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KEY INDICATORS OF THE QUALITY OF LIFE OF ADOLESCENTS
WITH BRONCHIAL ASTHMA

ОСНОВНЫЕ ПОКАЗАТЕЛИ КАЧЕСТВА ЖИЗНИ ПОДРОСТКОВ
С БРОНХИАЛЬНОЙ АСТМОЙ

BRONXIAL ASTMA BILAN KASALLANGAN O'SMIRLAR HAYOT
SIFATINING ASOSIY KO'RSATQICHLARI

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Annotation: 42 teenagers with bronchial asthma were examined. The average age of adolescents was 15.5 years, of which 52.7% (22) were boys and 47.3% (20) were girls. An assessment of the quality of life, a clinical and functional examination of adolescents with BA was carried out. The results revealed that economic status, physical mobility and social function are most affected. The relationship between the deterioration in the quality of life of BA boys and girls and the presence and severity of anxiety and depressive disorders has been established.

Key words: quality of life, bronchial asthma, adolescents.

Аннотация: Обследовано 42 подростка с бронхиальной астмой. Средний возраст подростков составил 15,5 лет, из них 52,7% (22) мальчики и 47,3% (20) девушки. Проводилась оценка качества жизни, клиническое и функциональное обследование подростков с БА. Результаты выявили что, наиболее страдают экономическое положение, физическая мобильность и социальная функция. Установлена взаимосвязь ухудшения качества жизни мальчиков и девушек БА с наличием и выраженностью тревожных и депрессивных расстройств.

Ключевые слова: качества жизни, бронхиальная астма, подростки.

Izoh: Bronxial astma bilan og'rigan 42 nafar o'smir ko'rikdan o'tkazildi. O'smirlarning o'rtacha yoshi 15,5 yosh bo'lib, ulardan 52,7 foizi (22) o'g'il bolalar va 47,3 foizi (20) qizlardir. BA bilan og'rigan o'smirlarning hayot sifatini baholash, klinik va funksional tekshiruv o'tkazildi. Natijalar shuni ko'rsatdiki, iqtisodiy holat, jismoniy harakatchanlik va ijtimoiy funktsiya eng ko'p ta'sir qilishi anaqlandi. BA o'g'il va qiz bolalarning hayot sifatining yomonlashishi bilan tashvish va depressiv kasalliklarning mavjudligi va ustunligi o'rtasidagi bog'liqlik aniqlandi.

Kalit so'zlar: hayot sifati, bronxial astma, o'smirlar.

Relevance

The problem of bronchial asthma (BA) continues to be relevant throughout the world, despite numerous studies and a sufficient amount of therapeutic and preventive measures. In childhood, bronchial asthma is one of the most common chronic diseases [1,2, 8]. In recent years, there has been a significant increase in interest in the problem of studying the quality of life (QOL) all over the world [4,7,8]. Currently, there is no generally accepted scientific definition of the concept of "quality of life" and each author focuses on one of the aspects of this concept. According to WHO experts, QOL is a subjective ratio of an individual's position in the life of society, taking into account the culture and value systems of this society, with the goals of this individual, his plans, opportunities and the degree of general disorder.

QOL is an integral characteristic of the patient's physical, psychological, emotional and social functioning, based on his subjective perception [3,5,8]. According to the results of a number of researchers, the prevalence of bronchial asthma in the Republic of Uzbekistan varies from 1.1% to 8.2%, which is due not only to the influence of external regional factors, but also to the use of various diagnostic methods - [2,4,6]. Given the priorities of modern medicine, in addition to the desire for the disappearance of clinical symptoms and improvement of functional indicators, the ultimate goal of treatment should be considered to be an improvement in the quality of life of the patient. Quality of life (QOL) is an integral indicator that reflects the degree of adaptation of a person to a disease and the ability to perform his usual functions corresponding to his socio-economic status - [1,5,7].

The aim of our study was to assess the QOL of adolescents with AD. Material and methods: 42 adolescents with BA were examined. The average age of adolescents was 15.5 years, of which 52.7% (22) were boys and 47.3% (20) were girls. Conducted clinical and functional examination (spirometry). To identify and assess the severity of anxiety and depression, the questionnaire "Hospital Anxiety and Depression Scale" was used [3]. The NAIF questionnaire [1] was used to assess the quality of life of adolescents. In adolescents with preserved QOL, the indicator approaches 100%, with a slight decrease it decreases to 75%, with a moderate decrease it is 74-50%, with a significant decrease - 49-25%, with a pronounced decrease in QOL - less than 25%. Statistical data processing was performed using the Statistica 8.0 program. The criteria of Student, Mann-Whitney, Spearman, Fisher were applied.

Results and their discussion: all adolescents showed a decrease in QOL: in 2.5% (1) - insignificant, in 50% (21) - moderate, in 45% (19) - significant and in 2.5% (1) - pronounced. The main components of QOL in adolescents with AD are presented in the table.

Table
The main components of the quality of life of adolescents
with bronchial asthma

Parameter, %, IU (25%- 75%)	All teenagers with BA n=42	Boys with BA, n=22	Girls with BA n=20
Physical mobility	43 (29-57)	45 (30-63)	42 (29-48)
Emotional condition	52 (36-79)	50 (34-62,5)	59 (36-82)
Social function	48 (43-60)	48 (40,5-58,5)	49 (43-60)
Cognitive function	64,5 (57-80)	71 (53-84,5)	61,5 (57-77)
Economic situation	14 (14-57)	29 (14-57,5)	14 (14-43)

In 71% (30) of adolescents, the presence of anxiety was revealed: subclinical anxiety was present in 47% (14) of adolescents, clinically expressed anxiety - in 53% (16) of adolescents. Depression was found in 60% (25) of adolescents: subclinical depression occurred in 28% (7) of adolescents, clinically significant depression in 72% (18) of adolescents. It is worth noting that 26% (11) of adolescents had a combination of clinically expressed anxiety and depression.

In girls with BA, inverse correlations were found between the integral indicator of QOL and age ($r=-0.56$; $p<0.001$; $n=42$), severity of clinical manifestations ($r=-0.51$; $p<0.05$), severity anxiety ($r=-0.50$; $p<0.001$) and depression ($r=-0.80$; $p<0.001$), the presence of a combination of anxiety and depression ($r=-0.59$; $p<0.001$).

When analyzing a group of boys with BA, it was found that all adolescents had reduced QOL, and in 5% (1) - slightly, in 45% (9) moderately, in 45% (9) significantly, and in 5% (1) - sharply expressed.

Inverse correlations were found between the integral index of QOL in boys ($r=-0.62$; $p<0.01$; $n=20$), the severity of clinical manifestations of BA ($r=-0.51$; $p<0.05$), the number of inhalations bronchodilators at night ($r=-0.64$; $p<0.01$), the severity of depression ($r=-0.91$; $p<0.001$) and anxiety ($r=-0.57$; $p<0.01$), the presence of a combination anxiety and depression ($r=-0.73$; $p<0.001$). Boys with BA were divided into 2 groups: 1) patients with a significant and pronounced decrease in QOL ($n=10$); 2) adolescents with a slight and moderate decrease in QOL ($n=12$). The groups were comparable in terms of age, severity and duration of BA, the severity of clinical manifestations, the presence of disability, education, marital status, the proportion of smokers and the proportion of adolescents taking basic therapy, as well as in terms of FEV1 in %. In the first group of adolescents with BA, compared with the second group, a decrease in the integral indicator of QOL (44 (36-46)% and 61 (58-71)%; $p<0.001$) was revealed, as well as in such components of QOL as physical mobility (30 (21-36)% and 63 (62-71)%; $p<0.001$), social (44 (29-50)% and 58.5 (48-79)%; $p<0.05$) and cognitive function (58.5 (49-60)% and 84.5 (71-91)%; $p<0.05$). In the first group of adolescents with BA, compared with the second group, the severity of anxiety (12.5 (11-15) points and 9.5 (4-12) points; $p<0.05$) and depression (11.5 (11-15) points) and depression (11.5 (11-15) points) 12) points and 4.5 (2-6) points; $p<0.001$). The combination of anxiety and depression was found in 70% (7) of adolescents in the first group and was not observed in the second group ($p<0.001$).

In the group of girls with BA, a decrease in QOL was revealed in all adolescents: in 55% (12) - moderate, in 45% (10) - significant. Direct correlations were established between the integral indicator of QOL and body weight ($r=0.54$; $p<0.01$; $n=22$), FVC after the test in % ($r=0.81$; $p<0.01$), FEV1 after samples in 1 ($r=0.83$; $p<0.01$). The worsening of QOL in adolescents with AD was associated with an increase in age ($r=-0.56$; $p<0.01$), increased anxiety ($r=-0.43$; $p<0.05$) and depression ($r=-0.78$; $p<0.001$), the presence of a combination of anxiety and depression ($r=-0.50$; $p<0.05$), the severity of clinical manifestations of BA ($r=-0.49$; $p<0.05$). Girls with BA were divided into 2 groups: 1) girls with a significant and pronounced decrease in QOL ($n=10$); 2) patients with a slight and moderate decrease in QOL ($n=12$).

The groups were comparable in terms of age, disease severity and duration, asthma test results, disability status, education, marital status, and proportion of smokers. In the first group, a girl with AD compared with the second a decrease in the integral indicator of QOL was

revealed (43.5 (39-46)% and 60 (58.5-61.5)%; $p<0.001$), as well as such components of QOL as physical mobility (27.5 (21-29) % and 48 (43-56)%; $p<0.001$), social (45.5 (36-57)% and 56 (46.5-62)%; $p<0.05$) and cognitive function (57 (37) -60)% and 75.5 (64.5-84.5)%; $p<0.01$), economic status (14 (12-15)% and 36 (14-71.5)%; $p<0.05$). In the first group of adolescents with BA, compared with the second group, the severity of anxiety (10.5 (9-12) points and 7.5 (4-9) points; $p<0.05$) and depression (12.5 (11- 14) points and 7.0 (6-9.5) points; $p<0.01$).

Conclusion

In girls with BA, a predominantly moderate and significant decrease in QOL was revealed. Economic status, physical mobility and social function suffer the most. Correlation between the worsening of the QOL of BA boys and girls and the presence and severity of anxiety and depressive disorders was established.

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