



## ANALYSIS OF MORBIDITY RATES BY TYPE OF HELMINTHIASIS (ON THE EXAMPLE OF THE CITY OF TASHKENT)

**Fayziboev Pirmamat Normamatovich**  
Samarkand State Medical University  
Head of the Department of Hygiene,  
MD, Associate Professor

**Zhavkharov Shokhrukh Zhirakul ugli**  
Clinical residents of the Department of  
Hygiene

**Boborakhmatov Sultanali Salomovich**  
Clinical residents of the Department of  
Hygiene

**Fayziboev Bekzod Pirmamat ugli**  
Alfraganus University student

**Аннотация:** Многие исследователи считают, что факторы передачи яиц гельминтозов: детские горшки, стулья, игрушки и другие предметы, которые соприкасаются с руками. В Узбекистане наиболее важным фактором передачи яиц в сельских условиях являются детские сладости, халва и другие пищевые продукты.

Также в распространении возбудителя гистеллиоза в некоторой степени участвуют и мухи. Наличие промежуточного хозяина, несущего яйца остается под вопросом до сих пор.

**Ключевые слова:** Паразиты, патологические изменения, черви, детские дома, эпидемиологическое исследование.

**Аннотация:** Tadқиқотчилар томонидан ўрганилган қўпгина маълумотларга кўра гелминтоз тухумларининг юқиши омиллари: чақалоқ идишлари, стуллар, ўйинчоқлар ва қўллар билан алоқа қиладиган бошқа нарсалар орқали юқуши бизга маълум. Ўзбекистонда қишлоқ шароитида гелминтоз тухуми орқали касалликни юқтиришида энг муҳим омил бўлиб, болалар севиб истеъмол қиладиган ширинликлар, халва ва бошқа озиқ-овқат маҳсулотлари ҳисобланади.

Шу билан бирга, гистеллиоз патогенининг тарқалишида чивинлар ҳам маълум даражада иштирок этади. Оралиқ тухум қўядиган хўжайиннинг мавжудлиги бугунги кунгача ноаниқ бўлиб қолмоқда.

**Калит сўзлар:** паразитлар, патологик ўзгаришлар, қуртлар, меҳрибонлик уйлари, эпидемиологик изланишлар.

**Актуальность темы:** About 270 species of helminths have been identified worldwide that are parasitic in the human body. Parasitic diseases remain one of the urgent problems of public health (Onishchenko G.G., 2000), which is explained by their widespread occurrence and the ability to cause various pathological changes in the human body (Sergiev V.P., 1998; Katz M., 1975). Parasitic diseases cause serious damage to health, especially dangerous for children (Serov V.P. et al., 1997; Katz M.,



1975; Gendler D. et al., 2003). Parasitoses affect a significant part of the world's population, which leads to serious social and economic consequences (Romanenko N.A., 2005; Olmasov M.M., 2008).

Improving the cultural and living standards of the population, improving agricultural and urban hygiene, as well as regular preventive measures against helminthiasis have led to a noticeable decrease in the incidence of parasitic diseases in Uzbekistan. Nevertheless, despite the successes achieved, 10-12 types of helminthiasis are still registered in the republic. Diseases such as enterobiosis, hymenolepidosis, ascariasis, teniarynchosis and trichocephalosis continue to be widespread in some areas.

**Objective:** Early detection and prevention of cases of hymenolepidosis among organized and unorganized preschool children, children entering kindergartens, orphanages, schools and camps, as well as among employees of children's collectives and employees of catering establishments.

**Research materials:** The study used official reports on the incidence of helminthiasis among various population groups provided by the Republican Service for Sanitary and Epidemiological Welfare and Public Health, as well as data from epidemiological surveys conducted in epidemic foci.

**The results of the study:** Analyzing the incidence rates of various types of helminthiasis, the following data were obtained. In 2018, 63 cases of ascariasis were identified, of which 49 (77.7%) were children. The infection index among both adults and children was 0.01%, and by 2022 the incidence rate remained at the same level.

In the analyzed years, the incidence of hymenolepidosis and enterobiosis among children in Tashkent significantly exceeded those among adults. For example, in 2018, 161 people were infected with hymenolepidosis, 132 of them (81.0%) were children. In 2022, 127 (89.4%) of the 142 cases were children. Also, 96.0% of those with enterobiosis in 2018 and 95.7% in 2022 were children. On the other hand, the incidence of teniarynchosis (84.2% in 2018 and 69.0% in 2022) and echinococcosis (91.3% in 2018 and 81.2% in 2022) was significantly higher among adults. These figures indicate that in the conditions of Tashkent, helminthiasis transmitted by contact (hymenolepidosis and enterobiosis) are most often found, followed by ascariasis, as well as biohelminthiasis such as teniarynchosis and echinococcosis. The analysis of the incidence of helminthiasis among children in Tashkent for the period 2016-2022 is presented in Table 1.

**Table 1**

**Cases of helminthiasis among children in the city of Tashkent in 2016-2022.**



Years	The total number of verified	The number of diagnosed случаев	The number of examined children under the age of 14	Number of diagnosed cases	Number of orphaned children	School students	Preschoolers
					Number of cases	Number of cases	Number of cases
2016	568713	10641	419780	10127	1837	2201	6254
2017	590654	10084	446514	9662	1639	1863	5743
2018	575046	9628	426541	9164	1500	2213	5350
2019	568921	9243	429805	8815	1244	2289	5096
2020	569931	9184	431067	8749	1215	2214	4990
2021	558833	7635	425430	7238	1239	2005	3861
2022	551083	7772	421462	7391	1138	2029	3924

Table 1 shows that the incidence of helminthiasis is especially high among preschool children. For example, in 2019, 5,096 pupils of these institutions were found to have various helminthiasis, which amounted to an infection index of 5.4%. In 2020, this index rose to 5.5%. It is also noticeable that the incidence rates among schoolchildren are significantly higher than among unorganized children. In 2019, 2,289 cases of helminthiasis with an infection index of 1.47% were detected among schoolchildren, while 1,244 children with an index of 1.3% were infected among unorganized children. In 2020, the results were similar.

Based on the conducted research, the following conclusions can be drawn. In the conditions of the city of Tashkent, the highest incidence of ascariasis, hymenolepidosis and enterobiosis is observed among children, while adults are more likely to suffer from teniarinchiasis and echinococcosis. The highest incidence rates of helminthiasis were registered among pupils of preschool institutions, then among schoolchildren and unorganized children. The high incidence of contact-transmitted helminthiasis (enterobiosis, hymenolepidosis) among preschool children can be explained by insufficient hygiene habits in children.

Analyzing the data by gender, it turned out that 67% of patients with ascariasis are men, and 33% are women.

For other helminthiasis, the results are as follows: teniarynchosis — 56% men and 44% women, hymenolepidosis — 50.1% men and 49.9% women, enterobiosis — 75% men and 25% women, echinococcosis — 54% men and 46% women.

Thus, in the conditions of Tashkent, men most often suffer from helminthiasis.

**Conclusion:** Early detection and treatment of patients are key factors in the fight against diseases. Special attention is paid to the following groups: organized



and unorganized preschool children, children entering kindergartens, schools, orphanages and camps, employees of children's institutions, employees of public catering enterprises, as well as family members in whom a case of the disease has been identified. It is necessary to separate patients with hymenolepidosis into separate groups in kindergartens and homes. Children who have had helminthiasis should be under medical supervision for two years.

#### **The literature used:**

1. Бабуева Р.В. В кн.: Паразитологические исследования в Сибири и на Дальнем Востоке: Материалы 11 межрегиональной конф. 12-20 сент. 2005. – Новосибирск, 2005 – С. 15.
2. Файзибоев Пирмамат Нормаматович, Ибрагимова Файруза Собировна, Махмараймов Фузаил Ильхомович, Абдурахмонова Шахноза Сокиевич, & Файзибоев Бекзод Пирмаматович. (2024). ГИГИЕНИЧЕСКАЯ ОЦЕНКА КРИТЕРИЕВ БЕЗОПАСНОСТИ И ПИЩЕВОЙ ЦЕННОСТИ ПЛОДООВОЩНОЙ ПРОДУКЦИИ. INTERNATIONAL JOURNAL OF RECENTLY SCIENTIFIC RESEARCHER'S THEORY, 2(1), 71–76.
3. Балаян Ю.В. Сравнительная эффективность лечения албендозолом и стандартные методы лечения метронидазолом с фуразолидоном у больных хроническим лямблиозом детей. //Инфекция, иммунитет и фармакология.- 2006. -№5.-С. 14-15.
4. Файзибоев П. Н. ИНСОН ОВҚАТЛАНИШИДА ҚАНДОЛАТ МАҲСУЛОТЛАРИНИНГ АҲАМИЯТИ //GOLDEN BRAIN. – 2023. – Т. 1. – №. 6. – С. 47-51.
5. Файзибоев П. Н. и др. АҲОЛИНИНГ ТЎҒРИ ОВҚАТЛАНИШИДА МАҲСУЛОТЛАРИНИНГ БИОЛОГИК ҚИЙМАТИНИНГ ТУТГАН ЎРНИ //INTERNATIONAL JOURNAL OF RECENTLY SCIENTIFIC RESEARCHER'S THEORY. – 2023. – Т. 1. – №. 7. – С. 215-220.
6. Файзибоев П. Н. и др. ОЗИҚ-ОВҚАТМАҲСУЛОТЛАРИДАН БАКТЕРИАЛ ЗАҲАРЛАНИШНИ ОЛДИНИ ОЛИШДА НАССР ХАЛҚАРО ТИЗИМИНИ ТУТГАН ЎРНИ //INTERNATIONAL JOURNAL OF RECENTLY SCIENTIFIC RESEARCHER'S THEORY. – 2023. – Т. 1. – №. 7. – С. 226-229.
7. Файзибоев П. Н. и др. САБЗАВОТ, ПОЛИЗ МАҲСУЛОТЛАРИНИ ЕТИШТИРИШ ЖАРАЁНЛАРИНИ ГИГИЕНИК БАҲОЛАШ //INTERNATIONAL JOURNAL OF RECENTLY SCIENTIFIC RESEARCHER'S THEORY. – 2023. – Т. 1. – №. 7. – С. 221-225.
8. Файзибоев П. Н. и др. ЎЗБЕКИСТОН ШАРОИТИДА ЭХИНОКОККОЗ КАСАЛЛИГИ БИЛАН КАСАЛЛАНИШНИНГ ЭПИДЕМИОЛОГИК ТАҲЛИЛИ //INTERNATIONAL JOURNAL OF RECENTLY SCIENTIFIC RESEARCHER'S THEORY. – 2023. – Т. 1. – №. 7. – С. 230-233.



9. Файзибоев П. Н. ЎЗБЕКИСТОН АҲОЛИСИНИНГ МИЛЛИЙ ҚАНДОЛАТ МАҲСУЛОТЛАРИ БИЛАН ОЗИҚЛАНИШИДА “НОВВОТ” НИНГ ТУТГАН ЎРИН //Журнал гуманитарных и естественных наук. – 2023. – №. 3 [2]. – С. 167-170.
10. Файзибоев П. Н. и др. ТЕХНОЛОГИЯ ПРИГОТОВЛЕНИЯ ИЗ НАЦИОНАЛЬНЫХ КОНДИТЕРСКИХ ИЗДЕЛИЙ НАВВАТА //INTERNATIONAL JOURNAL OF RECENTLY SCIENTIFIC RESEARCHER'S THEORY. – 2023. – Т. 1. – №. 6. – С. 149-153.
11. Файзибоев П. Н. ҚАНДОЛАТ МАҲСУЛОТЛАРИНИНГ ЗАМОНАВИЙ ТЕХНОЛОГИЯЛАРДА ИШЛАБ ЧИҚАРИШНИ ТАШКИЛЛАШТИРИШ //INTERNATIONAL JOURNAL OF RECENTLY SCIENTIFIC RESEARCHER'S THEORY. – 2023. – Т. 1. – №. 3. – С. 290-295.
12. Файзибоев П. Н. и др. ЗНАЧЕНИЕ КОНДИТЕРСКОЙ ПРОДУКЦИИ В ПИТАНИИ ЧЕЛОВЕКА //INTERNATIONAL JOURNAL OF RECENTLY SCIENTIFIC RESEARCHER'S THEORY. – 2023. – Т. 1. – №. 3. – С. 282-289.
13. Файзибоев П. Н., Ахророва М. Ш. TISH KARIESI BILAN KASALLANGAN VA SOG 'LOM BOLALARNING OVQATLANISHINI VANOLASH //ЖУРНАЛ СТОМАТОЛОГИИ И КРАНИОФАЦИАЛЬНЫХ ИССЛЕДОВАНИЙ.– 2023–Т. 4. – №.1.
14. Normamatovich F. P. PRODUCTION TECHNOLOGY OF NATIONAL CONFECTIONERY" NOVOT" //Academia Science Repository. – 2023. – Т. 4. – №. 04. – С. 794-798.
15. Faiziboev Pirmamat Normamatovich, & Ochilov Sardor Abduganievich. (2023). METHOD OF PREPARING NOVOT FROM NATIONAL CONFECTIONERY PRODUCTS IN UZBEKISTAN. *INTERNATIONAL JOURNAL OF RECENTLY SCIENTIFIC RESEARCHER'S THEORY*, 1(6), 160–164. Retrieved from <https://uzresearchers.com/index.php/ijrs/article/view/830>
16. Fayziboev Pirmamat Normamatovich. (2023). PRODUCTION TECHNOLOGY OF NATIONAL CONFECTIONERY "NOVOT". *Academia Science Repository*, 4(04), 794–798. Retrieved from <https://academiascience.com/index.php/repo/article/view/131>
17. Soatov , M. M. o'g'li, & Elmurodova , L. X. qizi. (2023). SUVNI KOAGULYATSIYA QILISHNING GIGIYENIK AHAMIYATI. *GOLDEN BRAIN*, 1(30), 67–71. Retrieved from <https://researchedu.org/index.php/goldenbrain/article/view/5194>
18. Faiziboev Pirmamat Normamatovich, Ibragimova Fairuza Sobirovna, Makhmaraimov Fuzail Ilkhomovich, Abdurakhmonova Shakhnoza Sokievich, & Fayziboev Bekzod Pirmamatovich. (2024). HYGIENIC ASSESSMENT OF CRITERIA FOR SAFETY AND NUTRITIONAL VALUE OF FRUITS AND VEGETABLES. *INTERNATIONAL JOURNAL OF RECENTLY SCIENTIFIC RESEARCHER'S THEORY*, 2(1), 77–81.



19. Faiziboev Pirmamat Normamatovich, Fakhritdinov Shokhrukh Fakhritdinovitch, Roziklov Dilshod Allayorovich, Obloberdiev Okhunjon O'tkirovich, & Fayziboev Bekzod Pirmamatovich. (2024). ESTIMATES OF CONSUMPTION OF CONFECTIONERY PRODUCTS IN THE AVERAGE DAILY DIETS OF THE POPULATION IN THE SUMMERAUTUMN SEASON. *INTERNATIONAL JOURNAL OF RECENTLY SCIENTIFIC RESEARCHER'S THEORY*, 2(1), 142–149.
20. Файзибоев Пирмамат Нормамаатович, Ибрагимова Файруза Собировна, Махмараймов Фузаил Ильхомович, Абдурахмонова Шахноза Сокиевич, & Файзибоев Бекзод Пирмаматович. (2024). ГИГИЕНИЧЕСКАЯ ОЦЕНКА КРИТЕРИЕВ БЕЗОПАСНОСТИ И ПИЩЕВОЙ ЦЕННОСТИ ПЛОДООВОЩНОЙ ПРОДУКЦИИ. *INTERNATIONAL JOURNAL OF RECENTLY SCIENTIFIC RESEARCHER'S THEORY*, 2(1), 71–76.
21. [Tsay CЙ, Жунод Р, Жасот-Гуиллармод М, ет ал. Вагинал Ентеробиус вермисуларис diagnosed он ликуид-based сйтологй дуринг Папанисолаоу test сервисал сансер скреенинг: А репорт оф two cases анд а ревиу оф тхе литературе. Диагн Сйтопатхол 2018; 46:179.](#)

