5‰), and in adolescents (32.1‰). Summary of the main results of the study According to the results of the preventive examination, the prevalence of obesity in the children of the Syrdarya region is much higher than that recorded in the official statistical reports on the use of medical care.

The study of age characteristics showed that the most important indicators of obesity growth were recorded in the age group of 5-9 years, the highest prevalence rate was recorded in the age group of 10-14 years, especially in boys.

DISCUSSION

An examination of different sources of medical data shows significant differences in the prevalence of obesity in children and adolescents diagnosed by primary care pediatricians. This situation can be related to the lack of awareness among pediatricians about the increase in children's body weight, as well as the lack of qualified personnel in primary medical institutions, when the positions of district pediatricians are occupied by paramedics. Болаларда аниқланмаган семиришнинг потенциал сабаби антропометрик ўлчовларни талқин қилиш ва овқатланиш ҳолатини аниқлашда турли хил ёндашувлардан фойдаланиш ҳисобланади. It helps to increase the frequency of registration of obesity in children during routine examinations, the routine examination of minors. At the age of 10, 15, 16 and 17, all teenagers are examined by an endocrinologist. This significantly increases the chances of identifying obesity in children and adolescents, because endocrinologists pay more attention to the problem of overweight in children and use standard criteria for the diagnosis of obesity in accordance with clinical guidelines. Inadequate medical literacy of the population, parents' inattention to the problem of excess weight in children and, as a result, failure to seek medical help have a great impact on timely detection of obesity. In general, our data on the age distribution of obesity in the region's child population correlates with the results provided by WHO experts and data from

other researchers. The maximum level of obesity in children aged 10-14 depends not only on the age characteristics of development, but also on the prevalence of behavioral risks in this age group. The significant increase in overweight in preschool children and elementary school students (ages 5-9) indicates the need to develop an early intervention system to prevent obesity in the child population. Despite the uncertainty of the obtained results, the study proves the significant impact of obesity on the health indicators of the children's population and emphasizes that its prevalence exceeds official statistics. A significant increase in indicators is related not only to the general laws of the prevalence of obesity, but also to the active preventive medical examination of the children's population of our country.

CONCLUSIONS

This study presents only statistical reporting data without epidemiological studies, without evaluation of anthropometric data and without determining the nutritional status of children. Since the highest prevalence of obesity is recorded in children of preschool and school age, the leading role in the diagnosis of overweight and obesity should be taken by medical personnel of educational institutions. It is these specialists who measure and evaluate the physical development of children at least once a year, and the timely diagnosis of obesity depends on the extent to which they have done it, and if necessary, they send them to the polyclinic for consultation and examination. Also, non-working people who are in daily contact with groups of children, monitor risk groups, monitor the dynamics of overweight ratio, food diaries, adherence to pediatrician's recommendations, regularly communicate and control not only with children, but also with their parents. it is necessary to put.

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