COMPARATIVE ANALYSIS OF MORBIDITY RATE IN ADOLESCENTS STUDIED IN DIFFERENT TYPES OF PUBLIC EDUCATIONAL INSTITUTIONS

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Common morbidity rate of adolescents aged from 15 to 18 years has been simultaneously estimated based on their appeals data to the polyclinics. These adolescents studied in public elementary schools and lyceums at medical high educational institutions of Tashkent city. Incidence was in 1.2-1.8 times higher among lyceum students than schoolchildren, while the structure of diseases was similar. The more important factors of morbidity in elementary schools and lyceums include iodine-deficiency, nonspecific respiratory diseases, iron-deficient anemia, gastritis, skin and subcutaneous tissue illnesses. These disease characteristics in elementary schools and lyceums should be considered when organizing recreational activities, in particular, during improving physical education and optimization of learning environment.

Keywords: Morbidity, hygiene of children and adolescents, elementary schools and lyceums.
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Introduction

The health of children and adolescents, who are the labor and intellectual potential of society, is one of the most important problems in the world. The high level of children’s health is a prerequisite for successful economic and social development. As noted some researchers (Biryukova, 2006; Krukovich et al., 2007; Zorina, 2006), in any socio-economic and political conditions, the health of children and adolescents is an urgent public concern and the subject matter of priority, since it determines the future of the country, its economic and scientific potential, the nation's gene pool.

Burhanov et al. (2006) and Zaytsev (2004) noted that the problem of physical and mental health of sub-races-melting generation now becomes especially acute, since the present situation differs by sharply deteriorating of ecological environment, lower quality of health care and disease prevention, and as a result by high rates of pediatric morbidity. Especially significant negative trends in health status of children and adolescents are marked by recent studies (Agool, 2007; Kalmikova et al., 2006; Onischenko, 2007) to be growth of disease, earlier formation of chronic pathology, leading to limited life and social functions. According to Glushkova (2003) factors of social protection, environment and lifestyle significantly influence on human health.

Since the beginning of independence in Uzbekistan started a reorganization of educational system. Network of colleges was organized in the country; they are profiled secondary schools usually formed at high educational institutions. Lyceums complete general secondary education on the basis of 9-year secondary schools, so the main contingent of students is the boys and girls of 15-18 years old.

Formation of high schools-lyceums began in the late 90’s. For Uzbekistan they represent the educational institutions of new type. 9-10-year experience in these institutions can make some preliminary conclusions about the influence of the learning environment in lyceums on the health of adolescents trained there, in comparison with parameters of schoolchildren aged between 15-18 years old, studying at the public educational schools.

The purpose of our study was to estimate common morbidity rate in adolescents aged from 15 to 18 years, enrolled in the programs of public educational schools and lyceums.
Objective: adolescents aged from 15 to 18 years studied in two public educational schools of Tashkent city and two lyceums at Medical high educational institutions. Simultaneous study of morbidity rate was conducted according to the data of 2007 year admissions to the regional polyclinics on the basis of the International Classification of Diseases - 10 (WHO, 2007).

Results and discussion

Figure 1 illustrates common morbidity rate on admission in the studied groups. The data shown in Figure 1 testify to that morbidity rate among lyceum-students (lyceists) significantly higher than in schoolchildren. In schoolboys and schoolgirls this rate amounted accordingly 308.7‰ and 184.6‰, whereas in lyceists at the similar gender and age it was on 17.3% and 84.9% higher, respectively.

We consider that this fact was conditioned by more complicated program and higher educational and training duties of lyceists, in comparison with the program of public educational schools.

We have found that there were no significant differences in the structure of morbidity rate in the comparing groups, even though were observed certain distinctions, which are shown in Figure 2. The results obtained showed that a general part of morbidity (70.6 - 72.9%) as in schoolchildren, as in lyceists, was forming due to 6 classes of diseases. In this case:

- diseases of blood and hemopoietic organs amounted in schoolchildren 7.8±2.5%, in lyceists - 4.5±1.8% (P>0.05),
- endocrine diseases, feeding and exchange disorders amounted in schoolchildren 14.7±3.3%, in lyceists - 20.1±3.5%;
- respiratory diseases were in schoolchildren 19.8±3.7%, in lyceists - 13.4±2.9% (P>0.05);
- skin and subcutaneous tissue diseases were in schoolchildren 16.4±3.4%, in lyceists - 20.1±3.5% (P>0.05);
- gastrointestinal illnesses amounted in schoolchildren 11.2±2.9%, in lyceists 10.4±2.6% (P>0.05);
- traumas and poisonings amounted in schoolchildren 5.2±2.1%, and in lyceists 4.5±1.8% (P>0.05), respectively.

![Comparative structure of leading forms of diseases in schoolchildren and lyceists of 15-18 years old (%)](image)

IVth class of diseases in 75-80% of cases was represented by iodine-deficiency, Xth class - nonspecific diseases of respiratory and otholaryngologic organs (80%), IIIrd class - iron-deficient anemia (80%), XIIth class - acute and chronic gastritis (70-80%), accordingly.

Morbidity rate on classes of diseases per 1000 of studied reflects the structure of illnesses. Thus, in girls of 15-18 years old, the rate of endocrine diseases, feeding and exchange disorders achieves 55.7‰, diseases of blood and hemopoietic organs - 42.4‰, diseases of respiratory organs - 39.8‰, and skin and subcutaneous tissue diseases - 21.2‰, respectively.

Hence, is necessary to consider the characteristics of morbidity rate in schoolchildren and lyceists in order to organize sanative measures, particularly to develop physical training and to optimize the regimen and conditions for the education of children and adolescents.
Conclusion

Morbidity rate on admissions of lyceists is higher in 1.2 times in boys and 1.8 times in girls respectively, than in schoolchildren.

The structure of morbidity in schoolchildren and lyceists is similar, with the prevalence of such diseases as endocrine, feeding and exchange disorders, skin and subcutaneous tissue illnesses, respiratory and gastrointestinal diseases.

Morbidity rate per 1000 of adolescents is higher as regards illnesses prevailed in the structure of diseases.

References


