Children

HOW SERIOUS IS HIV FOR CHILDREN?

Globally, about 1.7 million children 0-14 years had HIV at the end of 2018. The number of new HIV infections among children 0-14 years declined by 47% between 2010-2016. Much of the decline is due to steep reductions in new HIV infections among children, with increased access to pediatric antiretroviral therapy (ART) also contributing. Since 1995, an estimated 1.6 million new HIV infections among children have been averted due to the provision of antiretroviral medicines (ARVs) to people with HIV during pregnancy and breastfeeding. Read more about HIV among pregnant people.

In the U.S., there were 1,544 children with diagnosed perinatal HIV in 2018. Black/African American (60%) and Latinx/Hispanic (14%) children are much more likely to be infected than White children.

Pregnant people with HIV can pass HIV to their babies. This happens where pregnant people do not get good medical care while they are pregnant. It also happens where ARVs are not available, where new birthing parents feed their babies breast milk, or where blood for transfusions is not always screened.

WHY ARE CHILDREN PARTICULARLY AT RISK FOR HIV?

Perinatal transmission: The majority of children with HIV are infected via perinatal transmission during pregnancy, childbirth, or breastfeeding. This is sometimes referred to as "vertical transmission" or "parent-to-child-transmission." Perinatal transmission can be stopped as long as pregnant people have access to prevention and treatment services during pregnancy, childbirth, and breastfeeding. With adequate funding and resources, new infections among many thousands of children could be avoided. Without access to prevention and treatment, however, 50% of children with HIV will die by the age of 2 and 80% will die by the age of 5.

Orphans and vulnerable children: One of the biggest and most long-lasting impacts of HIV is the loss of whole generations of people in communities hit hardest by the epidemic. In this regard, it is often children who feel the greatest impact via the loss of parents or older relatives.

Children orphaned by AIDS or those living with parents/caregivers with HIV continue to face an increased risk of physical and emotional abuse as compared with other children, including other orphans. This increases these children's vulnerability to HIV.

HIV programs focusing on orphans and vulnerable children are a vital strategy for reducing vulnerability to HIV in children. These programs focus on supporting parents/caregivers of children, keeping children in school, and protecting their legal and human rights.

PREVENTING HIV INFECTION AMONG CHILDREN

In June 2011, UNAIDS and the United States President's Emergency Plan for AIDS Relief (PEPFAR) launched the "Global Plan towards the elimination of new HIV infections among children by 2015 and keeping their mothers alive." The Global Plan has resulted in impressive reductions in perinatal transmission rates.

The "Start Free, Stay Free, AIDS Free" initiative, launched in 2016 by UNAIDS and PEPFAR, aims to build on the progress achieved under the Global Plan to scale up HIV prevention, treatment, care, and support services for children, adolescents, and young women.

Prevention of perinatal transmission

A major contributor to the successful increase in ART coverage for pregnant people with HIV has been the involvement of communities. Entry to and retention in care has been shown to greatly improve through community engagement and support, and through community service-delivery models. Networks and support groups of pregnant and parenting people with HIV provide counseling, support treatment adherence, educate women about their sexual and reproductive health rights, encourage HIV testing and treatment, and provide psychosocial support.

Changes to treatment regimens over the past 5 years have played a major part in declines in perinatal transmission rates. In 2015, the World Health Organization (WHO) recommended that all pregnant people with HIV be provided with Option B+, which involves lifelong ART regardless of CD4 count. Soon after, 91% of the 1.1 million pregnant people receiving ARVs to prevent perinatal transmission were on lifelong ART due to the global rollout of Option B+.

Read more about prevention of perinatal transmission.

ANTIRETROVIRAL THERAPY (ART) AMONG CHILDREN

ART works very well for children. The death rate of children with AIDS has dropped as much as for adults. Over 30 ARVs are

approved for use in children.

Children's ART doses are based on their weight or body surface area, which considers both height and weight. Sometimes, doses are recommended based on a child's development (Tanner stage). As mentioned above, several factors affect drug levels in children. Dosing may have to be adjusted several times as a child develops.

The doses of some medications for infants and very young children can be individualized. They come in pediatric-friendly liquid or powder formulations. Others come in a granular form. Some pills can be crushed and added to food or liquids. Some clinics teach children how to swallow pills. Children who can swallow pills have more medication options.

As recommended for adults, all children should be started on ART as soon as possible after a positive HIV diagnosis and continued for life.

ADHERENCE TO ART

Adherence is a major challenge for infants and children and their care givers. Both the child and the parents may need extra help.

The parents of children with HIV often have HIV as well. They may have their own difficulties with adherence. Their children may take different medications on a different schedule.

THE BOTTOM LINE

Where antiretroviral medications (ARVs) and good medical care for pregnant people are available, new HIV infections of children are rare.

Not all ARVs are approved for use in children. The correct dosing is not always known. Children may have a difficult time taking every dose as scheduled.

MORE INFORMATION

CDC: HIV and Pregnant Women, Infants, and Children

HIV.gov: Recommendations for the Use of Antiretroviral Drugs in Pregnant Women with HIV Infection and Interventions to Reduce Perinatal HIV Transmission in the United States

HIV.gov: Guidelines for the Use of Antiretroviral Agents in Pediatric HIV Infection

HIV.gov: Guidelines for the Prevention and Treatment of Opportunistic Infections in HIV-Exposed and HIV-Infected Children

WHO: Treatment of children living with HIV

HIVInfo.NIH.gov: HIV and Specific Populations: HIV and Children and Adolescents

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