



Research Article

INVESTIGATING FACTORS INFLUENCING ANTIRETROVIRAL THERAPY ADHERENCE TO ART IN HIV-INFECTED CHILDREN

Submission Date: November 05, 2022, **Accepted Date:** November 15, 2022,

Published Date: November 28, 2022

Crossref doi: <https://doi.org/10.37547/medical-fmospj-02-11-03>

Journal Website:
<https://frontlinejournal.s.org/journals/index.php/fmospj>

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ABSTRACT

This article examines the factors influencing adherence to antiretroviral therapy in ARVT among HIV-infected children. HIV infection is a chronic infectious disease with a progressive course, characterized by a specific lesion of the immune system with the development of immunodeficiency, which is manifested by secondary diseases. In this connection, people living with HIV (PLHIV) need medical care for the rest of their lives.

Antiretroviral therapy (ART) is the only possible way to extend the life of people living with HIV (PLHIV), improve its quality and reduce the transmission of the virus to others. ART should be aimed at suppressing HIV replication with minimal risk of early and late side effects and drug resistance, as well as minimal disruption to normal life. Suppression of HIV replication helps to restore the function of the immune



system, ensure the normal physical and mental development of PLHIV, minimize the risk of opportunistic infections and cancer, and reduce AIDS and mortality rates.

KEYWORDS

HIV infection, women and children, equipment, needs, purchase, storage, prevention, diagnosis, equipment, diagnostic, generation, strengthening, physical and mental, opportunistic infections.

INTRODUCTION

The main principle of ART is to provide comprehensive care to PLHIV. Routine medical care and follow-up care is provided by groups of family physicians (FGPs) who monitor the course of HIV infection and assess indications for initiation of ART, together with specialists from the Department of Dispensary Monitoring (ODN) of the AIDS Service.

All antiretroviral drugs (ARVs) used to treat HIV infection, as well as some drugs for the prevention and treatment of opportunistic infections (OIs), are purchased with financial support from the Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM). Forecasting of needs, purchase, storage, distribution of ARVs is carried out centrally by the RC "AIDS". Further distribution is carried out in accordance with the

requests of the CPBC, which are issued by ARVs according to the list of FMCs / FGPs at the place of residence of PLHIV receiving ART. Treatment regimens for PLHIV are approved by clinical protocols. Clinical protocols use fixed-dose, combination drug combinations of ARVs as the preferred approach for ART in women, adolescents, and children over three years of age. For children under three years of age, a protease inhibitor (PI) regimen is preferred. An assessment of the situation on the effectiveness of ART for women and children with HIV infection was carried out for the first time.

THE MAIN FINDINGS AND RESULTS

Situational analysis of the organization of the provision of ART for HIV infection in women and

children, identification of the problem and development of recommendations, Uzbekistan is actively involved in achieving global goals in the field of prevention and treatment of HIV infection, joining the achievement of the goals of the global strategy 'Accelerate to achieve an end to the AIDS epidemic by 2030' and the goals 90-90-90. In the Republic of Uzbekistan, the estimated number of People Living with HIV is 54,000 according to Spectrum estimates (2018), the registered number is 42,425 people. According to national monitoring data: HIV-infection is kept at a concentrated stage, i.e. prevalent among key populations, in total, 3,983 cases of HIV infection were registered during the year, of which 2,291 (57.5%) were men and 1,692 (42.5%) were women. When analyzing cases of HIV infection by transmission routes, it was found: sexual route - 2916 (73.2%), parenteral route - 726 (18.2%), vertical route - 7 cases (1.3%). When examining people who stayed outside their permanent place of residence for more than 3 months, 543 cases of HIV infection were detected, and among newlyweds - 332 cases. During the reporting period, 1161 cases of HIV infection were detected among persons examined for clinical indications. All measures to combat HIV infection are carried out on the basis of the Law of the Republic of

Uzbekistan No. ZRU-353 "On counteracting the spread of the disease caused by the human immunodeficiency virus (HIV infection)" dated 23.09.2013. The coordinating body for all activities on HIV infection is the Republican AIDS Center, which is subordinated vertically to the Agency for Sanitary and Epidemiological Welfare to the Ministry of Health of the Republic of Uzbekistan. In recent years, there has been progress in the implementation of measures to combat the spread of HIV/AIDS. In order to raise the system of measures to combat the spread of HIV infection to a modern and qualitative level, the Decree of the President of the Republic of Uzbekistan dated January 25, 2018 No. PP-3493 "On measures to further improve the system to counter the spread of HIV infection in the Republic of Uzbekistan for 2018" was adopted and Decree of the President of the Republic of Uzbekistan No. PP-3800 "On additional measures to counter the spread of the disease caused by the human immunodeficiency virus and prevent nosocomial infections" dated June 22, 2018. These resolutions provide for the implementation of measures aimed at stabilizing the HIV epidemic in a concentrated stage by providing universal access to prevention, diagnosis, treatment, care and support, by strengthening the material and

technical support of AIDS centers, providing high-quality modern laboratory equipment, diagnostic test systems of new generation, strengthening the social protection of HIV-infected persons, including the creation of a system of uninterrupted supply of powdered milk formulas for children born from HIV-infected mothers.

In general, to date, Uzbekistan has implemented and adapted the recommendations of the World Health Organization on HIV prevention programs, in particular testing and counseling, information and education, access to personal protective equipment, access to needles and syringes, prevention with the participation of non-governmental organizations, post-exposure prophylaxis, application of the peer-to-peer principle in outreach work, prevention of mother-to-child transmission of HIV, antiretroviral therapy for serodiscordant couples. The Republican AIDS Center conducts quarterly monitoring of preventive programs conducted in the country among key groups of the population in points of trust offices (CA), friendly offices (DC), non-governmental organizations (NGOs). The tools for monitoring and evaluation are electronic online systems - MIS and a database of

individual records of clients of preventive programs.

In recent years, there has been a decrease in the incidence of HIV infection among children in the republic. In 2019, the number of children with HIV infection in the republic amounted to 449 cases (2018 - 461, 2017 - 538, 2016 - 580 cases, 2015 - 659 cases).

The proportion of children under the age of 18 among newly registered cases of HIV infection was 11.9%. The country pays special attention to the prevention of mother-to-child transmission of HIV infection and the birth of a healthy child. Based on the Orders of the Ministry of Health of the Republic of Uzbekistan No. 277 dated April 24, 2018 and No. 336 dated May 30, 2018, all pregnant women are examined for HIV in the first trimester of pregnancy. In 2019, 816,560 pregnant women were covered by the survey, and in 2018, 812,373 pregnant women. HIV infection among pregnant women was detected in 2019, 668 cases. In 2019, ART coverage for pregnant women was 97.0%, and for children born to HIV-infected mothers, 100%. In 2019, the share of vertical transmission of HIV was 1.3%.

The anonymous questionnaire method for assessing the factors influencing adherence to therapy in HIVN is highly informative and necessary for the development of a conceptual model on which the planned activities aimed at increasing adherence to treatment in HIVN should be based. The structure of the conceptual model is made up of individual-personal, medical, social and organizational factors. Individual-personal factors include: drug and alcohol consumption; lack of information; ignorance or low risk perception of the consequences of drug dependence and HIV; lack of knowledge about the possibilities of ART; doubts about the effectiveness of drug dependence treatment and the need for HIV treatment; anxious fears and fears (side effects of ART, loss of health and well-being, loss of autonomy, death, fear of rejection, exclusion, marginalization and discrimination; loss of job, employment; fear of legal consequences - criminal liability, illegal drug use, restriction of lifestyle) ; lack of motivation, life prospects; life problems and crises, Medical factors include: low efficiency of drug addiction and HIV treatment; the presence of mental disorders; interruption, non-adherence to ART, misuse of medications; side effects of ART; adverse drug interactions, toxicity,

hepatotoxicity, presence of comorbidities; lack of monitoring of the use of ARP and the effectiveness of drug dependence treatment; lack of monitoring of immune status (CD4+, viral load) Social factors are represented by lack of support (psychosocial, family, community), psychosocial problems, unemployment, homelessness, poor nutrition, poverty, stigmatization, self-stigmatization, discrimination. Organizational factors include the lack of a functional information and education center on drug addiction and HIV infection based on health care institutions where specialized medical care is provided; low awareness of psychiatrists-narcologists in the provision of medical care to HIV-infection specialists in matters of HIV infection and infectiologists in drug addiction issues, as well as middle and junior medical staff in matters of stigmatization of HIV-infection injectors; lack of proper coordination in the work of narcological and infectious diseases services; the absence of a clinical protocol for the management of HIID, the lack of stages and continuity in the provision of medical care; low quality of medical services and effectiveness of treatment for drug addiction and HIV infection. HIV-infected persons who have not reached the age of eighteen are entitled to receive monthly

social benefits, regardless of the stage of the disease, and benefits for disabled children established by law. To date, all HIV-infected children under the age of eighteen receive a monthly state allowance. The proportion of children under the age of 18 among newly registered cases of HIV infection was 11.9%.

CONCLUSION

The country pays special attention to the prevention of mother-to-child transmission of HIV infection and the birth of a healthy child. Based on the Orders of the Ministry of Health of the Republic of Uzbekistan No. 277 dated April 24, 2018 and No. 336 dated May 30, 2018, all pregnant women are examined for HIV in the first trimester of pregnancy. In 2019, 816,560 pregnant women were covered by the survey, and in 2018, 812,373 pregnant women. HIV infection among pregnant women was detected in 2019, 668 cases.

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