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СРАВНИТЕЛЬНАЯ ОЦЕНКА ПОЛОВОГО РАЗВИТИЯ ГОРОДСКИХ УЧАЩИХСЯ УЗБЕКИСТАНА И КАРАКАЛПАКСТАНА

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Изучено половое созревание у 2362 детей от 7 до 18 лет, проживающих на территории г.Ташкента, г.Нукуса и 4-х областных городов республики. Определены сроки начала, среднего возраста и окончания развития вторичных половых признаков. У девочек, проживающих в г.Ташкенте, других городах Узбекистана и г.Нукусе возраст наступления менструаций практически не отличался. Наиболее частыми формами нарушения менструального цикла у девочек являлись обильные и длительные кровянистые выделения, нарушение ритма и болезненность, в большей степени, выраженные у девочек-каракалпачек.

Ключевые слова: учащиеся, половое созревание, вторичные половые признаки, менструальная функция

SEXUAL DEVELOPMENT COMPARATIVE ASSESSMENT OF CITY PUPILS OF UZBEKISTAN AND KARAKALPAKSTAN

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Puberty at 2362 children from 7 to 18 years who are living in the territory of Tashkent city, Nukus city and 4 regional cities of the republic were studied. Beginning terms, middle age and an end of secondary sexual characteristics development were determined. At girls living in Tashkent, other cities of Uzbekistan and Nukus city an age of approach periods haven't been differed practically. The most frequent forms of menstrual disorders at girls were plentiful and long bloody excretions, a rhythm disturbance and painful, and more, expressed at Karakalpak girls.

Keywords: pupils, puberty, secondary sexual characteristics, menstrual function

Introduction

The priority purpose of policy of Uzbekistan is "... formation of a healthy and harmoniously developed generation, announce of a healthy lifestyle, a protection of our children from various negative impacts ..." (I.A.Karimov, 2013).

Data of domestic author's references are demonstrated that puberty standards of school age children of Uzbekistan have been developed in the end of nineties last century [6].

However, such researches results in decades could be served only as base for corresponding comparisons and conclusions about dynamics of the children's population health [1, 2, 7, 8].

If to consider that not only anthropometrical indicators, but also biological maturing it is subject to fluctuations depending on geographical, ethnic, climatic, social, ecological factors and urbanization [3, 4, 5, 9, 10, 11], so a question as how these indicators for the last decades have been changed is very actual.

Object and research methods

It has been studied a puberty at 2362 children from 7 to 18 years who are living in the territory of Tashkent and cities of Karakalpakstan, Samarkand, Syrdarya, Kashkadarya and Khorezm regions of the republic by using somatoscopy method. Beginning terms, middle age and an end of secondary sexual characteristics development were determined among 1284 girls (Axillaris - Ah, Pubis - P, Mammellaris - Ma) and 1078 boys (Axillaris - Ah, Pubis - P, Facialis - Fa, Voix - Vo, Laringis - La). In addition studied by poll method at girls a Menarhe beginning age and a characteristic of menstrual function was given. Researches were conducted within the Government grant ADSS-15.17.1 project.

Results and discussion

A comparative analysis of sexual development of Tashkent boys and cities of other regions has been shown that puberty changes (based on P) at Tashkent boys came much earlier: by 1 year 8 months - in comparison with Nukus peers and by 7-10 months – cities of Urgench, Samarkand, Qarshi and Gulistan. In 12 years the I stage of pubis hair development was observed at 28,7% of Tashkent boys, at 4,5% of peers of other cities of Uzbekistan and at 2% of Nukus boys. Distinction of pubis hair development wasn't smooth out by 17 years since a high stage (P₄) were 99, 90,4 and 75,7% respectively in Tashkent, other cities of Uzbekistan and Nukus of Karakalpakstan.

At boys of the compared groups by axillaries hair growth was noted that in 12 years a stage of Ax₁ in Tashkent were 10%, in other cities of the republic and in Nukus - 1%. By 17 years a high stage (Ax₃) was 82,1% (Tashkent), 79,5% (other cities of Uzbekistan) and 44,6% (Nukus). Earlier approach of a beginning change a voice timbre was noted at Tashkent boys (12 years 6 months), in comparison with age-mates of other cities of Uzbekistan (13 years 1 month) and Nukus (12 years 9 months). Initial signs of thyroid cartilage development were observed at 12 years 3 months (Nukus), 12 years and 8 months (Tashkent), 13 years 1 month (other cities of Uzbekistan). An age of the beginning of face hair distribution was 12 years 5 months (Nukus), 13 years (Tashkent) and 13 years 6 months (other cities of Uzbekistan).

At sexual development comparing of girls, it was noted that maturing of Karakalpaks on the basis of mammary glands development begins at 1 year and 3 months earlier (Ma₁ - 7,1% in 8 years) in comparison with Uzbek girls. At girls of the compared groups who are living in the cities of Uzbekistan and Karakalpakstan from 12 years gradual alignment of formation of this sign begins, and mature stages of mammary glands development (Ma₃₋₄) by 17 years reached nearly 100% of

girls, i.e. final mammary glands development came to an end equally at Uzbek girls and Karakalpaks.

Formation of signs in axillaries and pubis hair distribution at Nukus girls considerably lags and practically in all ages groups lower stages were noted. A definitional stage of pubis hair distribution (P_3) at Tashkent girls by 17 years were reached 99%, in other cities of Uzbekistan - 96,2% whereas Karakalpaks girls have been 56,9%. In 17-year age group in Nukus girls in axillary hair distribution (Ax_3) were 24,8% whereas Uzbek girls have been 90,5%.

A comparative analysis has been shown that at girls living in Tashkent, other cities of Uzbekistan and Nukus an age (beginning, middle and termination) of period's approach practically weren't differ (distinction were just 1-3 months). An age of Menarhe beginning at examined girls was equal to 11 years 4 months. An average age of Menarhe approach at examined girls was 13 years 3 months (distinction - 1-5 months). The time of puberty completion according to Menarhe – 12 years 11 months (distinction - 1-2 months). The number of menstruating girls in Tashkent from 11 up to 14 years was more, than in Nukus and other cities of Uzbekistan, but distinction smoothes out by 15 years and at the age of 16-18 years of 100% girls of the compared cities have been this period.

The most frequent forms of menstrual disorders at girls were plentiful (15,2%) and long (12,3%) bloody excretions, a rhythm disturbance (10%) and painful (9,1%), and more, expressed at Karakalpaks girls.

It was established that Karakalpaks boys considerably lag behind on rates of sexual hair distribution from their Tashkent peers and other cities of Uzbekistan (except for Urgench), and girls - from contemporaries of all studied cities of Uzbekistan. As less expressed distinction by hair distribution development between children of Nukus and Urgench was revealed, and there was a significant difference with peers of Tashkent and other cities of Uzbekistan, it was possible to conclude that the ethnic sign matters, but an important role in the children puberty development is played also the environment factors. So, an adverse ecological condition characteristic of Karakalpakstan and an exerting impact on nearby regions including on Khorezm region, are one of the reasons of a slow rate of children puberty (more - boys) living in conditions of near Aral.

Essential distinctions of indicators of a children puberty development of Tashkent, regional cities of Uzbekistan and Karakalpakstan were based for development of separate estimated tables of sexual development for children of Tashkent, for children of regional cities of Uzbekistan and separately for children Karakalpaks.

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