#### **MILESTONES** in the HIV epidemic among children and adolescents



1981 The United States Centers for Disease Control and Prevention publishes the first mention of what is

later determined to be HIV.

#### 1982

The first case of perinatal AIDS is reported to the CDC, about 18 months after the first case was reported in adults. By 1983, more reports of AIDS among children of parents with recognized risk factors are published.



HIV is identified as the cause of AIDS. A blood test is developed to screen for the virus.

1983

-84

#### 1985

Every region in the world has reported at least one case of AIDS.



#### 1992



hiv +

The United States Food and Drug Administration approves zidovudine (AZT) to treat children with AIDS.

The International Community of Women Living with HIV (ICW) is established.

#### The New England ournal of Medicin

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ERNAL-INFANT TRANSMISSION OF HUMAN I VIRUS TYFE I WITH ZIDOVUDINE TRELATMEN LD., ROUDA S. SYRRIAGO, M.D., REMARD GLEER, P.E.D., Mary JO O'SOLLIVAN, M.D., ROMENTAL VALUPUR, M.D. REMARTE BARN, M.D., LANG-RANGO DERARMAN, M.D., ROMENTE BARN, M.D., LANG, PARADO DERARMAN, M.D., PARD, MANY ELSIS, M.S., JOCK MOYE, M.D., PARD, or JO JANE BARLIN, M.D., PAD,

#### 1994

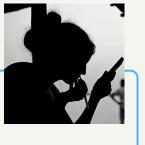
#### 1997



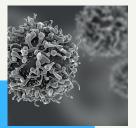
First International Conference devoted to global strategies to prevent mother-to-child HIV transmission is held in the United States.

#### **MILESTONES** in the HIV epidemic among children and adolescents

#### 1998



The total number of women living with HIV in sub-Saharan Africa surpasses that of men.



#### 1999

The World Health Organization (WHO) reports AIDS to be the leading cause of death in Africa and the fourth most common globally.



#### 1999

identifies nevirapine (NVP) as an effective and affordable way (single dose to mother and baby at birth) to reduce mother-to-child transmission (MTCT) of HIV.

1999

The second International Conference on Global Strategies for the Prevention of HIV Transmission from Mothers to Infants is held in Montreal, Canada.



200

The United Nations adopts the



Millennium Development Goals (MDGs), which include the specific goals of halting and beginning the reversal of the spread of HIV, malaria and tuberculosis.

#### 20

(OVC) framework, which 42 agencies endorsed, evolved from a process that the broader global focus on 'children affected by HIV,' followed by several guidelines, documents and programmes.



#### 200

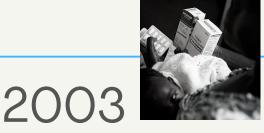
The World Trade Organization adopts the Doha Declaration, allowing developing countries to manufacture generic medications to combat public health crises like HIV, thereby helping to reduce drug prices.



#### 2002

The Global Fund to Fight AIDS, Tuberculosis and Malaria is founded in response to a United Nations General Assembly call for coordinated support to combat the spread of HIV.

#### MILESTONES in the HIV epidemic among children and adolescents



- United States President George
  W. Bush launches PEPFAR
  (President's Emergency Plan for AIDS Relief).
- WHO announces the '3 by 5' Initiative to bring HIV treatment to 3 million people by 2005.



#### 2006

- Unitaid is founded and begins funding efforts to provide countries with paediatric ARVs
- Male circumcision is found to reduce the risk of HIV transmission by up to 60 per cent.

#### 2011



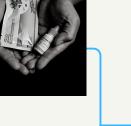
The Global Plan to eliminate new HIV infections among children by 2015 and keep their mothers alive is launched.

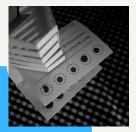
# 2014



UNAIDS launches 90-90-90 targets, and the Fast-Track agenda aims at averting 28 million new infections and ending the epidemic as a public health issue by 2030.







One of the targets for MDG 6 to halt and reverse the spread of HIV is reached, as 15 million people are receiving ART.

#### 2015

UNAIDS and Diagnostics Access Initiative negotiate a 40 per cent reduction in the global price ceiling for early infant diagnosis tests.



#### 2016

UNAIDS, UNICEF, PEPFAR and partners launched the Start Free, Stay Free, AIDS Free initiative, defining priority actions towards achieving super-fasttrack targets for children and adolescents and young women by 2018 and 2020.



#### 2020

A record of 1.19 million pregnant women, approximately 0.92 million children (0-14) living with HIV, receive ART.

#### MILESTONES in the prevention of vertical transmission from mother to child

The first case of perinatal AIDS is reported to the United States Centers for Disease Control and Prevention, about 18 months after the first case is reported in adults.



#### 1985

The United States Public Health Service issues the first guidance for preventing mother-to-child transmission (PMTCT), recommending pregnant women in high-risk groups be offered counseling and voluntary HIV testing and that HIVinfected women not breastfeed.

#### 1986

1982



First report of postnatal transmission of HIV through breastfeeding. Jonathan Mann makes the first report of paediatric HIV in Africa.



#### 1994

PACTG 076 (Pediatric AIDS Clinical Trials Group Protocol 076) trial to administer zidovudine (AZT) prophylaxis for PMTCT in the United States and France is so effective that it is stopped early. However, a WHO consultation concludes that AZT cannot be effectively implemented in resource-limited settings.

#### 1998



#### 1999



Glaxo Wellcome cut the cost of AZT for developing countries by 75 per cent.

Botswana launches Africa's first programme to combat MTCT with short-course AZT.



#### 1999

HIVNET 012 study demonstrates the effectiveness of single-dose NVP in reducing MTCT by almost half.

#### 1999



The Inter-agency Task Team (IATT) on the Prevention of Mother-to-Child Transmission of HIV is established by the UNAIDS Secretariat, UNFPA, UNICEF, and WHO.

#### MILESTONES in the prevention of vertical transmission from mother to child

#### 1999

UNICEF starts pilot projects in 11 countries to test the feasibility of introducing PMTCT services in antenatal care clinics in resourceconstrained settings.



#### 2001

The first WHO guidelines on the use of antiretroviral drugs (ARVs) for the prevention of mother-to-child transmission are released.



#### 2002

South Africa's Constitutional Court orders the government to make NVP available to all HIV-positive pregnant women and their newborn children following a legal challenge by the Treatment Action Campaign.



The United States Food and Drug Administration (FDA) approves the first rapid HIV test, which results in 20 minutes with 99.6 per cent accuracy.





2003

UNICEF-supported pilot PMTCT projects are evaluated in 11 countries (Botswana, Burundi, Côte d'Ivoire, Honduras, India, Kenya, Rwanda, Uganda, the United Republic of Tanzania, Zambia, and Zimbabwe) confirm implementation feasibility.

#### 2004

A combination of short-course AZT with single-dose NVP is shown to reduce MTCT to nearly 2 per cent in the nonoreastfeeding population in Thailand.



#### 2008 -09

Studies show that both antiretroviral drug (ARV) prophylaxis for the infant and combination ARVs for the mother can reduce postnatal transmission if taken during breastfeeding.

#### 2010



- Mma Bana study shows a massive reduction in MTCT rates with maternal triple-combination antiretroviral treatment (ART) during pregnancy and breastfeeding.
- BAN study demonstrates that both maternal ART and infant NVP given for six months postpartum similarly reduce HIV transmission via breast milk.

#### MILESTONES in the prevention of vertical transmission from mother to child

#### 2011



- Kesho Bora study shows that triplecombination ART during pregnancy and six months of breastfeeding is superior to short-course AZT and single-dose NVP for PMTCT.
- The Kisumu study reveals that maternal ART postpartum reduces transmission via breast milk; however, breastfeeding transmission could still occur if maternal ART is stopped.
- Malawi is the first country to implement lifelong ART for all pregnant HIV-infected women, an approach known as Option B+.

## 2011



PEPFAR and UNAIDS launch the Global plan towards the elimination of new HIV infections among children by 2015 and keeping their mothers alive (Global Plan).

#### 2015



WHO validates the elimination of MTCT of HIV in Cuba, the first country to achieve this distinction after the validation protocol was established in 2014.

#### 2016



WHO validates the elimination of MTCT of HIV in Armenia, Belarus and Thailand.



#### 2016



#### 2017





therapy.

Barbuda, Bermuda, Cayman Islands, Montserrat, St. Christopher and Nevis).



2017

South Africa's national birth testing programme reports an in-utero transmission rate of 1.1 per cent.



#### 2018

PROMISE trial demonstrates that postnatal transmission rates of HIV via breast milk are similarly low with maternal ART or infant NVP, with the safety of both given through 18 months postpartum.

#### 2018

WHO validates the elimination of MTCT of HIV in Malaysia.

#### 2019

WHO validates the elimination of MTCT of HIV in the Maldives and Sri Lanka.



# MILESTONES in paediatric treatment, care and support



#### • Three years after it was approved for use in adults, the first antiretroviral drug, AZT, is approved in children by the United States FDA.

1990

• First United States guidelines for treating HIV-infected children recommend ART for any child with a definitive diagnosis of HIV infection with substantial immunodeficiency and/or HIV-associated symptoms.

#### 1997-98



Clinical trials demonstrate the superiority of dual therapy over monotherapy for the treatment of children. Triple NNRTI (non-nucleoside reverse-transcriptase inhibitor)based ART in infants is shown to be well tolerated and effective.

#### 2001



The United Nations General Assembly Special Session on HIV/AIDS adopts a Declaration of Commitment pledging to "care for all whose lives have been devastated by AIDS, particularly more than 13 million orphans."



#### 2001

More than 11 million children under the age of 15 in sub-Saharan Africa are reported to have lost one or both parents to AIDS.









- Africa is reported.
- UNICEF convenes a forum to develop a Framework for the Protection, Care and Support of Orphans and Vulnerable Children Living in a World with HIV and AIDS and launches OVC programmes funded by the UK Department for International Development.

#### LUUT

A study on mortality in African children living with HIV demonstrates the value of early ART initiation for infants. Mortality in the absence of treatment is found to be 52.5 per cent. Three or four drugs are safe in infants and provide effective viral suppression, with superior suppression if initiated before the age of 3 months. Coalition for Children Affected by AIDS is formed to help them survive and thrive at home, in school and in their communities.



#### 2005

The number of children orphaned by AIDS reaches 15 million worldwide, but only 1 in 10 receives essential support services.

# 2006



Launch of the Children and AIDS Regional Initiative, a five-year programme to improve the wellbeing of orphans and vulnerable children affected by HIV and AIDS.

# MILESTONES in paediatric treatment, care and support



CHER study in South Africa demonstrates that ART initiation in asymptomatic infants aged 6–12 weeks significantly decreases morbidity and mortality.

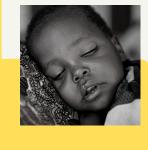
#### 2009



The number of children orphaned by HIV and AIDS reaches an estimated worldwide peak of 15.5 million.

#### 2010 -11

200



Lopinavir-ritonavir-based ART in children under three years of age is found to be superior to NVP-based ART.

#### 2013



Report of 'Mississippi baby'- the first paediatric 'cure'/ remission in an infant with very early treatment (first hours of life) put the functional paediatric cure on the agenda.

### 2015



South Africa institutes routine virologic testing at birth into its early infant diagnosis programme in the national protocol, in addition to testing at 4–6 weeks.

#### 2016

PEPFAR, the world's largest donor of OVC programmes, reaches more than 6.2 million OVC and their caregivers worldwide.



#### 2016



UNAIDS announces that 18.2 million people are on ART, including 910 000 children, double the number five years earlier. However, increased ART access raises the risk of drug resistance, and WHO releases a report on this growing concern.



#### 2020

A pricing agreement for the new formulation reduces the yearly cost of the drug from US\$400 to US\$36 per child, thereby helping to overcome prohibitive costs that had previously limited treatment access for younger children. The new dispersible formulation also has been shown to improve treatment adherence.

#### 2018



WHO extends the recommendation for dolutegravir (DTG) as the preferred first-line treatment (10mg dispersible tablet formulation) to all children over the age of four weeks and 3kg in weight.

#### 2020



The United States FDA approves a dispersible 5 mg formulation of DTG for use in infants and children living with HIV. The tablet, taken orally, is approved for use in paediatric patients older than four weeks of age and weighing at least 3 kg in combination with other antiretroviral drugs.

#### 1995



WHO, in collaboration with UNFPA and UNICEF, publishes Programming for Adolescent Health and Development, which includes recommendations for global action against HIV.

#### 2000



The Millennium Development Goals (MDGs) are launched. MDG 6 includes indicators for measuring HIV prevalence and comprehensive, correct knowledge of HIV among young people (aged 15–24).

### 2001



The United Nations General Assembly Special Session on HIV/AIDS (UNGASS) is the first global declaration and commitment to specifically include HIV targets for young people aged 15–24 years.

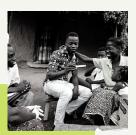


#### 2006

UNAIDS Inter-Agency Task Team (IATT) on Young People publishes a systematic review underscoring the need to decrease HIV incidence among young people.







Male circumcision is found to reduce the risk of sexual transmission of HIV from females to males by up to 60 per cent.



#### 2009

UNESCO publishes the first global guidelines on comprehensive sexuality education (CSE). WHO and UNAIDS issue new guidance recommending 'provider-initiated' HIV testing in health care settings. The guidance aims to increase knowledge of HIV status and significantly boost access to HIV treatment and prevention services.



#### 2010

The third phase of a PrEP trial reveals that drugs used to treat HIV might also effectively prevent infection.





United Nations Secretary-General launches the Global Strategy for Women's and Children's Health.



UNAIDS releases a strategy describing combination HIV prevention, an approach that first entered the global discourse in 2003. UNAIDS defines it as rights-based, evidence-based, and community-based programmes that promote a combination of biomedical, behavioral, and structural interventions designed to meet the HIV prevention needs of specific people and communities.

#### 2011



Results from HPTN 052 trial demonstrate that HIV treatment has significant prevention benefits.

#### 2013



WHO issues the first-ever guideline addressing the specific needs of adolescents living with HIV.

## 2013



United Nations Secretary-General's High-Level Panel of Eminent Persons on the Post-2015 Development Agenda emphasizes equity, empowerment, and engagement of adolescents and youth.



2013

UNAIDS funds ACT!2030 as a youth-led social action initiative to inspire a new wave of activism in the HIV response by using youth-led research and data collection to establish accountability mechanisms for sexual and reproductive health and rights.





#### 2014

PEPFAR's DREAMS partnership is launched in 10 high-burden countries in sub-Saharan Africa. The initiative addresses the key factors that make adolescent girls and young women particularly vulnerable to HIV.



#### 2014

2015

Adolescent HIV Treatment Coalition (ATC) is established, supporting youth leadership and advocating for improved access to HIV treatment and care.



UNICEF and UNAIDS launch the 'All In' platform to galvanize global action around HIV and adolescents.

#### 2015

UNAIDS, UNICEF and partners release a report on the clinical, ethical and operational considerations for making oral PrEP available to sexually active older adolescents (aged 15–19) at high risk of HIV infection.

#### 2016



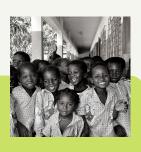
Launch of the Global Health Strategy for Women, Children and Adolescents (2016–2030).

### 2016



PrEP proves to decrease HIV transmission risk, especially among at-risk youth and adolescents.

#### 2016



UNICEF, UNAIDS, PEPFAR, together with partners, launch Start Free, Stay Free, AIDS Free, a 'super-fast-track' framework with global targets for the year 2020 for accelerated action on HIV prevention and treatment among pregnant children, adolescents and young women.

# 2017



The Global HIV Prevention Coalition launches an HIV Prevention 2020 Road Map to accelerate the achievement of the targets of the 2016 United Nations Political Declaration on Ending AIDS.



2017

#### 2017



The new Global Fund Strategy 2017–2022 commits increased funding for programming support to women and girls.



#### 2017

Launch of the Adolescent HIV Prevention and Treatment Implementation Science Alliance (AHISA), which is intended to facilitate information exchange between scientists and implementers to support evidence-based policy decisions and enhance research impact.



#### 2018

UNESCO, UNAIDS, UNFPA, UNICEF, UN Women and WHO publish international technical guidance on CSE to young people in order to achieve the global Sustainable Development Goals (SDGs).



Global Accelerated Action for the Health of Adolescents (AA-HA!) is launched to guide countries setting priorities for adolescent health programmes based on best practices and lessons learned, including programme implementation, monitoring and evaluation.



#### 2017

'Undetectable = Untransmittable' (U=U), an anti-stigma slogan championed by the Prevention Access Campaign, is introduced. It is subsequently endorsed by many HIV and AIDS communities and organizations.



#### 2019

UNICEF and WHO redesign child and adolescent health programmes to achieve optimal health and well-being.



#### 2020

UNICEF and the Interagency Task Team (IATT) on Young Key Populations in Asia and the Pacific launch a rapid response survey to assess the impact on mental health and quality of life among young key populations and young people living with HIV in the time of COVID-19.

#### 2020



UNICEF and partners conduct analyses of evidence on the effects of COVID-19 on child and adolescent health, including the direct/indirect data on mortality and morbidity from the pandemic. Findings suggest that adolescents might be at an elevated risk of HIV infection.

# 2020

Results from a clinical trial are released showing that the long-acting injectable cabotegravir (CAB LA) for PrEP is highly effective in preventing sexual transmission of HIV to women. CAB LA has the potential to improve adherence to long-term biomedical HIV prevention.



#### 2021

#### 2021



WHO recommends that the dapivirine vaginal ring (DPV-VR) be offered as a complementary prevention choice for women at substantial risk of HIV infection.

WHO and UNICEF launch new tools for the promotion of adolescent mental health.



#### 2021

The Education Plus initiative (2021–2025) is co-launched by UNAIDS, UNESCO, UNFPA, UNICEF and UN Women. This high-profile political advocacy agenda is centered on the empowerment of adolescent girls and young women and the achievement of gender equality in sub-Saharan Africa—with secondary education as the strategic entry point.



#### 2021

UNESCO, UNAIDS, UNFPA, UNICEF, UN Women and the WHO publish a joint report on country progress toward providing high-quality, school-based CSE to all learners, including gaps and recommendations.