Malaria control programme in Vietnam 2008

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I. Overview of Malaria situation

- 25.2/86.7 millions of people are living in the malaria endemic areas (29% total pop.).

- The principal vectors:
  \textit{An. minimus, An. dirus, An. epiroticus}

- Malaria parasite species:
  + \textit{P.falciparum}: 78.4\% (82.4\% in the Centre and South; 30.6\% in the North).
  + \textit{P.vivax}: 20.6\%
  + \textit{mix (P.f + P.v)}: 1\%
# Main malaria indicators in 2005 - 2008

<table>
<thead>
<tr>
<th>Indicators</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of malaria cases</td>
<td>99,275</td>
<td>91,635</td>
<td>70,910</td>
<td>60,426</td>
</tr>
<tr>
<td>Morbidity rate/1,000</td>
<td>1.19</td>
<td>1.08</td>
<td>0.83</td>
<td>0.70</td>
</tr>
<tr>
<td>No. of positive cases</td>
<td>19,496</td>
<td>22,637</td>
<td>16,389</td>
<td>11,355</td>
</tr>
<tr>
<td>No. of deaths</td>
<td>18</td>
<td>41</td>
<td>20</td>
<td>25</td>
</tr>
<tr>
<td>Mortality rate/100,000</td>
<td>0.02</td>
<td>0.05</td>
<td>0.02</td>
<td>0.03</td>
</tr>
<tr>
<td>No. of outbreaks</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>No. of Pop. protected by insecticides</td>
<td>11,891,397</td>
<td>11,282,512</td>
<td>11,749,657</td>
<td>10,239,652</td>
</tr>
<tr>
<td>No. of Pop. Treated by antimalarial drugs</td>
<td>1,600,000</td>
<td>866,104</td>
<td>688,782</td>
<td>508,373</td>
</tr>
</tbody>
</table>
Problems

1. Big population are living in the endemic areas (29% total pop).

2. The coverage and quality of malaria control activities in the malaria endemic areas is limited.

3. Malaria indicators in some areas are still high.

4. The quality of diagnose activities of village health workers & microscopist is limited.

5. People going to and staying over night in the forests.

**Quang Tri:**
- Chlo. (05): 22.9%
- Sulfa.-Pyri. (02): 12.2%
- DHA-P (03;04;08): 1.5%

**Dak Lak:**
- Chlo. (01): 71.9%
- Sul.-Pyri.(01): 81.8%

**Dak Nong:**
- DHA-P (03;06): 0%

**Binh Phuoc:**
- Artes. (02,03,05,08): 4.0%-13.1%
- Coaterm (01): 2.8%

**Quang Binh**
- DHA-P (07): 0%

**Kon Tum:**
- Chlo. (01): 11%

**Gia Lai:**
- DHA-P (07): 0%

**Ninh Thuan:**
- Artes. (03): 7.4%
- DHA-P (04;06;08): 0%
## 6. Drug resistance of *P. vivax*.

<table>
<thead>
<tr>
<th>Year</th>
<th>Study site</th>
<th>Drug</th>
<th>No. patient</th>
<th>Late Para. Failure</th>
<th>Late Clinical Failure</th>
<th>Early Treat. Failure</th>
<th>Total failure</th>
</tr>
</thead>
<tbody>
<tr>
<td>05</td>
<td>Binh Phuoc</td>
<td>Chloroquin</td>
<td>45</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>06</td>
<td>Ninh Thuan</td>
<td>Chloroquin</td>
<td>51</td>
<td>2 (4%)</td>
<td>0</td>
<td>0</td>
<td>2 (4%)</td>
</tr>
<tr>
<td>07</td>
<td>Quang Binh Gia Lai</td>
<td>Chloroquin</td>
<td>14</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>08</td>
<td>Binh Phuoc</td>
<td>Chloroquin</td>
<td>26</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>08</td>
<td>Ninh Thuan Dak Nong</td>
<td>Chloroquin</td>
<td>21</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
II. plan for malaria control 2009

2.1. objectives

1) General objectives:
   - Continue to roll back malaria in the high endemic areas and the high risk groups.
   - Develop and strengthen the sustainable factors for malaria control.

2) Specific objectives: compared with 2008
   - Reduce morbidity by 5% ( < 0.7/1,000 pop.).
   - Reduce mortality by 5% ( < 0.03/100,000 pop.).
   - No big malaria outbreaks.
3) Main malaria indicators in 2009

- Protect 10.6 million people by vector control:
  + By bednet treated: 9.0 million people
  + Indoor spraying: 1.6 million people

- Provide 811,000 doses of anti-malaria drug
- No. of Blood slides: 2,500,000 slides
- Provide 200,000 bednets to the target population.
Main solutions FOR MALARIA CONTROL 2009

1. Continue the investments and technical guidance for rolling back malaria in the malaria “hot spots“, high endemic areas and high risk groups.

2. Improve the quality of malaria epidemiological surveillance and control of malaria vectors.

3. Improve the quality of supervision and


5. Strengthen scientific researches, IEC and international cooperation.

6. Strengthen the socialization of malaria control.

7. Develop scientific researches and international cooperation.
III. THE ROUND 3 GFATM PROJECT

**Title**

"To consolidate and sustain the achievements of the last decade and to decisively roll back malaria in the remaining high risk areas".

**Duration:** 5 years (1/1/2005 - 31/12/2009)

**Coverage:** 23 highly endemic provinces (141 districts; 1,818 Communes; 17,228 Villages).

**Total budget for 5 years:** 22,787,909 USD.

*Year 2009, Activities and budget consolidated in the round 7 GFATM project, effective 1 January 2009.*
### Indicators of the Project in 2008

<table>
<thead>
<tr>
<th>Indicators</th>
<th>2006</th>
<th>2008</th>
<th>Reduce</th>
</tr>
</thead>
<tbody>
<tr>
<td>23 provinces:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- No of Mal. cases</td>
<td>64,455</td>
<td>37,465</td>
<td>41.9%</td>
</tr>
<tr>
<td>- Mobidity/1,000</td>
<td>2.65</td>
<td>1.49</td>
<td>43.8%</td>
</tr>
<tr>
<td>- No of slides (+)</td>
<td>20,932</td>
<td>10,022</td>
<td>52.1%</td>
</tr>
<tr>
<td>- No of death</td>
<td>28</td>
<td>19</td>
<td>32.1%</td>
</tr>
<tr>
<td>- Mortality/100.000</td>
<td>0.11</td>
<td>0.08</td>
<td>27.3%</td>
</tr>
<tr>
<td>- No of out break</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
## Impact and outcome of the project in 2008

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Target</th>
<th>Achieve</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Mobidity/1,000 pop.</td>
<td>&lt; 1.7</td>
<td>1.49</td>
</tr>
<tr>
<td>2. Proportion of parasite/1,000 pop.</td>
<td>&lt; 0.57</td>
<td>0.40</td>
</tr>
<tr>
<td>3. Proportion of <em>P.fal</em>/1,000 pop.</td>
<td>&lt; 0.44</td>
<td>0.33</td>
</tr>
<tr>
<td>4. Mortality/100,000 pop.</td>
<td>&lt; 0.04</td>
<td>0.08</td>
</tr>
<tr>
<td>5. Proportion of population sleeping under ITN (survey)</td>
<td>≥ 85%</td>
<td>85.3%</td>
</tr>
<tr>
<td>6. Proportion of people in the target areas who can recall at least 2 malaria messages.</td>
<td>≥ 87%</td>
<td>89.4%</td>
</tr>
</tbody>
</table>
IV. THE ROUND 7 GFATM PROJECT

1. Title:
   Intensify community-based malaria control targeting key risk groups, and enhance the functionality and sustainability of Viet Nam’s malaria control efforts.

2. Duration: 5 years (01/2009 - 12/2013).

3. Coverage: the project will be implemented in 29 highly endemic provinces (152 districts; 1,848 Communes; 9,459,523 pop).

4. Total budget for 5 years: 29,977,899 USD
5. Objectives:

1) To improve access to and utilization of effective malaria prevention measures.

2) To improve access to and utilization of effective diagnosis and treatment for malaria.

3) To strengthen malaria surveillance and epidemic response

4) To enhance the functionality of the national malaria control effort
Epi. stratification

29 project provinces
V. Other activities

5.1. In 2009, Vietnam will participate in the First Learning Way for National Strategy Applications (NSA) to the Global Fund for funding (1 of 7 countries are invited to submit the NSA for Malaria).

5.2. Also in 2009, NIMPE & IMPEs take part in the National Dengue Control Program, cooperate with other Institutes to monitor the insecticide resistant mosquitoes and provide guidance for dengue vector control.
5.3. ACT Malaria Training 2008-2009.

- 4 staff participated in the malaria microscopy and quality assurance held in the Philippines.

- 4 staff participated in the Workshop on Vector control Management held in Cambodia.

- 3 staff attended the MMFO course in Thailand.
Thank you for your attention