MEDECINS SANS FRONTIERES
DOCTORS WITHOUT BORDERS

Community Health Agents Training
PMTCT 04-07-2013

BENDING THE CURVES

MEDECINS SANS FRONTIERES
DOCTORS WITHOUT BORDERS

MTCT: HOW IS HIV TRANSMITTED FROM MOTHER TO CHILD?

Objectives 1:

- 1. Define MTCT and PMTCT.
- 2. Understand the three ways HIV can be transmitted from mother to child.
- 3. List the risk factors for each mode of transmission.

BENDING THE CURVES

MEDECINS SANS FRONTIERES
DOCTORS WITHOUT BORDERS

LEARNING OBJECTIVE 2;PMTCT

- Understand the difference between PMTCT Options (A, B, B+) programs and services
- Explain key PMTCT concepts and interventions for before and during pregnancy, during the time of labor and delivery, and after the baby is born –
- Explain the importance of ART for pregnant women and link women enrolled in PMTCT to ART services.
- Provide advice to patients on safe infant feeding.
- Counsel patients on needed follow-up and testing of HIV-exposed babies.

BENDING THE CURVES

MEDECINS SANS FRONTIERES
DOCTORS WITHOUT BORDERS

Definitions

MTCT

MTCT stands for **M**other-**T**o-**C**hild **T**ransmission

PMTCT

PMTCT stands for **P**revention of **M**other-**T**o-**C**hild **T**ransmission

BENDING THE CURVES

MEDECINS SANS FRONTIERES
DOCTORS WITHOUT BORDERS

South Africa HIV/AIDS statistics 2011

- Children aged 0 to 14 living with HIV
  - 460,000 [410,000 - 520,000]
- Orphans due to AIDS aged 0 to 17
  - 2,100,000 [2,000,000 - 2,300,000]

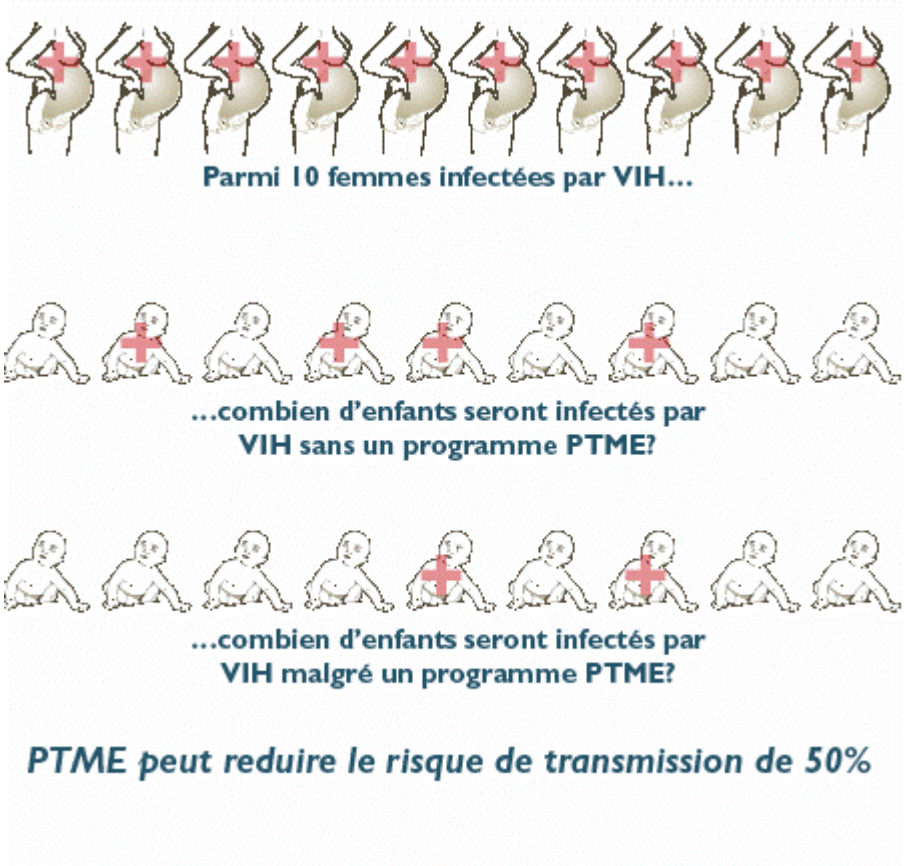
BENDING THE CURVES

MEDECINS SANS FRONTIERES
DOCTORS WITHOUT BORDERS

- Not all babies born to women living with HIV/AIDS will have HIV. About 4 out of 10 will become HIV-infected if there are no PMTCT interventions.

BENDING THE CURVES

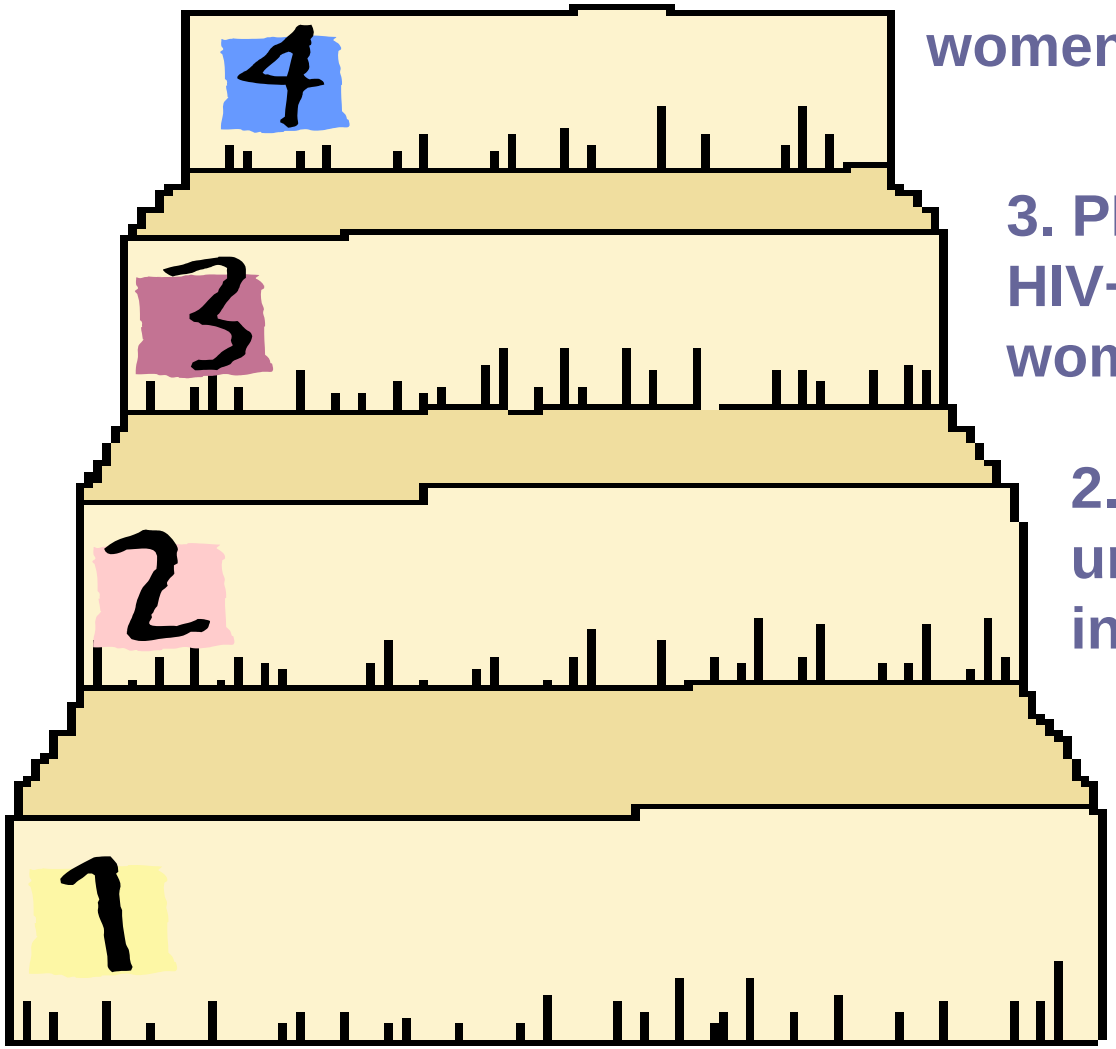
Over all PMTCT can reduce by 50% the risk of Vertical transmission (MTCT)



RSA can reduce to 95%
Target 2015=zero
baby infected
wit HIV

4 prongs for HIV eradication

MEDECINS SANS FRONTIERES
DOCTORS WITHOUT BORDERS



4.. Access to care for HIV+ women and their family

3. PMTCT for HIV+ pregnant women

2. Prevention of unwanted pregnancies in HIV+

1.Prevention of VIH new infection in men and women

BENDING THE CURVES

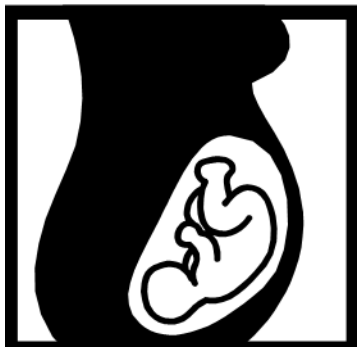
MEDECINS SANS FRONTIERES
DOCTORS WITHOUT BORDERS

When can mother-to-child transmission happen?

BENDING THE CURVES

MEDECINS SANS FRONTIERES
DOCTORS WITHOUT BORDERS

During pregnancy, in the womb (before delivery) 5-10%



BENDING THE CURVES

MEDECINS SANS FRONTIERES
DOCTORS WITHOUT BORDERS

- During labour and delivery (while the baby is being born)10-20%

BENDING THE CURVES

MEDECINS SANS FRONTIERES
DOCTORS WITHOUT BORDERS

During breastfeeding

(after delivery)

5 -20%

BENDING THE CURVES

MEDECINS SANS FRONTIERES
DOCTORS WITHOUT BORDERS

Risk factors for Mother-to-Child Transmission of HIV

Factors Related to the Mother	Factors Related to the Delivery	Factors Related to the Baby	Factors Related to Infant Feeding
High viral load Due to recent infection or Advanced HIV Disease	Prolonged rupture of membranes (over 4 hours before delivery)	Prematurity (early birth)	Breastfeeding
Poor nutrition	Episiotomy (cutting of vagina)	First infant of multiple birth, i.e. twins	Mixed feeding: breastfeeding & other food
Presence of STIs	Invasive foetal monitoring	Immature GI tract (digestive system)	Breast infections of the mother
Infection of the placenta, especially due to malaria	Bleeding during the birth		Longer duration of breastfeeding
	Delivery using instruments		HIV infection of mother during breastfeeding
	Vaginal versus caesarean section		Mouth sores in infant

BENDING THE CURVES

Key Point MTCT

- The higher the mother's viral load (the amount of HIV in her body), the higher the risk of HIV transmission to her baby .
- Retesting is very critical for ALL pregnant women tested HIV Negative, every 3 months during the pregnancy and breastfeeding period. (NEW HIV infection increases risk of MTCT)
- Early Antenatal clinic Booking <14 weeks.(as soon as she knows she is pregnant).

MEDECINS SANS FRONTIERES
DOCTORS WITHOUT BORDERS

PMTCT INTERVENTIONS.

BENDING THE CURVES

MEDECINS SANS FRONTIERES
DOCTORS WITHOUT BORDERS

PMTCT OPTIONS

- OPTION A (previous in SA)
- OPTION B :Implemented since April 2013 as the new PMTCT guideline with FDC .
- OPTION B+ :To be implemented by MSF when MOU is signed, for Eshowe clinics and Mbongolwane Hospital.

BENDING THE CURVES

PMTCT Options	Pregnancy	delivery	Mother Post delivery	Infant Post delivery
OPTION A	**AZT 300 mg BD (from as early as 14 weeks gestation)**	**SD-NVP AZT 3 Hourly at onset of labour and TRUVADA (TDF/FTC).**	**Reassess CD4**	**Breastfed infant Daily NVP from birth until one week after all exposure to breast milk has ended Non-breastfed infant Daily NVP from birth to 6 weeks****
OPTION B	**HAART (from as early as 14 weeks of gestation) regardless of CD4 results**	**Continue HAART**	**Continue HAART until one week after breastfeeding cessation**	**Irrespective of feeding options Daily NVP from birth to 6 weeks**
OPTION B+	**Start/Continue HAART**	**Continue HAART**	**Lifelong ART**	**NVP 6 weeks.**

MEDECINS SANS FRONTIERES
DOCTORS WITHOUT BORDERS

Why B+ is better option!

- Suggestion that it may have clinical and programmatic advantages – simple message – ART for all, and once started, it's taken for life
- Protection against MTCT in future pregnancies
- Protection of negative partners in sero-discordant relationships
- Avoiding stopping and starting treatment repeatedly, especially in areas of high fertility

BENDING THE CURVES

MEDECINS SANS FRONTIERES
DOCTORS WITHOUT BORDERS

PMTC During Pregnancy.

BENDING
THE
CURVES

MEDECINS SANS FRONTIERES
DOCTORS WITHOUT BORDERS

Baseline screening and ANC

- Group HIV pre-test counselling
- Opt-out approach
- Booking bloods should include RPR, Rh, Hb check and HIV
- For HIV: Individual testing with rapid test kit
- Individual post-test counselling
- Tetanus
- Iron, folic acid, vit C, Calcium

P15 on, PMTCT Guidelines

BENDING THE CURVES

Screen for TB

- Active TB disease is common in women living with HIV.
- All pregnant women should be actively screened for TB symptoms.
- The healthcare provider should suspect TB in a woman living with HIV if any of the following 4 symptoms are present:
  - Current cough of any duration.
  - Fever
  - Night sweats
  - Weight loss or poor weight gain

- Any woman living with HIV who has **none of these symptoms** can be **considered for eligibility for isoniazid preventive therapy** by performing a tuberculin skin test.

p26, PMTCT Guideline

HIV Negative Test

- If negative, repeat **3 monthly** during pregnancy and while breastfeeding and then at least annually
- **"Stay negative" message to all** by: **Consistent condom use**, STI treatment, patner testing.

p5 (2.2 Antenatal Care) & p46, PMTCT Guidelines

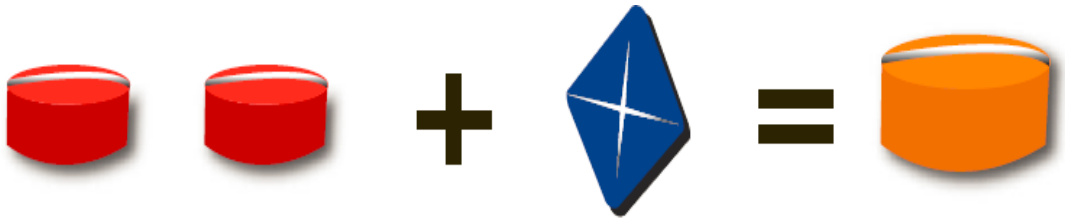
HIV Positive Test

- If positive and confirmed positive with 2nd rapid test kit
  - Post-test counselling
  - Baseline bloods (CD4, Creatinine)
  - Initiate ART with the FDC on the same day **regardless of CD4 cell count or gestational age.** Do not wait for blood results to initiate!
  - Bring client back within 7 days for CD4 and Creatinine results

p8 Figure 2 PMTCT Algorithm 1, PMTCT Guidelines

MEDECINS SANS FRONTIERES
DOCTORS WITHOUT BORDERS

FDC



A fixed dose combination (FDC) contains different drugs. It allows you to take less pills.

BENDING THE CURVES

MEDECINS SANS FRONTIERES
DOCTORS WITHOUT BORDERS

ART for PMTCT mothers.

- **Tenofovir (TDF) + FTC (Emtracitabine) + EFV (Efavirenz)**

FDC formulation -1 tablet that contains all the three drugs.

BENDING THE CURVES

Counselling for women on FDC use

- Screen for contra-indications to FDC
  - Known renal disease
  - Previous or current history of psychiatric illness (psychosis)
  - very symptomatic for TB i.e. high index of suspicion
- Explain what **monitoring bloods** will be required and when they will be done
- Counsel that **EFV is safe in pregnancy** (many clients will read the package insert and panic)
- Common **side effects**: most self limiting or develop tolerance
  - Somnolence/dizziness/strange dreams common, but usually improve
  - Shift workers need reassurance that symptoms of somnolence/dizziness usually improve
  - Client must be aware of potential renal toxicity but that this will be monitored with creatinine.
  - Explain that FDC unlikely to cause rash
  - Seek attention at clinic/hospital immediately if there is a problem, but emphasise importance to continue treatment regardless

Already on AZT

- Check CD4 cell count has been done. If no count in past 6 months re-do CD4
- Take blood for Creatinine
- Change to FDC

MEDECINS SANS FRONTIERES
DOCTORS WITHOUT BORDERS

Diagnosed HIV positive postpartum

- If seroconverts and **still breastfeeding:**
  - Start FDC immediately
  - Take CD4 & creatinine & review with results in 7 days
  - Counsel about EXCLUSIVE breastfeeding
  - Dispense NVP syrup for baby for 7 days
  - Take and review PCR in 1 week
    - PCR positive – discontinue NVP syrup & initiate HAART
    - PCR negative – continue NVP syrup for **minimum 6 weeks**

p11, PMTCT
Algorithm 4,PMTCT
Guidelines

BENDING THE CURVES

Monitoring Bloods

- Creatinine (lifelong & prophylaxis)
  - If on TDF
  - Baseline, 3 months, 6 months, 12 months then annually
- CD4
  - Lifelong: Baseline and at 1 year
  - Prophylaxis: baseline and 6 months after FDC stopped
- VL -6 months, 12 months and then annually.

Infant Nevirapine

- All HIV exposed infants would take Nevirapine syrup for only 6 weeks irrespective of feeding choice
- Birth weight >2500g: 1,5ml daily at the same time everyday
- Birth weight<2500g: 1ml daily at the same time everyday

MEDECINS SANS FRONTIERES
DOCTORS WITHOUT BORDERS

Which Infant get NVP for > 6 Weeks

- If mother for any reason is on AZT monotherapy for PMTCT continue NVP until 1 week after cessation of breastfeeding.
- If concerns about maternal adherence to FDC – High Viral load >400 copies.
- If mother booked late & started FDC soon before or at delivery – may not be fully suppressed by 6 weeks post-delivery

BENDING THE CURVES

MEDECINS SANS FRONTIERES
DOCTORS WITHOUT BORDERS

Infant Co-trimoxazole

- Initiate co-trimoxazole in ALL HIV exposed infants at 6 week EPI visit

- Co-trimoxazole discontinued only once PCR confirmed negative post breastfeeding cessation

- Monitor babies for adverse reactions

Infant feeding option

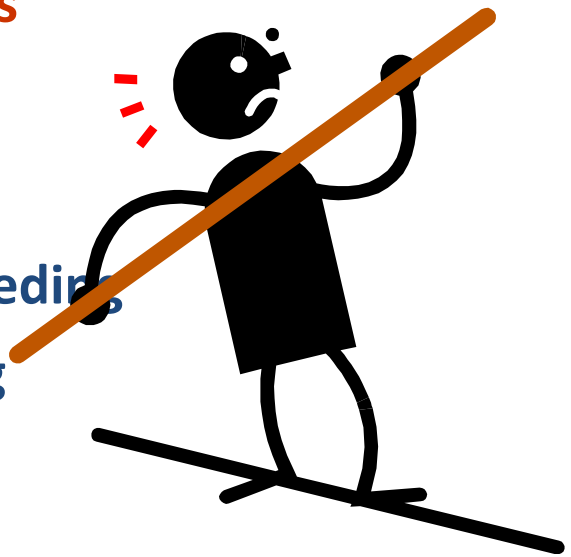
The Dilemma for HIV-positive women:
Balancing risks

Mortality

Infectious diseases

Malnutrition

HIV transmission through breastfeeding



Feeding options

- Exclusive breastfeeding for the first 6 months.
- Exclusive replacement feeding: use infant formula or modified (changed) cow's or goat's milk.

MEDECINS SANS FRONTIERES
DOCTORS WITHOUT BORDERS

Infant Feeding

- HIV infected mothers (with HIV-exposed infants or unknown HIV status) should exclusively breastfeed for first 6 months.
- Discourage mixed feeding.
- Introducing appropriate complementary foods thereafter
- Continue breastfeeding for first 12 months of life with gradual weaning from breast milk.
- Breastfeeding should then only stop if a nutritionally adequate and safe diet without breast milk is possible
- If baby seroconverts (PCR+) breastfeeding should continue for 24 months
- Women should be careful not to breastfeed other children or allow their children be breastfed by another woman.

p41-42, PMTCT Guidelines

MEDECINS SANS FRONTIERES
DOCTORS WITHOUT BORDERS

Infant Feeding

Mothers known to be HIV-infected should only give commercial infant formula milk as a replacement feed to their HIV uninfected infants or infants who are of unknown HIV status, when specific conditions are met: (referred to as AFASS - affordable, feasible, acceptable, sustainable and safe in the 2007 WHO recommendations on HIV and Infant Feeding)

a. safe water and sanitation are assured at the household level and in the community, and,
b. the mother, or other caregiver can reliably provide sufficient infant formula milk to support normal growth and development of the infant, and,
c. the mother or caregiver can prepare it cleanly and frequently enough so that it is safe and carries a low risk of diarrhoea and malnutrition, and
d. the mother or caregiver can, in the first six months, exclusively give infant formula milk, and,
e. the family is supportive of this practice, and,
f. the mother or caregiver can access health care that offers comprehensive child health services.

p42-p43, PMTCT guidelines

BENDING THE CURVES

Infant Testing

- 6 week PCR testing for all HIV exposed infants
- If breastfed, repeat PCR 6 weeks after cessation of breastfeeding
- 18 month HIV Rapid test in all HIV exposed infants
  - Except those already PCR+ & initiated on HAART

MEDECINS SANS FRONTIERES
DOCTORS WITHOUT BORDERS

Ask for this documents! Reference docs for PMTCT clients

- ANC – Maternity file
- Post delivery : Discharge slip from hospital
- Baby- Road to health book, Page 7& 8. at the back of the book the notes are written if NVP/CTX given.
- ART Green card.

BENDING THE CURVES

MEDECINS SANS FRONTIERES
DOCTORS WITHOUT BORDERS

Ngiyabonga.

BENDING THE CURVES