Malaria Burden And Control Efforts In The Context Of Millennium Development Goals

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Preventable and Treatable Diseases

• A number of the major diseases such as malaria and neglected tropical diseases are preventable and treatable.
• These diseases have basically disappeared from most of the developed world.
• These diseases are prevalent in the developing world and are recognized as diseases of poverty.
Lack of progress of disease control in the developing world

- Lack of clear and sustainable leadership role taken by developing countries
- Not decisive policies: very little say on formulation policies that affect them: donor driven
- Too much dependency on outside support
- Unwillingness of most of the donor agencies to adjust to the new realities
Malaria: an example of the multiple challenges that affect effective control
The Malaria Burden

- Malaria is a major global public health problem
- One fifth of the world’s population at risk
  - between 300-500 million clinical cases per year
  - Up to 30% of outpatient consultations, up to 20% of hospital admissions, up to 10-30% malaria fatality rate amongst hospitalized malaria patients
  - Up to 3 million deaths per year
  - disability from severe form of the disease
3000 children die from malaria every day.
Malaria during pregnancy can lead to acute disease and Anaemia

- Women in endemic countries are four times more likely to suffer from malaria attacks when they are pregnant
- Malaria parasites can sequester in the placenta
- Anaemia & placental malaria are associated with low birth weight, one of the primary causes of neo-natal mortality
Malaria Epidemics

Significant epidemics in the last two years:
Burden of malaria in emergencies and epidemics

• 80% of emergency countries are malaria endemic

• > 20 countries in Africa at risk of epidemic malaria (with population of 110 million)
Major impact on human and economic development

• Peak malaria transmission coincides with planting & harvesting seasons; at a time when there is greatest need for agricultural work

• Subsistence farmers in Africa shoulder the heaviest burden of malaria as their productivity is severely affected

• A brief of illness that delays planting or harvesting produce catastrophic effects on farmers because of their fragile way of life

• Illness is also associated with loss of earnings and high treatment costs that must be purchased by the farmer out of his own meager cash income.
Impact on development

• Malaria affects school enrolment and cognitive development. The youth are too weak to attend schools or to learn when they do attend.

• The potential income loss from adult illness is also very high.

• In sub-Saharan Africa, 15% of all disability adjusted life years (DALYs) that are lost are associated with malaria.
Impact on development

• Where malaria risk is intense, development is impeded

• Malaria isolates endemic countries and suppress economic links with developed non-malarious parts of the world

• Investors from non endemic areas avoid malarious regions for fear of contracting the disease

• Impedes the flow of trade and foreign direct investment
Global malaria control strategy

1. Early diagnosis and prompt treatment
2. Insecticide treated nets
3. Indoor residual spraying
4. Intermittent preventive treatment during pregnancy
5. Early detection to contain or prevent epidemics
6. Strengthening of local capabilities in basic and applied research
### Abuja Declaration (2000)

<table>
<thead>
<tr>
<th>RBM Strategy</th>
<th>Abuja Targets for 2005</th>
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<tr>
<td>♦ Prevention and control of malaria in pregnant women</td>
<td>♦ 60% of pregnant women will be protected by ITNs</td>
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<td>♦ 60% of pregnant women at risk for malaria will have access to intermittent preventive treatment</td>
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<td>♦ Malaria epidemic and emergency response</td>
<td>♦ 60% of epidemics held in check within 2 weeks of onset</td>
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<td>♦ 60% of epidemics are responded to within 2 weeks of detection</td>
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4. Intermitent preventive treatment (IPT) during pregnancy

- Receive two treatment doses during the course of pregnancy

- Low proportion of pregnant women benefit from the IPT service due to low coverage of health services

- Sulfadoxin/pyrimethamine is used for IPT, a drug of decreased efficacy due to increasing resistance by *Plasmodium falciparum*
12–24 months lag time between ACT adoption and implementation

Countries adopting ACT

Countries implementing ACT

Cumulative No. of countries

No countries adopting ACT
No countries implementing ACT
Funding for malaria control

• The Global Fund against HIV/AIDS, TB and Malaria is the primary source of funding

• For the last 6 rounds, GFATM 2-year allocation is $1,168,700,678
  – $97,391.000 per year/ round

• Estimated need for Africa alone is $3 billion /year
A GLOBAL FUND TWO-YEAR ALLOCATION FOR AFRICA
BY ROUND

GLOBAL FUND ROUND

APPROVED AMOUNT

- 50,000,000
- 100,000,000
- 150,000,000
- 200,000,000
- 250,000,000
- 300,000,000
- 350,000,000
- 400,000,000
- 450,000,000
- 500,000,000

1 2 3 4 5 6

Approved 2 years
Approved 5 years
2. Insecticide treated nets

- Countries using long-lasting insecticide treated nets (LLINS)

- Net ownership and use in Africa is very low
  - 22% of households own at least one net
  - Up to 15% of children under five years of age sleep under net
  - Up to 19% of pregnant women sleep under net

- Abuja target of net coverage by 2005 was 60%
Challenges/Concerns

1. Present funding available is too low for endemic countries to undertake nation-wide control programs

2. The institutional policy of the Global Fund structure need to be adjusted for endemic countries the lead

3. The low available fund is also diverted for social marketing of nets and drugs, instead of free distribution like those of GFATM. This conditionality by donor agencies has denied the poorest of the poor with .. Protection through use of nets

4. Social marketing requirement affects rate of uptake of nets and insecticide
   - This conditionality by donor agencies has denied the poorest of the poor with protection through use of nets

5. MDG/malaria target: “Reduce malaria mortality by 75% by 2015 from the 2005 baseline
Challenges/Concerns

6. At present rate of funding countries will not achieve their MDG targets for malaria

7. The Abuja target of 60% net coverage by 2005 is unmet by nearly all countries

8. The target of net coverage of 80% by 2008 may also be missed

9. Lack of success with malaria will affect other MDG targets such as maternal health, cognitive development of school children and child mortality
Millennium Development Goals 2015

1. Eradicate extreme poverty and hunger
2. Achieve universal primary education
3. Promote gender equality and empower women
4. Reduce child mortality
Millennium Development Goals 2015

5. Improve maternal health
6. Combat HIV/AIDS, malaria and other diseases
7. Ensure environmental sustainability
8. Develop a global partnership for development
Recent development

• The African Union has developed an Africa-wide strategy taking local epidemiological conditions of each country
• Decided that anti-malarial commodities would be available to all populations living in endemic areas free of cost
• Have asked the cooperation of development partners to support such initiative