Malaria Situation Update In Oman

Dr. Said Al Mukhaini
MD, MPH
Head, Malaria Epidemiology Section
Malaria Eradication Department
Ministry Of Health
Presentation Outline

• Global Malaria Situation.
• History of Malaria Eradication Program in Oman & it’s current status.
• Malaria Surveillance System in Oman.
• National Malaria Policy.
In 2008:

- 247 million cases of malaria
- 1 million deaths, mostly among < 5 years.
- In Africa, a child dies every 45 seconds of malaria.
- 20% of all childhood deaths are due to malaria

(WHO 2010)
Estimated deaths due to malaria per 1000 population, 2006
Global Malaria Situation
History of Malaria Eradication Program in Oman

1950s & 60s
- National Malaria Eradication Program was Launched

1970s
- 32,720 confirmed cases
  - Around 300,000 clinical malaria cases were diagnosed
  - Malaria Control Program was launched

1990
- 1991

1991
- One third of the population
Classification of malaria cases, Sultanate of Oman, 1988-2009.
Total Number of Autochthonous Malaria Cases & Annual Parasite Incidence in the Sultanate of Oman, 1994-2008
Proportion Of Cases According To Species 2009

- Pf: 18%
- PfPv: 2%
- Po: 0%
- Pv: 80%
Classification Of Cases According To Source Country 2009

- Imp.Yemen: 43
- Imp.Uganda: 1
- Imp.Tanzania: 11
- Imp.Sudan: 2
- Imp.Pakistan: 2
- Imp.Nigeria: 2
- Imp.Nepal: 1
- Imp.India: 1
- Imp.Ghana: 1
- Imp.Ethiopia: 1
- Imp.Congo: 1
- Imp.Bangladesh: 19
- Imp.Afghanistan: 10
- Imp.: 1

Total: 543 cases
Distribution of Cases Among Regions
Proportion Of Cases According To The Source (2009)

- PC: 66%
- PCD: 21%
- ACD: 11%
- CDC: 2%
Proportion of malaria cases detected by the private health institutes, Oman, 1999 - 2009.

<table>
<thead>
<tr>
<th>Year</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999</td>
<td>20.5</td>
</tr>
<tr>
<td>2000</td>
<td>26.0</td>
</tr>
<tr>
<td>2001</td>
<td>25.5</td>
</tr>
<tr>
<td>2002</td>
<td>23.6</td>
</tr>
<tr>
<td>2003</td>
<td>28.8</td>
</tr>
<tr>
<td>2004</td>
<td>45.4</td>
</tr>
<tr>
<td>2005</td>
<td>49.5</td>
</tr>
<tr>
<td>2006</td>
<td>59.5</td>
</tr>
<tr>
<td>2007</td>
<td>69.9</td>
</tr>
<tr>
<td>2008</td>
<td>71.3</td>
</tr>
<tr>
<td>2009</td>
<td>66.0</td>
</tr>
</tbody>
</table>
Malaria Surveillance System in Oman
Objectives

• To detect malaria cases as early as possible
• To monitor the malaria situation in Oman
• To evaluate the control measures
• To assist in the case investigation to know the source of infection.
A malaria case is a person in whom, regardless of the presence or absence of clinical symptoms, malaria parasites have been confirmed by quality-controlled laboratory diagnosis.
Implications

• All cases must be confirmed microscopically before treatment.

• All referred cases from private health institutions must be confirmed before treatment.

• No clinical diagnosis.

• No presumptive treatment.
National Malaria Treatment Policy

• Malaria cases should be notified within 24 hours
• Management of malaria cases is free of charge
• Availability of antimalarial drugs is limited only to governmental health institutes
Malaria Treatment

- ACT for uncomplicated P.f
- Chloroquine + primaquine (after testing G6PD status) for P.v
- Quinine inj. For severe malaria.
- Chemoprophylaxis:
  - Chloroquine + Pruguanil
  - Mefloquine
  - Doxycycline
Central Malaria Lab. 

Regional Malaria Lab. 

Health Facility Lab. 

100% +ve slides 10% -ve slides 

100% +ve slides 10% -ve slides 

Feedback 

Feedback
Noting Oman’s accomplishment in effectively tackling the malaria menace, the WHO is considering the possibility of establishing Oman’s Malaria Laboratory as a Regional Centre of Excellence in Malaria Microscopy. The Centre is expected to strengthen the capacity of the Member States of the region and possibly neighbouring regions, in laboratory diagnosis of malaria and ensure its quality assurance.

Taking the case ahead, a WHO assessment team comprising of Dr John Storey, Malaria Scientist, UK and Dr Earl Long, Health Scientist, Centre for Disease Control and Prevention, Atlanta, USA were recently in Oman (14 to 31 October 2005) to assess the malaria laboratory and forward recommendations to the WHO Office of the Eastern Mediterranean Region as well as WHO Headquarters in Geneva, Switzerland.

The consultants undertook an overall assessment of the malaria laboratory diagnosis in Oman and evaluated the existing system for quality assurance. Dr Storey confirmed that the malaria laboratory in Oman has huge potential to be developed as a Reference Centre for laboratory diagnosis as well as a training unit on quality assurance of malaria microscopy and other related issues. He further stated that all the key ingredients – strong political backing, skilled personnel and adequate infrastructure – vital for good laboratory diagnosis are well in place.

Make every mother and child count

(Al Zadjali, M 2006)
1st INTERNATIONAL TRAINING COURSE IN ADVANCED MALARIA MICROSCOPY AND QUALITY ASSURANCE, MUSCAT

(Al Zadjali, M 2006)
Thank You