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UNITE AGAINST AIDS

A Call to Action
Children – The missing face of AIDS
Prevention of Mother to Child Transmission: Implementation Status in Asia and Pacific

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CONSULTATION ON INTEGRATING PREVENTION AND MANAGEMENT OF STI/HIV/AIDS INTO REPRODUCTIVE, MATERNAL AND NEWBORN HEALTH SERVICES

and the

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Presentation Outline

• Status of PMTCT and Paediatric ART Programme Implementation
• PMTCT Implementation in Asia and Pacific
• Challenges and Opportunities
• Conclusion
I. Status of PMTCT and Paediatric ART Programme Implementation
2001 UNGASS PMTCT Targets

Impact: By 2005, reduce the proportion of infants infected with HIV by 20 percent, and by 50 per cent by 2010

Access: Ensure that 80 per cent of pregnant women accessing antenatal care have information, counseling and other HIV-prevention services available to them & increasing the availability of and providing access for HIV-infected women and babies to effective treatment to reduce MTCT of HIV...
Global PMTCT Response by 2004
Countries with established PMTCT programs per region

- North Africa & Middle East: 0 countries, 6 national service coverage
- Asia South, East and Pacific: 2 countries, 15 national service coverage
- CEE/CIS: 6 countries, 16 national service coverage
- Latin America and Caribbean: 6 countries, 25 national service coverage
- Sub-Saharan Africa: 2 countries, 16 national service coverage
- Total: 16 countries, 101 national service coverage

Source: United Nations Children Fund Annual Reports, 2004
10% of Women Giving Birth Annually are Counseled and Tested for HIV

- 8,403,718 Women counselled on PMTCT
- 7,896,717 Women tested for HIV
Only 9% of HIV-positive Women Globally Receive ARV Prophylaxis

- Central and Eastern Europe: 92% identified, 78% given ARVs
- Latin America: 45% identified, 27% given ARVs
- East and Southern Africa: 17% identified, 11% given ARVs
- Asia: 11% identified, 7% given ARVs
- West and central Africa: 3% identified, 1% given ARVs

Legend: Blue bars represent HIV-positive women identified, red bars represent HIV-positive women given ARVs.
Prioritizing HIV/AIDS: Where are 10.8 million child deaths occurring?
Cause of mortality disease profiles in the 42 high mortality countries with 90% of U-5 mortality
HIV/AIDS Epidemic in India-2005

- Total: 5.206 m

- >1% in Antenatal mothers
- >5% in High Risk Groups
- <5% in High risk groups
New Challenges......New Opportunities

HIV +

U5MR

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Around 700,000 children under 15 need antiretroviral treatment

Note: The data shown are for end-2003. The estimates used have been rounded, therefore the world total is not the exact sum of the rounded regional estimates.

<table>
<thead>
<tr>
<th>2005 estimates</th>
<th>Children (0-14 years) in need of ART</th>
<th>Children (0-18 months) in need of ART</th>
<th>Children (0-14 years) in need of cotrimoxazole - diagnosis at 18 months</th>
<th>Children (0-14 years) in need of cotrimoxazole - diagnosis before 18 months</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Global</strong></td>
<td>660,000</td>
<td>270,000</td>
<td>4,000,000</td>
<td>2,100,000</td>
</tr>
<tr>
<td>Caribbean</td>
<td>5,100</td>
<td>1,800</td>
<td>29,000</td>
<td>15,000</td>
</tr>
<tr>
<td>East Asia</td>
<td>1,900</td>
<td>1,700</td>
<td>17,000</td>
<td>7,600</td>
</tr>
<tr>
<td>E. Europe &amp; Central Asia</td>
<td>1,600</td>
<td>1,100</td>
<td>18,000</td>
<td>6,200</td>
</tr>
<tr>
<td>Latin America</td>
<td>8,600</td>
<td>400</td>
<td>70,000</td>
<td>35,000</td>
</tr>
<tr>
<td>N. Africa &amp; Middle East</td>
<td>7,600</td>
<td>4,400</td>
<td>59,000</td>
<td>18,000</td>
</tr>
<tr>
<td>Oceania</td>
<td>&lt;500</td>
<td>&lt;500</td>
<td>2,000</td>
<td>&lt;1000</td>
</tr>
<tr>
<td>South &amp; SE Asia</td>
<td>37,000</td>
<td>21,000</td>
<td>290,000</td>
<td>130,000</td>
</tr>
<tr>
<td>Sub-Saharan Africa</td>
<td>600,000</td>
<td>240,000</td>
<td>3,500,000</td>
<td>1,900,000</td>
</tr>
<tr>
<td>Asia</td>
<td>39000</td>
<td>23000</td>
<td>310,000</td>
<td>140,000</td>
</tr>
<tr>
<td>L. America &amp; Caribbean</td>
<td>14,000</td>
<td>5,800</td>
<td>100,000</td>
<td>50,000</td>
</tr>
</tbody>
</table>

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**The Reality**
Limited ARV Treatment Access

![Graph showing ARV treatment access over time](image)

- **Jun 2004**: 400,000
- **Dec 2004**: 600,000
- **Jun 2005**: 1,000,000
- **Dec 2005**: 1,200,000

**Legend:**
- Adults
- Children

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II. PMTCT and Paediatric ART Implementation Status in Asia and Pacific
Female to Male Ratio Among Reported AIDS Cases in Selected South-East Asian Countries, 1990-2005

Women are increasingly affected

Source: National AIDS Programme, 2005
Comprehensive approach to prevent HIV infection in infants

Prong I
Prevention of HIV in parents to be

Prong II
Prevention of unintended pregnancies among HIV-infected women

Prong III
Prevention of transmission from an HIV-infected woman to her infant

Care and support for HIV-infected women, their infants and their families

Prong IV
## Approach to scaling-up PMTCT interventions

<table>
<thead>
<tr>
<th>Stage of Epidemic</th>
<th>Emerging but low epidemics; Middle income country &lt; 1%</th>
<th>Concentrated epidemics among drug users Middle income country &lt;1% to 1%</th>
<th>Generalised epidemics, Low income country &gt; 1%</th>
<th>Pockets of generalised epidemics, Concentrated epidemics among IDUs - Middle/low income country</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Example</strong></td>
<td>Countries of the Middle East</td>
<td>Most countries of Eastern Europe. Some countries in South America</td>
<td>Most countries of SSA and some LAC</td>
<td>Some countries of South and South-East Asia</td>
</tr>
<tr>
<td><strong>Approach</strong></td>
<td>Prong 1 and 2 Prong 1 to 4 in referral hospitals</td>
<td>Prong 1, 2 for all settings. Prong 1-4 for settings with &gt;1%</td>
<td>All four prongs</td>
<td>Prong 1, 2 for all settings. Prong 1-4 for settings with &gt;1%</td>
</tr>
</tbody>
</table>
Overview of PMTCT Implementation Status in Asia (January to December 2005)

- Total: 19
- Policy, guide, plan: 8
- Guide only: 5
- Small scale or no: 6

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Implementation Status: Cambodia (2005)

- Total AN: 253,000
- PW Counseled: 18,000
- PW Tested: 17,400
- PW Positive: 280
- PW Received ARVP: 228
Implementation Status: India (2005)

- PW Covered: 865,000
- PW Counseled: 700,000
- PW Tested: 620,000
- PW Positive: 5,523
- PW Received ARVP: 2,279
Implementation Status: Myanmar (2005)

- Total ANC: 880,000
- PW Counseled: 134,000
- PW Tested: 69,450
- PW Positive: 870
- PW Received ARVP: 630
Implementation Status: Thailand (2005)

- Total ANC: 630,000
- PW Counseled: 636,000
- PW Tested: 636,000
- PW Positive: 5,622
- PW Received ARVP: 5,081
Only 9 countries provide ARV prophylaxis to >40% of HIV+ women

- Jamaica: 90%
- Russia: 88%
- Ukraine: 87%
- Moldova: 84%
- Georgia: 78%
- Thailand: 59%
- Romania: 52%
- Botswana: 49%
- Brazil: 49%
### Percent of pregnant women offered services for the PMTCT of HIV in 2005 by region

<table>
<thead>
<tr>
<th>Region</th>
<th>Coverage (weighted average)</th>
<th>Number offered PMTCT</th>
<th>Number of countries</th>
<th>Annual number of births</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caribbean</td>
<td>49%</td>
<td>100 000</td>
<td>1</td>
<td>680 000</td>
</tr>
<tr>
<td>East Asia and Pacific</td>
<td>2%</td>
<td>410 000</td>
<td>1</td>
<td>17 500 000</td>
</tr>
<tr>
<td>Eastern Europe and Central Asia</td>
<td>25%</td>
<td>620 000</td>
<td>8</td>
<td>3 200 000</td>
</tr>
<tr>
<td>Latin America</td>
<td>51%</td>
<td>4 900 000</td>
<td>14</td>
<td>10 900 000</td>
</tr>
<tr>
<td>North Africa and Middle East</td>
<td>1%</td>
<td>27 000</td>
<td>5</td>
<td>5 300 000</td>
</tr>
<tr>
<td>South-East Asia</td>
<td>5%</td>
<td>1 900 000</td>
<td>13</td>
<td>46 900 000</td>
</tr>
<tr>
<td>Sub-Saharan Africa</td>
<td>10%</td>
<td>2 000 000</td>
<td>27</td>
<td>27 700 000</td>
</tr>
<tr>
<td>All reporting countries</td>
<td>11%</td>
<td>9 900 000</td>
<td>69</td>
<td>92 400 000</td>
</tr>
<tr>
<td>Estimate for all 94 countries</td>
<td></td>
<td>12 000 000</td>
<td>94</td>
<td>112 000 000</td>
</tr>
</tbody>
</table>
Issues related to PMTCT service delivery

• Significant efforts have been made in the region on providing PMTCT services however…..
• Focus is on counseling, testing and ARV prophylaxis (Prong III)
• Success of current PMTCT interventions rely on ANC coverage, quality services, regimen of ARV prophylaxis and infant feeding
• Low prevalence – concentrated epidemics among high risk behaviour groups – do they use/have access to regular ANC/healthcare services?
Issues related to PMTCT service delivery

• Current ARV prophylaxis regimens – SD NVP, SC AZT + SD NVP

• Limited or lack of data on
  • Primary prevention
  • Prevention of unwanted pregnancy among HIV+ women
  • Infant feeding
  • Follow up (high percent of lost to follow up)
  • Linkages with care, treatment and support (? HIV + PW assessed for CD4 or clinical assessment)
  • Cotrimoxazole Prophylaxis
Primary Prevention in pregnant women & lactating mothers

- Entry Point: Maternal Health Services
- Pregnancy is known to be one of the few occasions where women access the health care system and therefore an opportunity to provide information on HIV prevention to help ensure that HIV negative women remain free from infection.
- During pregnancy and postpartum period both parents are motivated to protect the infant. Educating partners on HIV prevention is important
Basic Package for low prevalence, low utilization, low resource settings

- Information, Education Communication on HIV/AIDS including materials including pamphlets and posters to pregnant women
- Group education strategies
- Prevention Counseling including dual protection
- Counseling on infant feeding
- Condom programming [male and female]
- Referral linkages for VCT, STI services, tuberculosis screening, PMTCT services, and treatment care and support services.
What are the reproductive health needs of women and couples infected with HIV?

- Weak referral linkages
- Lack of confidence and knowledge in providing appropriate contraceptive methods
- Some countries still high rate of sterilization among HIV infected pregnant women 2 months after delivery
- Support the rights of all women to make informed choices about their reproductive lives
# PMTCT: HIV and Infant Feeding

<table>
<thead>
<tr>
<th>Infant Feeding</th>
<th>India</th>
<th>Nepal</th>
<th>Pakistan</th>
<th>Bhutan</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Policy</strong></td>
<td>AFASS-optimal feeding option</td>
<td>AFASS–safest IF choice by the mother</td>
<td>AFASS-support IF method of choice</td>
<td>Formula feeding fulfils IC of M of BMS</td>
</tr>
<tr>
<td><strong>HIV and IF Counseling</strong></td>
<td>Exclusive BF 4 to 6 months – Abrupt stop (RCH of DFW)</td>
<td>EBF – early cessation BMS, RF</td>
<td>EBF, ERF (safe preparation), men/in-laws, MCH/BFHI</td>
<td>Risk of BF, MF, safe prep, cup feeding, free formula 1 year</td>
</tr>
<tr>
<td><strong>Training Programme</strong></td>
<td>All counselors and HCWs</td>
<td>All counselors</td>
<td>Nurses, MWs, counselors, TBAs</td>
<td>HCWs, hospital staff, mothers</td>
</tr>
<tr>
<td><strong>Components</strong></td>
<td>BF, CF, IF in MTCT, and RF options</td>
<td>Part of PMTCT training</td>
<td>1-1 interaction, separate training</td>
<td>Prep of formula feeding, GM, CF</td>
</tr>
</tbody>
</table>
Pattern of Infant Feeding and HIV Transmission in Breastfeeding Children, South Africa

Coutsoudis A et al. AIDS 2001;15:379-87

Never Breastfed (N=157)  Exclusive Breastfed (N=118)  Mixed Feeding (N=276)

- 1 Day: 8% (Never), 7% (Exclusive), 7% (Mixed)
- 6 Mos: 19% (Never), 19% (Exclusive), 26% (Mixed)
- 15 Mos: 19% (Never), 25% (Exclusive), 36% (Mixed)

Infant Age

% Transmission

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Prevention of Breast Milk HIV Transmission

• Greatest protection of breastfeeding against infant mortality is first 6 months of life
• Risk of breast milk HIV transmission is associated with duration breastfeeding and mother’s disease stage
• It is hypothesized that “safer” breastfeeding, through provision of infant or maternal ARV prophylaxis, with early weaning might reduce transmission.
• Need to evaluate safety and efficacy of ARV provision as well as safety of early weaning.
Predictive values for a range of prevalence (serial testing):
Assay sensitivity 99%; specificity 98%

<table>
<thead>
<tr>
<th>Prevalence</th>
<th>1 test</th>
<th>2 tests</th>
<th>3 tests</th>
<th>NPV</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.05%</td>
<td>2.4%</td>
<td>55.1%</td>
<td>98.4%</td>
<td>100%</td>
</tr>
<tr>
<td>0.5%</td>
<td>19.9%</td>
<td>92.5%</td>
<td>99.8%</td>
<td>100%</td>
</tr>
<tr>
<td>2.0%</td>
<td>50.3%</td>
<td>98.0%</td>
<td>99.96%</td>
<td>99.98%</td>
</tr>
<tr>
<td>5.0%</td>
<td>72.3%</td>
<td>99.2%</td>
<td>99.98%</td>
<td>99.95%</td>
</tr>
<tr>
<td>10.0%</td>
<td>91.9%</td>
<td>99.7%</td>
<td>99.99%</td>
<td>99.89%</td>
</tr>
<tr>
<td>30.0%</td>
<td>95.5%</td>
<td>99.9%</td>
<td>100%</td>
<td>99.57%</td>
</tr>
</tbody>
</table>
Issues on Paediatric ART

- 660,000 children in need of ART, by the end of 2005 only 52,000 receiving treatment
- Apart from Thailand and India – percent of children receiving ART very low in the region
- Limited access to PCR in the region
- HIV exposed children for HIV AB testing at 18 months – lost to follow up
III. Challenges
Low ANC and Skilled Delivery Rates Contribute to Low Uptake …

- South Asia: ANC coverage: 54, Skilled delivery: 35
- Sub-Saharan Africa: ANC coverage: 66, Skilled delivery: 41
- Latin America and Caribbean: ANC coverage: 86, Skilled delivery: 82
- East Asia and Pacific: ANC coverage: 88, Skilled delivery: 87
- Central and Eastern Europe: ANC coverage: 92, Skilled delivery: 80

Legend: ANC coverage, Skilled attendant deliveries
Major challenges and gaps: PMTCT

• Limited human resources and infrastructure for scale up
• Inadequate integration into maternal and child health services
  – Weak coordination between PMTCT and MCH
  – PMTCT is still viewed as vertical program
  – PMTCT not included in the basic MCH package of services
  – Separate service providers, rooms and monitoring tools
  – Poor follow-up of women and children
• Weak linkages with HIV care, support and treatment
• Inadequate NGO/community involvement
• Weak supply management system
• Weak monitoring of primary prevention, prevention of unwanted pregnancies and IF counseling/follow up
Paediatric AIDS: Challenges

- Access to treatment still disproportionately in favor of adults
- Rapid disease progression results in most children dying before they are identified as infected and put on treatment
- Limited national capacity to effectively manage programs
- Testing of infants for HIV and monitoring disease progression (PCR, CD4%)
- Limited amount of accurate and reliable data regarding Paediatric treatment needs
- ARV Formulations available, but ….
IV. Opportunities
Global commitments

- “Unite for Children and Unite Against AIDS” Campaign in 2005 October – UNICEF and UNAIDS
- The Abuja Call to Action: Towards an HIV-free and AIDS-free Generation” Dec 2005
- Universal Access to prevention, care and treatment
- Donor support
- New products – ARV syrups WHO pre-qualified ones
- WHO August 2006 guidelines “ARV for treating pregnant women and preventing HIV infection in resource-limited settings”
- Paediatric guidelines and Cotrim – series of guidelines
- Global partnership – IATT on PMTCT
Regional collaboration

• WHO, UNFPA, UNICEF, UNAIDS – UN Asia Pacific PMTCT Task Force (integration/TF meeting in KL 6 – 11 Nov 2006)
• Regional Paediatric ART clinical manual (WHO SEARO and UNICEF ROSA)
• Regional Paediatric ART roll out plan
• Baylor Medical College (BIPAI) – Training Manual on Paediatric ART
In order to reduce vertical transmission, we must move from vertical programming to horizontal programming – “Integration”

- Scaling-up low prevalence resource limited settings – Yes to scale-up but how and what?

Prioritizing, targeting, referral linkages with NGOs

Infant feeding needs to be the integral part of national PMTCT scale-up plan

- Countries have different levels of epidemics, capacity to respond, socio-economic status

There is no single approach for all

- Shift from convenient programming to evidence-based and result oriented programming

Strengthen primary prevention, prevention of unwanted pregnancies, referral linkages, infant feeding and follow up
Conclusion

• Estimated 20-30% of pregnant women meet WHO criteria for initiating ART for their own health – mothers need to live
• Children respond well to ART – “need to find them and treat them”
• Adult ART, PMTCT and Paediatric ART – need to be harmonized (team approach of service provision for family-based care, support and treatment)
• Partnership with NGOs, communities and PLWHA groups
Decline in AIDS Cases Among Children (aged 0-4 years), Thailand, 1984-2004

Source: Ministry of Health, Thailand, 2005
Towards an HIV-free and AIDS-free generation

Thank you for your kind attention

Special thanks to Chewu Luo, Ngashi Ngongo, Robert Gass, Ying Ru-Lo, Anirban Chatterjee and Lynne Mofenson for sharing their slides.