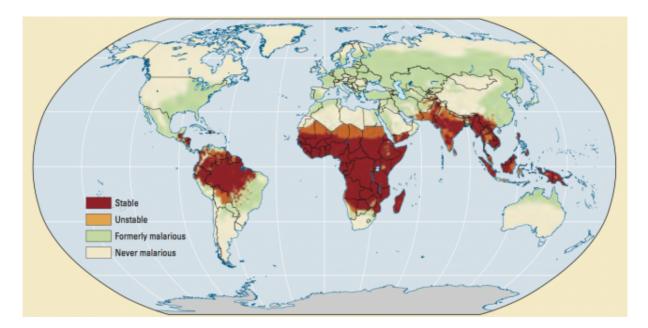
Forum:	Special Commission (Health)
Issue:	Measures to decrease infant mortality in malaria affected areas
Student Officer:	Wienke Behrens (Gymnasium Meiendorf, Hamburg)
Position:	President of the Special Commission (Health)

# **Definition of the issue**

Malaria is a life-threatening disease that is caused by parasites that are transmitted to people through bites of infected mosquitoes. According to estimates, released in December 2014, there were about 198 million cases of Malaria in 2013 and around 584,000 deaths. Malaria mortality rates have fallen by 47% globally and by 58% in Africa since 2000. Most deaths occur among children living in Africa, where every minute a child dies from malaria. The map below shows where the Malaria affected areas and the former ones are. The red areas are the ones where there is constantly Malaria. The orange ones are areas where Malaria is not constantly proven.



#### **Background information**

Malaria is caused by plasmodium parasites. The dangerous parasites are spread to people through the bites of infected mosquitoes, called "Malaria Vectors". Malaria is preventable and healable and increasing Malaria prevention and control measures are reducing the Malaria burden in many places.

**Symptoms:** Malaria is an acute febrile illness. The symptoms appear seven days or more after the infective mosquito bite in non-immune people. The first symptoms are fever, headache and vomiting. If these symptoms are not treated within one day, Malaria can develop into a severe illness that often leads to death. Children who are infected develop anemia, respiratory distress in relation to metabolic acidosis, or cerebral Malaria as symptoms. In Malaria affected areas, persons sometimes develop partial immunity.

**Who is at risk:** More than half of the world's population is at risk of Malaria. Most Malaria cases and deaths occur in the sub-Saharan Africa but they also occur in Asia, Latin America and in some parts of Europe and the Middle East.

There are groups that are especially at risk. These groups include young children who have not yet developed protective immunity against Malaria, pregnant women who are non- and semi-immune, people with HIV/AIDS and travelers and immigrants from non-endemic areas because they cannot develop a natural immunity.

**Prevention:** Vector control is the main way to reduce Malaria transmission. It is the only intervention that can reduce Malaria transmission from very high to very low levels.

For people in affected countries, personal protection against mosquito bites represents the first line of defense for Malaria prevention.

#### **Definition of key terms**

**Roll Back Malaria:** RBM was established in 1998 by the World Health Organization (WHO), UNICEF, the United Nations Development Programme (UNDP) and the World Bank to help coordinate a global approach to eliminating Malaria.

Millennium Development Goals:MDGs are eight goals which were adopted by the UN in<br/>2000. These goals have to be reached until 2015.

- Anemia: Anemia is the decrease in number of red blood cells and/or the quantity of hemoglobin.
- **Cerebral malaria:** This complication of Malaria happens at times with P. falciparum infection and involves Malaria infection of the very small capillaries that flow through the tissues of the brain.
- Infant parasite rate: The percentage of infants below one year old who show parasites in their blood films. If the infant parasite rate is zero for three years in a place, this is regarded as unverifiable local transmission.

#### **Countries and organizations involved**

- WHO: The WHO provides help to Malaria affected areas for example by giving mosquito nets to the people. They are also involved in the Roll Back Malaria (RBM) initiative. Furthermore the WHO does studies about Malaria and related issues.
- **UNICEF:** UNICEF is a founding partner of the Roll Back Malaria (RBM) initiative, a global partnership which was established in 1998 to catalyze the support for Malaria control.
- **UNDP:** The UNDP is also one of the founding members of Roll Back Malaria and it helps people in Malaria affected areas in the same way as the WHO.
- All Sub-Saharan countries: The Sub-Saharan countries are the most affected countries in the world and there is the highest infant mortality rate due to Malaria.

#### **<u>Timeline of events</u>**

- 1820: Quinine becomes a common treatment for intermittent fever, later identified as Malaria
- 1880: First Malaria parasite discovered by Charles Louis Alphonse Laveran
- **1898:** Sir Ronald Ross discovers that mosquitoes transmit Malaria
- **1934:** Anti-malarial drug Chloroquine discovered by Hans Andersag at Bayer laboratories in Germany but not widely used until after World War II
- **1955:** Global Malaria Eradication Campaign launched by WHO; the campaign excludes sub-Saharan Africa and is eventually abandoned
- **1976:** Malaria parasite first grown in culture in a lab by Dr. William Trager and Dr. JB Jensen, opening the way for drug discovery and vaccine research
- 1981: Principles of antigen-based rapid diagnostic tests for Malaria discovered
- 1992: Today's most advanced Malaria vaccine candidate, enters clinical trials
- **1996:** Insecticide-treated bed nets are proven to reduce overall childhood mortality by 20% in large, multi-country African study
- **1996:** Unit-dose packaging of Coartem proven effective for use by trained community volunteers (home management of Malaria)
- 1997: Multilateral Initiative on Malaria founded to strengthen Africa's ability to spearhead new Malaria approaches; 1<sup>st</sup> MIM Pan-African Malaria Conference held in Dakar, Senegal
- **1998:** Roll Back Malaria Partnership (RBM) launched by WHO, UNICEF, UNDP and World Bank with goal of halving Malaria incidence and mortality by 2010
- **1998:** Home management of Malaria where trained community volunteers provide antimalarials in remote African communities adopted as strategy by the WHO
- **2001:** Millennium Development Goals adopted at the UN General Assembly, setting target to halt and reverse malaria incidence and mortality
- **2001:** WHO prequalifies first fixed-dose Artemisia in combination therapy (ACT) Coartem and recommends ACTs as first-line malaria treatment
- **2002:** The Global Fund to Fight AIDS, Tuberculosis and Malaria established

2004: Coartem approved for use in infants and young children

- 2005: Health Assembly adopts target of 80% worldwide coverage of insecticide nets and ACTs by 2010
- 2007: Long-lasting insecticidal nets (LLINs) recommended for use by WHO
- 2007: World Malaria Day instituted by the World Health Assembly at its 60th session
- 2008: First World Malaria Day adopted by UN
- **2008:** Rectal artesunate proven to reduce mortality and illness among young children with severe Malaria
- **2008:** Global Malaria Action Plan (GMAP) announced by endemic countries and RBM to renew commitments to Millennium Development Goals

# Actions taken

The WHO recommends that all cases of suspected Malaria be confirmed by using parasitebased diagnostic testing before administering medication. Results of parasitological confirmation can be available in 15 minutes or less. Treatment on the basis of symptoms should only be considered when such a test is not possible.

The WHO Global Malaria Programme (GMP) is responsible for charting the process of Malaria control and elimination by finding threats to Malaria control and elimination as well as setting and promoting adoption of evidence-based norms, policies, guidelines and technical strategies.

In accordance with the Millennium Development Goals, the Global Malaria Action Plan (GMAP) and the goals contained in the outcome document of the UN Special Session on Children: "A World Fit for Children", UNICEF aims to help to ensure that, by 2015, mortality due to Malaria is reduced by 75% in comparison to 2005. Also the Malaria-related MDGs should be achieved by this year across all affected countries.

GMP serves as the secretariat for the Malaria Policy Advisory Committee (MPAC), a group of 15 global Malaria experts. The MPAC provides independent advice to the WHO to develop

policy recommendations for the fighting of Malaria. The mission of MPAC is to help finding a strategy and providing technical input.

The Roll Back Malaria initiative was implemented by the WHO, UNICEF, UNDP, the World Bank and 500 other partners such as NGO's and community-based organizations and academic institutes.

### **Possible solutions**

For solving this issue, there have to be changes in the health care system, so that Malaria can be diagnosed and treated as early as possible. Furthermore the local capacities in basic and applied research for regular assessment of the Malaria situation within the countries have to be strengthened.

#### **Relevant resolutions/treaties**

- Millennium Development Goals
- **2015:** A/69/916
- 2014: A/RES/68/308

A/68/854

• 2013: A/RES/67/299

A/67/L.80

A/67/L.80/Add.1

A/67/825

- 2012: A/RES/66/289
- **2011:** A/66/169

A/RES/65/273

• **2010:** A/65/210

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• 2009: A/64/L.28

A/64/L.28/Add.1

# In order to prepare for the position of your country you should consider the <u>following:</u>

Is your country affected by Malaria?

Is your country involved in any help programs/organizations and how?

Think of how your country can help to decrease infant mortality in Malaria affected areas.

# <u>Useful links</u>

http://www.who.int

http://www.unicef.org

http://www.unicef.org/prescriber/eng\_p18.pdf

# **Sources**

http://www.unicef.org/health/index\_malaria.html

http://www.who.int/mediacentre/factsheets/fs094/en/

http://ourworldindata.org/data/health/malaria/

 $\underline{http://www.unfoundation.org/what-we-do/issues/global-health/preventing-malaria-deaths.html}$ 

http://www.unicef.org/prescriber/eng\_p18.pdf

If you have any questions do not hesitate to ask Leon or me. (specialcom@munoh.de)