Recent Developments and Achievements in Malaria Control in Tanzania (Mainland)

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Malaria Continues to Cause Disability and Death in Africa

• Complicates pregnancies (maternal anemia)

• Leads to poor birth outcomes (low birth weight)

• Each year...
  – 300–500 million cases
  – Millions progress to severe malaria disease
  – 900,000 ultimately die

• Accounts for 40% of public health expenditures

But several interventions are immediately available to prevent and treat malaria!
The burden in Tanzania Mainland

- Over 93% of the Tanzania mainland population lives in areas where malaria is transmitted.
- Stable and intense transmission - coastal fringe, southern lowlands and regions bordering Lake Victoria - (70 – 75% of the country).
- Reported malaria cases 10-12 million annually.
- Leading cause of Outpatient, Inpatient and Hospital deaths in underfive children.
- 30-40% of health facility attendance.
- Estimated deaths: 60-80,000 mainly in children.
- The poorest bear the brunt of the burden.
NMCP’s Ongoing Four-pronged Strategy

- Prompt diagnosis & treatment
- Intermittent preventive treatment in pregnancy (IPTp)
- Insecticide-treated nets (ITNs)
- Indoor residual spraying (IRS)
- Larviciding

Plus...
- Monitoring & evaluation
- Surveillance
- Behavior Change Communication
Malaria Control Financial Inputs for Mainland Tanzania, 2000-10

[Bar chart showing financial inputs from various sources (Other Donors, WB, GOT, GF, PMI) for Malaria Control in Mainland Tanzania from 2000 to 2010.]
Allocation of Malaria Control Funding for Mainland Tanzania, 2000-10

- ITN: 48%
- Diagnosis & Treatment: 30%
- IRS: 8%
- Behavioral change: 6%
- M&E: 5%
- IPTp: 1%
- Other: 2%

The graph shows the percentage allocation of funding for different malaria control strategies.
Update 1: 

*Intervention Scale-up*
ITNs

• Tanzania National Voucher Scheme (TNVS ongoing)
  – Net vouchers issued at health facilities for later redemption at retail shops
  – Launched in 2004 (preg women) & 2006 (infants)
  – LLIN voucher with fixed top-up 500/= Tsh since Oct 2009
  – Over 7 million vouchers redeemed to date, with redemptions increasing

• Under-5 Coverage Campaign (completed May ‘10)
  – Jointly funded by GFATM, World Bank, PMI, UNICEF, GoT and Swiss Development
  – Completed May 2010
  – 8.7 million LLINs distributed at total cost of $64 million

• Universal Coverage Campaign (est. completion Jun ‘11)
  – Majority funded by GFATM
  – 5 Zones completed & 12 million LLINs distributed to date
  – 18.5 million LLINs to be distributed at total cost of $91 million
IRS

- Kagera selective application since 2007 (outbreak prevention)
  - 100,000 households targeted (0.5 million people)

- Expansion to all districts of Kagera in 2009 (high transmission)
  - 450,000 households targeted (2.2 million people)

- Further expansion to Mwanza/Mara Regions in 2010
  - 1,250,000 households targeted (6.5 million people)

- All households sprayed with lambda-cyhalothrin (ICON®)

6.5 million population now protected by IRS
IPTp

• Introduced in 2003

• First dose sulfadoxine-pyramethamine (SP) starting at second trimester, then 2\textsuperscript{nd} dose at least 4 weeks later

• Success is highly dependent upon early access to antenatal care

• Uptake impeded by periodic stock-outs of SP since ’08

• Significant variation in uptake across regions
Case Management

• Rapid diagnostic tests (mRDTs)
  – Now implemented in 11 Regions
  – Rollout completion by end-2011

• Artemisinin-based combination therapy (ACT)
  – First-line treatment at all public facilities since 2007
  – 60 million+ treatments delivered in 4 yrs

• Recurrent national stock-outs of RDTs and ACTs impede continuous service delivery
Affordable Medicine Facility for Malaria (AMFm)

- It’s a pilot aimed at increasing access to recommended ACTs through private outlets at an affordable price
- Drugs are procured by the private sector and distributed through the private distribution system
- The Government role: awareness creation, monitoring and evaluation
- Drugs are already available
Update 2:

Achievements in Intervention Coverage
Trends in Core Coverage Indicators: Tanzania Mainland, 2004–10

Population Coverage (%)

- Own 1 ITN per Home: 63.4% (2004/05 DHS), 64.1% (2007/08 THMIS), 57.1% (2009/10 DHS)
- Use ITN Age <5y
- Use ITN Pregnant
- IPTp 2 doses
- Tx within 24h

Target
IRS Achievements, Lake Zone 2010-11

# of house structures sprayed (1,120,092) coverage (94%) and impact (70% reduction malaria test positivity rate)
Update 3: Impact
P. falciparum Prevalence in Tanzania, 2007/08

Malaria Prevalence in Children 6-59 Months, 2007/8

Prevalence of Malaria
- 0% - 9%
- 10% - 19%
- 20% - 29%
- 30% - 39%
- 40% - 49%

Reductions in Severe Anemia, Mainland Tanzania, 2004–10
Reductions in All-cause Mortality in Tanzania Mainland, 1999–2009/10

45-50% reductions between 1999 and 2009/10

Deaths per 1000 live births

- Children < 5 yrs: 1999 - 147, 2004/05 - 112, 2009/10 - 81
Looking Ahead at NMCP

• Affordable Medicines Facility – malaria (AMFm)
  – Subsidized ACT (< $0.05 per treatment)
  – Pilot program highly dependent upon performance

• Continued rollout of RDTs nationwide

• Mechanisms for ITN “keep-up”

• Increased integrated vector control initiatives
  – Including Larviciding
Larviciding

• Implemented in collaboration with the Cuban Government
• Target in Urban areas
• Builds up on the Urban Malaria Control Project which focused in 15 wards 2006-2010
• Roll out in all wards in DSM
• last four years
• Construction of larvicides production industry in Kibaha – Coast Region
• Implementation at preliminary stage
Surveillance, Monitoring & Evaluation

Health facilities:
- Strengthening Integrated Disease Surveillance and Response (IDSR) for NMCP needs
- Surveillance in new Sentinel Panel of Districts
- NMCP collaborating with HMIS strengthening initiative

Household surveys:
- 2011-12 Tanzania HIV/AIDS and Malaria Indicator Survey (THMIS)

Analysis:
- Malaria Impact Evaluation
NMCP’s Careful Vigilance for Monitoring Insecticide and Antimalarial Drug Resistance*

*In collaboration with NIMR, IHI, WHO, PMI, and others
Need for Cross-border Collaboration with other NMCPs

Shared borders with 8 countries, plus Zanzibar!

Mainland:
- 41 million
- 900,000 km²

Zanzibar:
- 1.2 million
- 2,500 km²
Asanteni sana.
Questions?

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