



Scaling up in resource poor settings – what about the children ?

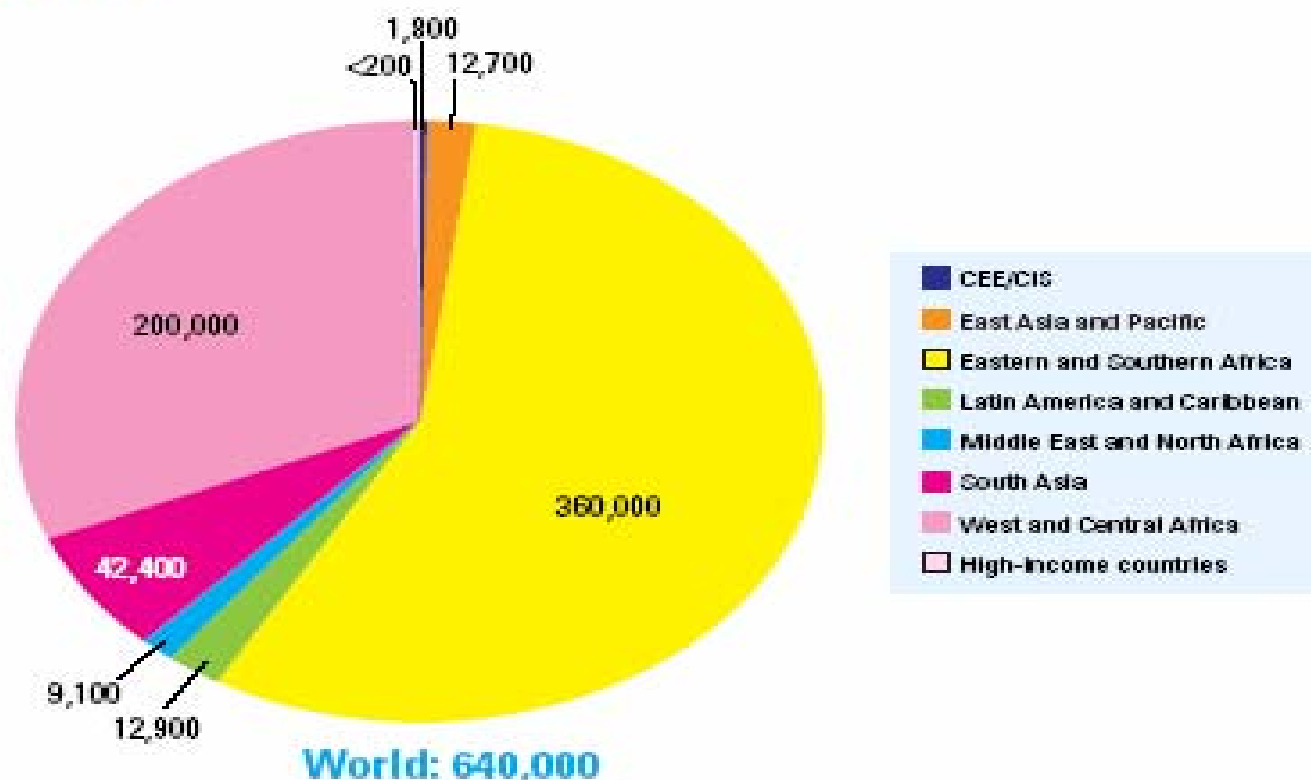
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Tapas - menu

- Situation
- What is needed
- Programme realities
- Tasters of hot topics
- Vision

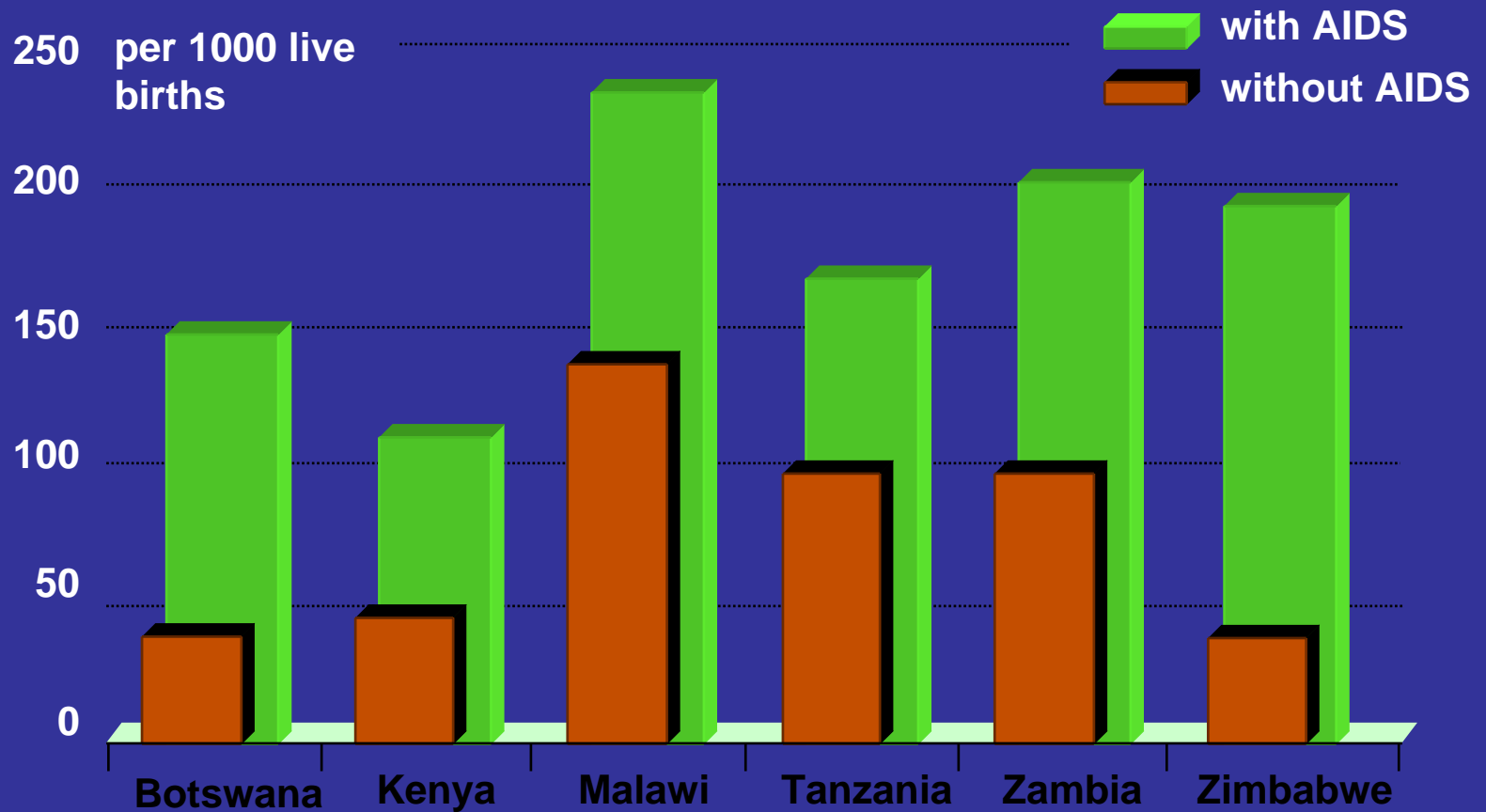
New HIV infections among children under 15



Note: The data shown are for 2004. The estimates used have been rounded, therefore the world total is not the exact sum of the rounded regional estimates.

Source: UNAIDS and WHO, *AIDS Epidemic Update: December 2004*, UNAIDS, December 2004.

Estimated impact of AIDS on under-5 child mortality rates – Selected African countries, 2010



Source: US Bureau of the Census



HIV and Children

- HIV infection is preventable in children
- HIV disease is treatable in children
- Each new infection is a 'system' failure of prevention
- Treatment Goal – universal access to treatment as a basic right of every child
- Prevention Goal – the elimination of HIV infection in infants and young children
- MDG 4 - uninfected and alive to thrive at 5

The best treatment is not to have to treat

Still waitingless than 6%
of those on ART are children



Life course approach

➤ Infants (< 18 mo)

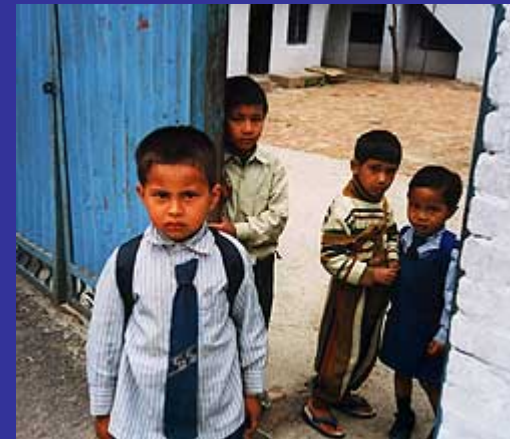
- ✓ Problem with confirming HIV diagnosis
- ✓ Rapid progression
- ✓ Less easy to use ARV formulations

➤ Children (18 mo – 10 yr)

- ✓ Survivors
- ✓ Toxicities
- ✓ Long-term non-progressors
- ✓ Informing and disclosing

➤ Adolescents (> 10 yr)

- ✓ Identity and self image
- ✓ Adherence
- ✓ Toxicities
- ✓ Informing & disclosure to family, peers and partners
- ✓ Sexuality and fertility



Public health programming for HIV Care

➤ Multiple entry & delivery points

- ✓ PMTCT
- ✓ Hospital/U5Clinic/NRU - symptomatic patients
- ✓ Community facilities
- ✓ Home based care and outreach
- ✓ Linkages with preventive services inc HIV T&C



➤ Family friendly care

- ✓ children + primary care givers seen in same setting
- ✓ testing, support for siblings

➤ Chronic disease approach

- ✓ Clinical care teams

➤ Integrated care & decentralized delivery

- ✓ links to facilities closer to community (HBC) + task shifting

Implementation challenges- generic

- Health system constraints (esp. human resources)
- Moving to chronic & preventive models of health care
- Duplication and fragmentation of resources
- SWAP approaches -can lose child focus
- Coordination & coherence
- Project mentality
- Rapid dissemination of lessons learned (no evidence not = lack of action)



Why the lack of progress - children

Biomedical factors

- Rapid aggressive disease course
- Difficulties identifying HIV infection early enough
- Limitations of ARV drugs for children

Operational

- Limited pediatric expertise
- Limited health systems capacity for child health interventions (lab, human, etc.)
- Lack of monitoring or tracking of activities relating to children
- Limited functional linkages or integration of service delivery
ANC/CH/RH
- high relative cost of interventions

Global & local

- Lack of data for (demand generation & forecasting)
- Lack of advocacy and attention to children
- Sustainable funding



Ingredients for success in HIV programming



Access to ART-enhances capacity of family to care & protect, to plan for future, enables prevention, addresses stigma

Community and home based approaches to delivery of care, treatment, support and prevention

Support and guidance for parents and care givers – close to the home

Immunization and essential child survival interventions

Systems approach - simplified, standardised and integrated approaches to service delivery

Supportive Policy and legislative environment (equity, access, protection and mitigation of stigma)

Targets, tracking of progress & accountability

Other specific ingredients

Enabling policy environment;

- Testing, (when how , who, by whom, confidentiality, consent, privacy, informing disclosing and post test support)
- Provision ART (who, how by whom, cost to end user)
- Comprehensive family based HIV care – a true continuum (e.g. nutrition, support)
- Explicit about non 'medical' interventions, PSS and nutrition, continuity care etc

Commitment and ownership by Govmt.

Coherent, budgeted national operational plans for:

- ART roll out
- HIV Testing roll out
- PMTCT
- Plan of action for OVC
- Nutrition/IYCF
- Child health/child survival
- PSM (all commodities and consumables)
- Training
- Laboratory strengthening & QA
- M and E

Specific hot topics



Diagnosics

Difficulties in making diagnosis:

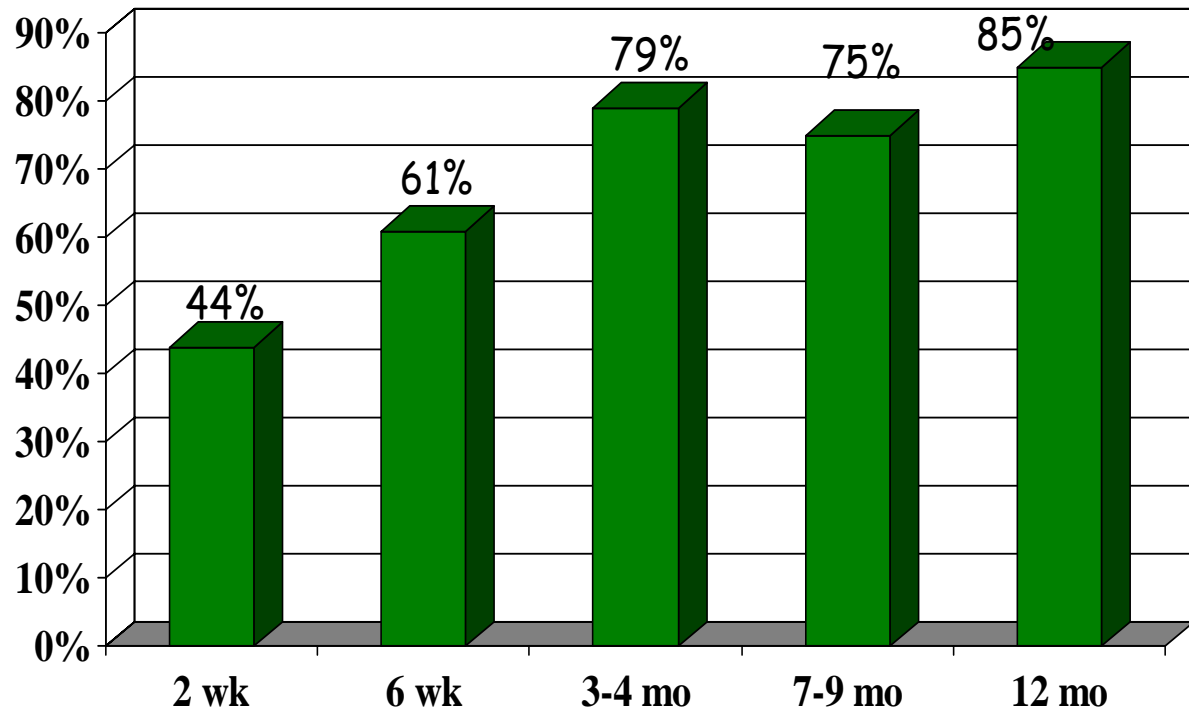
- HIV antibody tests not easily interpreted
- Maternal HIV antibody (IgG) is passively acquired during pregnancy & persist for up to 18 mo – usually lost by 10 months
- Virological tests; remain costly, not routinely available & require specialized laboratory capacity
- Blood tests not routinely performed in CH services
- Confusion fear and stigma around testing of children

Difficulties in excluding HIV :

- Infants who breast feed continue to be at risk for acquiring HIV infection & continues throughout duration of breast feeding
- (Incorrect) assumptions about rates of MTCT infection

HIV-exposed infants lost to follow up

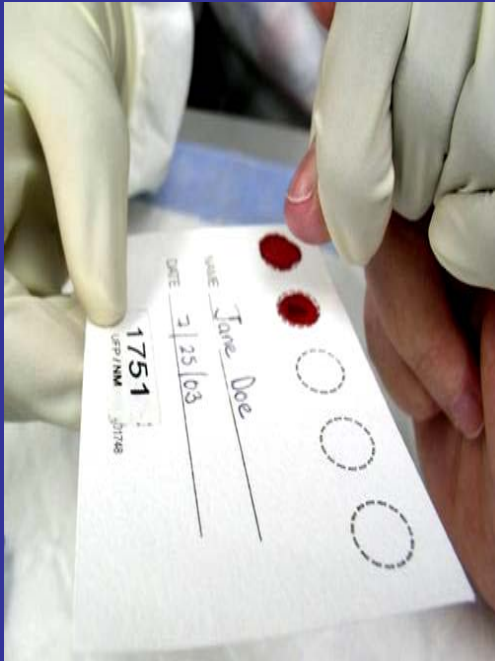
~40% of HIV-infected infants die by age 1 year



Oct 2001 – 2002 (13mo). Sherman et al. S Afr Med J 2004

**No follow up
No ongoing prevention
No diagnosis
NO ACCESS TO HIV CARE !!**

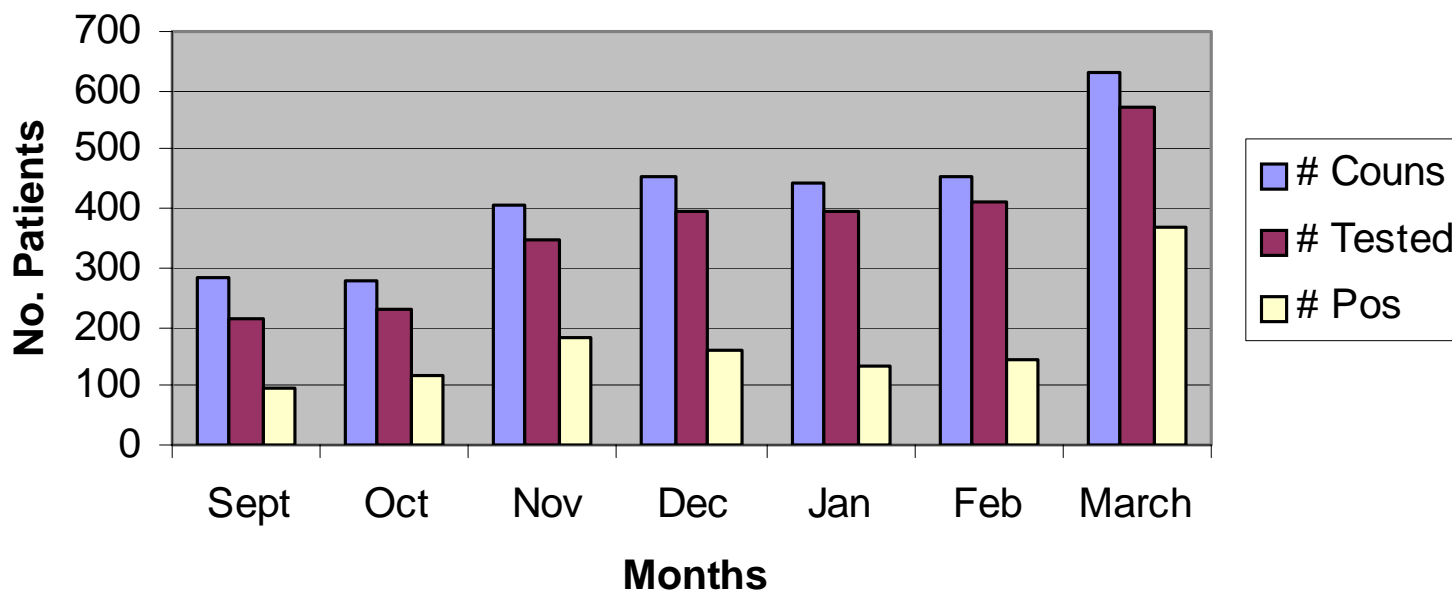
Ways forward-innovation in technology & approaches



- DBS
- Rapid Antibody testing
- PI HIV TC
- Dip stick RNA testing

Routine Provider initiated HIV Testing :University Teaching Hospital, Department of Pediatrics, Lusaka, Zambia

**Children Counseled & Tested September 2005 -
March 2006**



Drugs - is there a problem?

- More expensive than adult formulations
- No approved FDCs
- Estimating needs are problematic
- Complex dosing schedules mg/kg or mg/m²
- Some need cold storage, shipment
- Distributing glass bottles has it's problems
- Taste of formulations,
- Bulk & PSM headaches of supplies



50 mg/5 mL
240 mL



10 mg/1 mL
240 mL



300 mg

240 mL
Oral Solution



100 mg

80 mg per mL
Oral Solution
240 mL Bottle



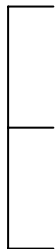
400 mg / 100 mg
per 5 mL

Kaletra™
(lopinavir/ritonavir)



GPOvir

60 tab/bottle



5 cm

d4T (30 mg) +
3TC (150 mg)+
NVP (200 mg)



1 cm



d4T
5 mg/ml



3TC
10 mg/ml



NVP
10 mg/ml



Requirements for provider, consumers and programmes

- Simplified dosing guidance
- Standardised simplified national ART prescribing
- FDCs
- Limited formulary of solid durable practicable dispensing forms
- Dispensing and prescribing tools
- Adherence tools & support
- tools & capacity to accurately assess growth and development

Obstacles for Pharmaceutical Companies

- Lack of data for demand and production forecasting
- Big Pharma:
 - Formulation difficulties (not applicable to non PI first line ART)
 - ‘no business case’, especially to make several formulations
 - Patent extension/restrictions (carrot vs. sticks FDA, EU)
 - Lack of clarity on regulatory requirements
- Generic Companies:
 - Also need a business case
 - Cost (and lack of) expertise and research ‘know-how’
- **Pre-qualification**
- **International and national drug policy, practice & standards**

What is needed

- ✓ Pressure on originators
- ✓ Clear advice to industry – priority & optimum products
- ✓ Incentives (e.g. FDA/EMEA)
- ✓ Guaranteed markets - commitment to purchase (? IDPF)
- ✓ Support to unblock regional and national regulatory & registration obstacles - common standards.

Other bubbling hot topics

- Resistance
- Pharmacovigilance
- Essential medicines for children
- Infant and young child feeding
- TB in children –diagnostics and treatment

The vision needs to change



An HIV & AIDS free generation.....
achievable only by Universal access to PMTCT
& child survival interventions



WHO Plans for 2006-2008

- Advocate for including children in HIV UA
- Maintain the momentum – push for more
- Normative technical guidance on diagnosis and non ART care and HIV testing for children, nutrition & adherence support
- Maintain ART dosing guides and tools
- Pharmacovigilance & Ped EDL
- Targeted technical assistance to CO

With UNICEF and other key partners

- Move on the 'call to action' for PMTCT
- Guidance for programming ped HIV care
- Continue to roll out IMAI + IMCI adaptation + IMCI complementary course
- Targeted support to high burden countries to review, find resources and implement action plans for scale up