# THEORETICAL ANALYSIS OF HUMAN PAPYLOMAVIRUS DISEASES AND THE DRUGS USED IN IT

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Abstract. The analysis of human papillomavirus disease provided a theoretical analysis of local and foreign literature. The literature review analyzed the etiology and classification of Human Papillomavirus disease and the assortment of drugs used. A theoretical analysis of medicines and treatments used in human papillomavirus disease has been carried out. As a result of the gradual increase in human papillomavirus disease worldwide, including in the world, treatments are under way based on pharmacotherapy groups of drugs used therein. On this basis, there has been an opportunity to analyze the drugs used in Human Papillomavirus disease for patients with Human papillomavirus disease in Uzbekistan and medical prevention facilities. The etiology and classification of human papillomavirus disease, the epidemiology of human papillomavirus disease, and the drugs and treatments used therein have been theoretically explained.

**Keywords:** patients, medications used in human papillomavirus disease, outpatient treatment, stational conditions.

Relevance of the work: Human papillomavirus infection (HPV) is a chronic infectious disease caused by a group of more than 200 human papillomavirus viruses. Human papillomavirus (HPV) is most common in the neck, back and groin areas. While most (HPV) infections clear up on their own, some high-risk strains can cause serious health complications, including cervical, anal, and oropharyngeal cancer. Human papilloma virus (HPV) is one of the most common sexually transmitted (STI) infections. Among more than 200 (HPV) types, the most oncogenic types 16, 18, 31, and 45 (HPV) have an increased risk of developing cervical cancer during longterm (5-10 years) hormonal contraception. Human papillomaviruses infecting the epithelial cells of the skin and mucous membranes are etiologically related to the development of cervical and, in fact, cervical cancer, as well as anogenital warts (condylomas) and recurrent papillomatosis. It increases in the presence of other sexually transmitted infections. Of particular importance among the (HPVs) are the genital papillomavirus (PVI) infection caused by the human papillomavirus (HPV), which belongs to the papillomavirus genus and belongs to subgroup A of the Papovaviridae family. Human papillomavirus (HPV) is the most common sexually transmitted infection (STI) in the world, which has a high negative impact on individual social life. It is difficult to estimate the annual rate of (HPV) infection, because most of the primary cases remain asymptomatic or unrecognizable, which makes it very difficult to predict the course of PVI in each individual woman. (HPV) is considered one of the viruses that cause cancer, and according to research results, all people infected with oncogene (HPV) develop cancer. However, people who are symptomatic carriers of the virus can cause serious illness and can pass it on to others. Papilloma or human papillomavirus (HPV) is a virus that is transmitted mainly through sexual contact (especially anal and oral sex), as well as through direct contact with the skin of an infected person, in baths or swimming pools, through daily contact, during childbirth (infection passed

from mother to child). In the initial stages, all (HPV) infections are symptomatic. People with strong immunity can remain symptomatic carriers throughout their lives.

However, when the immune system is weakened, the low-risk virus is invisible as a formation on the mucous membrane or skin.

- -The main symptoms of human papillomavirus are warts.
- Skin papilloma looks like a soft, painless growth like a cauliflower.

Genital warts can be around the waist or groin or more commonly in the mouth or throat (neck area). A non-oncogenic form is genital warts. A virus with a low oncogenic risk and a high oncogenic risk does not help the appearance of tumors, but causes the development of malignant tumors. The virus itself is a 55nm-sized form, wrapped in a shell. Viruses enter epidermal cells and they can exist in 2 forms. The latest scientific studies show that infection with various types of human papillomavirus can lead to the development of oral cavity, larynx, esophagus and skin cancer. There is no specific treatment for a patient infected with the human papilloma virus. The only effective way to prevent infection is vaccination. Vaccination is carried out in adolescents from 9 to 14 years old. If a patient infected with human papilloma virus is vaccinated, it will have the opposite effect on the patient. That is, it causes the occurrence of oncogenic conditions.

**Purpose of work.** To study the analysis of epidemiological problems of the distribution and growth rates of human papillomavirus disease around the world.

Materials and methods. Analysis of the assortment of drugs used in human papillomavirus disease, registered in the state register of drugs, medical devices and medical equipment allowed for use in medical practice in the Republic of Uzbekistan in 2023, by pharmacotherapeutic group. The method of statistical analysis on the epidemiology of human papilloma virus disease was used.

**Research results and their discussion.** According to the results of the statistical analysis, according to the data of 2023, mainly women and men aged 15 years and older, patients with human papilloma virus appear in the neck, back and groin areas. A total of 22.13% per 100,000 inhabitants in the Republic of Uzbekistan, of which 6.7% are among men and 15.43% are among women. From the countries of the Commonwealth of Independent States (CIS): in Armenia, 26.41%, of which 13.13% are among men, 13.28% are among women. in Azerbaijan

2 1.67% of which 9.4% among men, 12.27% among women. In Belarus, 67.42% of them occur among men, 40.75%, and 26.67% among women. In Kazakhstan, 34.53%, of which 11.12% are men, 23.41% are women. In Kyrgyzstan, 22.25%, of which 4.46% are men, 17.79% are women. Republic of Moldova 69.3% of which 40.79% are men, 28.51% are women. Russian Federation 59.69% of which 30.71% are men, 28.98% are women. In Tajikistan, 10.4% of them, 1.87% among men and 8.53% among women, were found.

In other foreign countries, in the United States of America, 48.82%, of which 25.13% are men, 23.69% are women. In Germany, 64.18% of which 27.81% are men, 36.37% are women. In Spain, 55.74% of which 31.95% are men, 23.79% are women. In Japan, 55.02% of them, 23.99% among men, and 31.03% among women were found.

The world epidemiology of human papillomavirus disease was theoretically studied. According to it, it became known that the percentage of human papillomavirus in the CIS countries is higher than in Uzbekistan and foreign countries.

In the course of the research, an analysis of the assortment of drugs used for the treatment of the disease was carried out according to the pharmacotherapeutic group.

Medicines that destroy the human papilloma virus are not yet available. But for their treatment, pharmacotherapeutic groups of drugs that showed practical results with high indicators of effect were determined. According to it, 6 pharmacotherapeutic groups of the pharmacotherapeutic group of drugs used in human papilloma virus disease were determined from the data of the state register of drugs, medical products and medical equipment allowed to be used in medical practice, and an assortment analysis was carried out.

According to the order of the Ministry of Health of the Republic of Uzbekistan dated August 31, 2023 No. 3455 "On approval of the list of essential drugs", the antiviral agents on this list contain interferon alpha 2 -b and the third generation of antibiotics cefolasporin group of medicines including ceftraksion, ascorbic acid from vitamins, cyanocobalamin, iodine from antiseptics, nitrofural, metronidazole against parasites and protozoa, drugs with the international unpatented name are included in the list of main drugs. The analysis of the countries that produce anti-human papilloma virus drugs shows that in 2023, according to the data of the State Register of drugs, medical devices and medical equipment authorized for use in medical practice No. 27, the Commonwealth of Independent States a total of 1334 drugs were produced in the countries, and 11 drugs were identified in the pharmacotherapeutic group of drugs used in the human papillomavirus disease registered in the register, 15% of them, 5515 drugs were developed in foreign countries 15 of the pharmacotherapeutic group of drugs used in human papilloma virus disease, 20% of which, 3,268 drugs used in human papilloma virus disease were registered in the State Register of Uzbekistan 49, i.e., 65% of drugs by pharmacotherapeutic group. According to the results of the analysis, the state register of drugs, medical products and medical equipment allowed to be used in medical practice has a wide range of drugs used in the treatment of human papilloma virus disease. shows the dynamics of growth. The obtained results are important for understanding consumer behavior and formulating informational materials for doctors. Currently, there is a high growth rate in viral infections, and especially papillomavirus infection is increasing.

(HPV) diagnosis occurs as a result of examination of the patient and cytological analysis of urine from the cervix in women or urinary tract in men. The use of isoprinocin in the complex treatment of papillomavirus infection increases the effectiveness of therapy, contributes to a clear anti-inflammatory effect and leads to significant destruction of human papillomavirus (the size, shape and internal structure of virus-infected cells have changed). Colposcopy and cervical biopsy may be prescribed additionally. The PTSR method (molecular biological methods) is often used to detect DNA fragments of the virus (human papillomavirus analysis) and to determine the type of human papillomavirus.

Skin changes are removed with the help of chemicals, curettage, freezing (cryodestruction) or laser cauterization to prevent spread and infection, as well as to change them into an oncological form. However, it should be noted that after removing skin pathologies, the virus remains in the body. Therefore, they can reappear. When immunity is weakened, immunomodulators and vitamin complexes are used in the treatment of human papilloma virus. Women infected with high-risk human papillomaviruses should undergo regular tests to assess the level of cervical cancer. In women (HPV), cervical dysplasia and Bowen's disease (benign tumor, without metastases) can turn into skin cancer if left untreated.

#### Conclusions.

The etiology of human papilloma virus diseases was studied by statistical analysis in relation to every 100,000 population of the countries of the world.

According to it, it became known that the percentage of human papillomavirus in the CIS countries is higher than in Uzbekistan and foreign countries.

Medicines and treatment methods used in human papilloma virus diseases and modern approaches in the treatment process were analyzed.

Based on the analysis results, timely diagnosis of human papilloma virus disease, proper organization of treatment, and marketing research are of great importance.

The range of drugs used in HPV disease was analyzed according to the pharmacotherapeutic group. It can be said that in the practice of "Dermatoventrology and medical anthology" there is no specific drug for the disease of anogenital warts (Acute pointed warts) (HPV), but for this disease, according to the pharmacotherapeutic group, Antiviral drugs, Antibiotic treatment, It was found that diathermocoagulation can lead to treatment courses using immunomodulators.

Treatment with vitamins, laser destruction, surgical treatment, KTLH-therapy and plasmapheresis treatment methods can be used to treat and eliminate the disease.

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