

JOURNEY FROM PARENT TO CHILD TRANSMISSION TO ELIMINATION OF MOTHER TO CHILD TRANSMISSION ROAD MAP

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PPTCT EPIDEMIOLOGY

Pakistan has one of the fastest growing epidemics in Asia-Pacific region with an 84% increase in the number of new infections over the last decade

HIV infection is mainly concentrated in key populations: people who inject drugs (38.4%), transgender (7.2%), high risk men (5.6%) and sex workers (2.2%). 69% M:29% F :2% Children (UNAIDS fact sheet data 2022)

Estimated 3,100 HIV+ve pregnant women but only **183** are receiving PPTCT services, indicating a very low coverage of less than **5.9 %**, with no data on final vertical transmission rate.

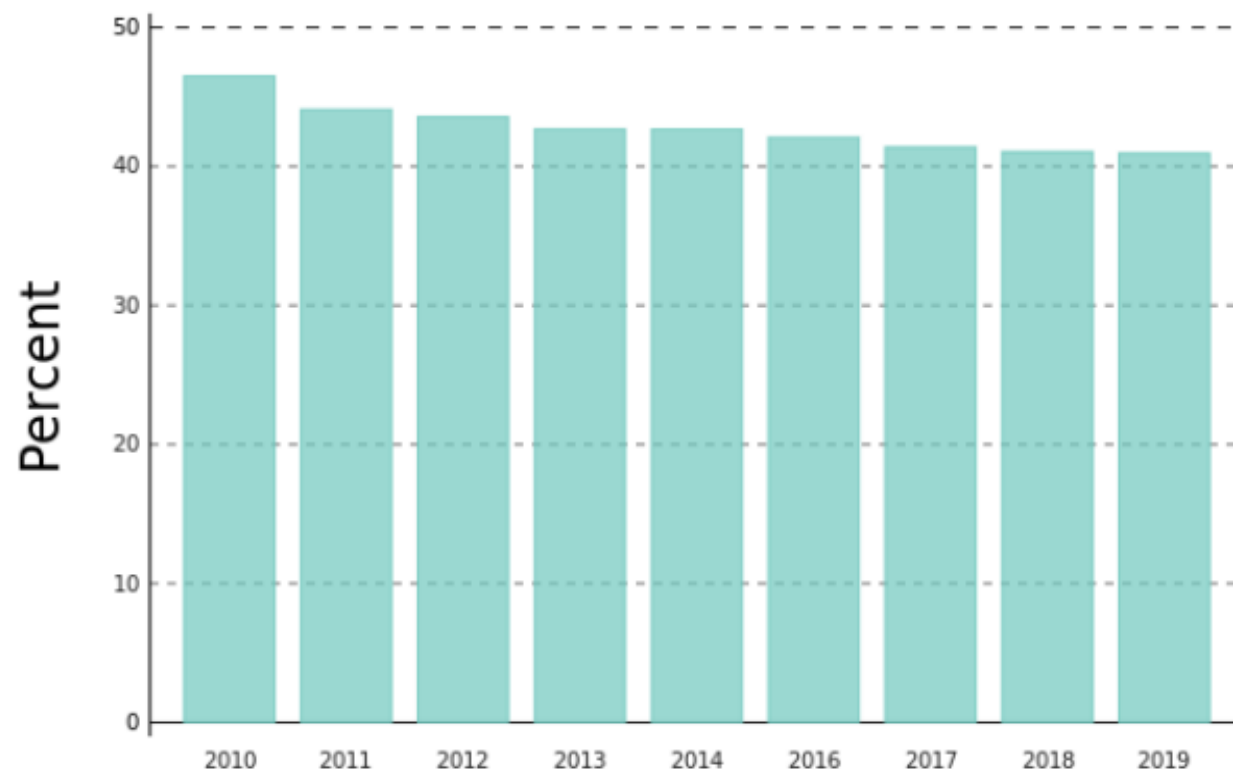
Of an estimated **4,600 Children Living with HIV (CLHIV) 2,466 (53%)** are on ART with <1000 AIDS-related deaths.

Mother-to-child transmission of HIV, Pakistan (2010-2019)

Source [AIDSinfo](#) | [UNAIDS](#)

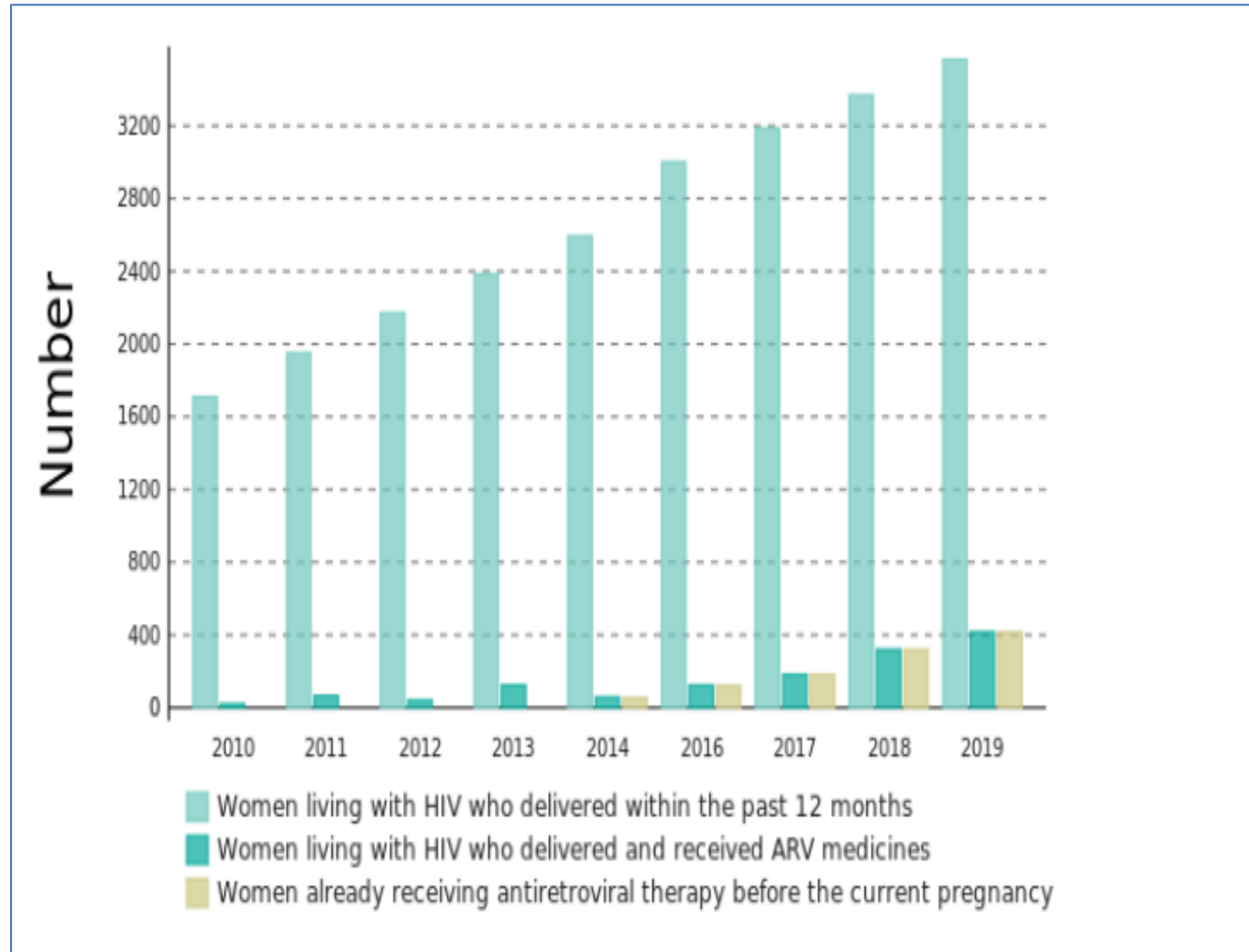
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Estimated percentage of children newly infected with HIV from mother-to-child transmission among women living with HIV delivering in the past 12 months



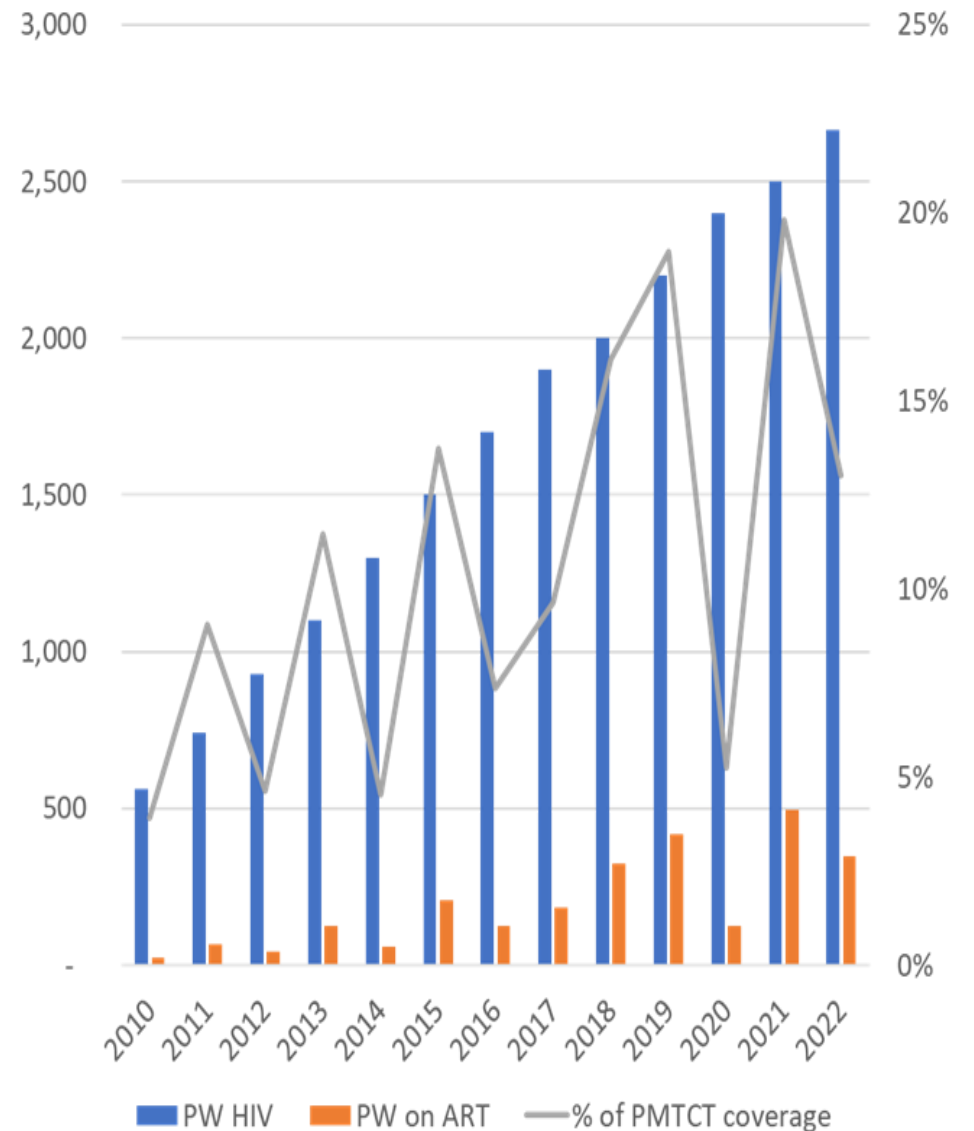
- In Pakistan, it was a policy decision to consider MTCT as prevention of Parent to Child transmission (PPTCT) of HIV , to reflect shared responsibility of prevention efforts between both parents and not just the mother.
- In 2007, with support from UNICEF and WHO the NACP in collaboration with the PACPs initiated 5 prevention of parent to child transmission (PPTCT) and 5 Paediatric care sites mainly in the same public sector tertiary hospitals to provide a comprehensive “family-centred” package of services.
- **Now the total number of ART centers are 75 across the country. However, there are only 12 functional PPTCT sites and 20 Paediatric ART centers & are directly supervised by the provincial AIDS control programs.**

Preventing mother-to-child transmission of HIV, Pakistan (2010-2019) Source : [AIDSinfo](#) | [UNAIDS](#)



- In the last **2017 PDHS**, the knowledge about reducing MTCT is higher among men than women, specifically, men are more aware than women that HIV can be transmitted during pregnancy (39% versus 21%), during delivery (32% versus 20%), and through breastfeeding (37% versus 19%) and that the risk of transmission can be reduced by the mother taking special drugs (23% versus 9%).
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- When looking at the trends over time, looking at the 3 methods for PMTC, knowledge among women has decreased from 23% to 16% and from 40% to 36% among men in the last 2017 DHS survey.
- Screening of pregnant women during ANC is mandatory from a policy perspective in Sindh, Khyber Pakhtunkhwa and Punjab provinces, in practice HIV testing in routine ANC screening at public sector hospitals is patchy.

- HIV MIS data - women from presentation at ANC to HIV testing, and post-test counselling.
- As evident from the figure below, the efforts at curtailing vertical transmission have been uneven in the last decade.
- A general increasing trend is observed from 7% in 2016 to 19% in 2019, an increase of 12% in these four years. A sharp drop is observed from 19% in 2019 to 5% in 2020, increasing to 20% in 2021 and again a drop of 7% to 13% in 2022.
- The low coverage of PPTCT services (13%) indicates indirectly that the targeted HIV Testing Services for at-risk pregnant women remains low.



- Pakistan Consolidated Guidelines for the Prevention and Treatment of HIV and AIDS – 2021
- In 2012-13, all four provinces developed their provincial HIV Strategies with specific PPTCT targets and objectives



- In the absence of women's access to ART, transmission rates range from 15-45%
 - 5-10% during pregnancy,
 - 10-20% during delivery,
 - 10-20% during breastfeeding.
- Without ART, half of the children born with HIV die by the age of two years
- The risk can be reduced to 2-5% or less through
 - timely diagnosis and initiation of ART,
 - appropriate obstetric care,
 - safe breastfeeding practices
 - infant prophylaxis

- UN adopted a four-pronged approach to HIV PMTCT that represents the cornerstones of comprehensive PMTCT service delivery.



PRONG 1	PRIMARY PREVENTION OF HIV INFECTION
Prong 2	Prevention of unintended pregnancies among women infected with HIV
Prong 3	Prevention of mother to child transmission of HIV
Prong 4	Provision of treatment, care, and support to HIV+ve women, their infants, and families

Findings of the PPTCT Programme Evaluation (2015)

- PPTCT centres are functioning (moderately well) and focus mainly on Prong-3 (prevention of HIV transmission from mother to child), with very little attention to Prong-1 (prevention of infections in girls and women), and Prong-2 (availability of family planning choices for birth spacing and preventing).
- Centres are starting to follow new WHO guidelines and majority of babies are delivered by elective C-sections.
- Gaps were found in counselling content, lack of clarity on infant feeding practices, and weak emphasis on early infant testing and diagnosis. PPTCT centres (5/8) lacked counsellors and/or case managers (due to funding constraints or withdrawal of support from UNICEF or provincial Health Departments), leading to deficiencies in documentation, missing patient tracking of appointments and follow up, and incomplete patient chart notes or register information (these were tasks previously done by or assigned to case managers).
- Implementation of Prong-2 is non-existent even though 80% or more of the HIV-positive women are of childbearing age.

Findings of the PPTCT Programme Evaluation (2015).....Continued

- An estimated 86 - 116 infections were averted due to direct PPTCT interventions.
- PPTCT centre staff and providers are well versed in Prong-3 management, and somewhat deficient in Prong-2 family planning counselling and rapport building (<6/10 scoring).
- PPTCT providers have a narrow clinical perspective on the implementation of PPTCT services versus a holistic continuum of care approach.
- Ongoing incidents of stigma and discrimination amongst PPTCT centre staff, hospital management, and lower staff for PLHIV.
- Fairly limited involvement of men .
- PPTCT data or monitoring itself are not being used for strategic decision making or improvements in policies or programming.
- Some provinces have taken on the programmatic responsibility early on (2011 onwards) while others are still planning or waiting for pending PC 1, and seeking support from other donors like GFATM, UNAIDS for bridge funding.

EMTCT – Background

- **Triple EMTCT goal:** Achieve and sustain elimination of EMTCT of HIV, hepatitis B and syphilis and achieve better health for women, children and their families through a coordinated approach and efforts by 2030.
- **Four countries** in Asia and the Pacific – **Malaysia, Thailand, Sri Lanka, and Maldives** have achieved the EMTCT of HIV and syphilis (dual EMTCT). **Bhutan** is the 5th country in the process.



- Pakistan has implemented Hepatitis B testing for all pregnant women but has only partially adopted the policy of administering the Hepatitis B vaccine to newborns within 24 hours of birth .
- In contrast to HIV and syphilis, HBsAg is recommended as a routine test and obstetric care is provided to Hep B-positive women through general ANC in all provinces.
- Unlike HIV, there exists no detailed guidelines/SOPs for HBV and syphilis care in pregnancy.
- Screening of pregnant women during ANC is mandatory from a policy perspective in Sindh, KPK and Punjab provinces.
- There is no independent STI program in Pakistan

EMTCT ROAD MAP DEVELOPMENT

- The regional WHO, UNICEF, and UNAIDS offices commissioned the Nossal Institute for Global Health, the University of Melbourne, Australia in 2023, to review the progress of the countries towards triple EMTCT to inform a tailored regional roadmap for triple EMTCT by 2030.
- selected six countries in the region Pakistan, Philippines, Papua New Guinea, Cambodia, Sri Lanka and India

Challenges

- **There are independent HIV, hepatitis, EPI and MNCAH programs, each contributing to EMTCT** service delivery to varying degrees. There is duplication of services, missed opportunities, resulting in slow progress to attain the triple elimination goal.
- Yet to develop national and provincial triple **EMTCT policies and EMTCT indicators** and align them with the 2030 regional benchmarks.
- **Monitoring and information system (MIS)** for HIV, unlinked from the hepatitis program MIS and the District Health Information System (DHIS II)
- PPTCT providers have a narrow clinical perspective on the implementation of PPTCT services versus a holistic continuum of care approach.
- Very few functional PPTCT centres / One stop models in country .

Recommendations

1. It is imperative to have integrated HIV treatment services with emphasis on data linkage for WCBA, children and adolescent with HIV with critical review of current data collection (HMIS/DHIS) systems in place which inform program.
2. Strengthen established PPTCT & Paediatric ART sites.
3. PPTCT services needs to be within same premises or in reasonable vicinity to facilitate continuum of care for women with HIV seeking care during pregnancy and puerperium, specific needs of the child, the stage of HIV infection involving a multidisciplinary team approach to address the diverse needs of the child and their family.
4. EMTCT data strengthening and integration to monitor progress on key indicators for EMTCT of HIV, Hep B, and syphilis and guide actions towards triple elimination.



THANK YOU