Research on the treatment and prevention of malaria in pregnancy in sub-Saharan Africa: East Africa Regional meeting

Nairobi, 11-12th July 2016
Malaria in Pregnancy Consortium
41 Institutions in 29 countries

AFRICA
Benin
Burkina Faso
Cameroon
Gabon
The Gambia
Ghana
Kenya
Malawi
Mali
Mozambique
Rwanda
Tanzania
Zambia

ASIA /PACIFIC
Australia
India
Papua New Guinea
Thailand

EUROPE
Austria
Belgium
France
Germany
Netherlands
Spain
UK

NORTH AMERICA
US

LATIN AMERICA
Brazil
Columbia
Guatemala
Peru

Secretariat:
Liverpool School of Tropical Medicine
MIP Consortium
Aim & Approach

To identify & evaluate new ways of preventing and treating malaria in pregnancy to improve the evidence base for its control

1. Comprehensive and standardized approach to research of the control of malaria in pregnancy
2. Resource centre
3. Advocacy
4. Facilitate communication between members and stakeholders to share information

Funding: BM Gates Foundation, EDCTP & EU-FP7
MIP Consortium
2007 Primary Objectives

1) Identify >=2 drugs the treatment of uncomplicated falciparum and vivax malaria in pregnancy
2) Identify >=1 alternative to SP for IPTp in Africa.
3) Optimize IPTp-SP:
   1) Can IPTp be restricted to main transmission season in seasonal transmission areas?
   2) Determine the optimal dosing frequency for IPTp in the context of integrated use with insecticide treated nets.
4) Define malaria burden and control strategies in Asia and Latin America
5) Determine ways of scaling up existing & new tools
MiP Consortium  
2007: Secondary Objectives

6) Determine safety of antimalarials in all 3 trimesters (centralized safety database & exposure registry).

7) Immuno-Patho
   1) Understand how prevention affects immunity to MiP and in infants
   2) Understand effect of timing & duration of infection on pregnancy outcome to inform design preventive strategies.

8) To develop country research capacity and a network of excellence for malaria in pregnancy research.

9) Ensure systematic approach to MIP research, facilitate communication, advocacy & serve as a resource centre so that…

    new ways of preventing and treating MiP are found and implemented as speedily and effectively as possible.
MIP Consortium Structure
Research Activities

1. Treatment
   Africa, Asia, LA
   - MA 1
   - MA 2
   - MA 3

2. Prevention
   Africa
   - MA 4
   - MA 5
   - MA 6

3. Prevention
   Asia & Lat. America
   - MA 7
   - MA 8
   - MA 9

4. Public Health
   Impact
   - MA 10

Cross-Cutting activities
- Immunology & Pathogenesis WG
- PK/PD Working Group
- Safety Working Group
- Capacity Development WG
- Policy Liaison Group

July 11-12, 2016
Joint MiPc RBM East Africa Regional Meeting
Timeline

2008
- Consortium infrastructure
- Protocol development
- Initial PK studies

2009/10
- Initial PK studies
- Initial Mapping
- Start Observational studies and trials

2015/16
- Completion field studies
- Cross-cutting/meta-analysis: cost-effectiveness, safety, etc
Regional Meeting: Overall Objective

To share the latest research from the MiP Consortium’s clinical trials and studies on the treatment and prevention of malaria in pregnancy in sub-Saharan Africa (2009-2015) and to discuss with policy stakeholders the implications for national malaria and reproductive health programmes.
Specific Objectives

1. To share research findings from recent clinical trials and related studies on the safety and efficacy of drugs to treat and prevent malaria in pregnancy in sub-Saharan Africa:
   a. Artemisinin combination therapies (ACTs) for the treatment of malaria in all trimesters of pregnancy.
   b. Intermittent preventive treatment in pregnancy (IPTp) with 2 vs 3 or more doses of sulphadoxine-pyrimethamine (SP), and the impact of SP resistance on IPTp effectiveness.
   c. Alternative drugs to SP for IPTp and prevention of malaria in HIV-positive pregnant women.
   d. Alternative strategies to prevent malaria in pregnancy, namely intermittent screening and treatment (ISTp).
   e. Tools and approaches to support implementation of malaria in pregnancy interventions.
Specific Objectives cont.

2. To discuss the implications of research findings for national health programmes with Malaria and Reproductive Health representatives from Kenya, Malawi, Mozambique, Tanzania and Zambia, and their donor and technical partners.

3. To learn from national Malaria and Reproductive Health departments about the challenges with changing and implementing malaria in pregnancy policy in the context of ANC.

4. To outline the type of technical support and materials needed by countries to implement any changes to policy resulting from the research findings.
### Monday 11 July

**AM**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>08.30 - 08.40</td>
<td>Opening/Welcome and introductions</td>
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<tr>
<td>08.40 - 09.00</td>
<td>Malaria in Pregnancy Consortium Overview &amp; Objectives of the meeting</td>
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<tr>
<td>09.00 - 09.30</td>
<td>Burden of malaria in pregnancy in the East Africa region</td>
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**Session 1 – Use of ACTs for case management of malaria in all trimesters of pregnancy**

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<tbody>
<tr>
<td>09.30 - 10.00</td>
<td>Safety, efficacy and dosing of ACTs for treatment of clinical malaria in 2nd and 3rd trimesters in Africa</td>
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<tr>
<td>10.00 - 10.30</td>
<td>Safety of ACTs and quinine in early pregnancy in Africa</td>
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<td>10.30 - 11.00</td>
<td>Knowledge and adherence to national guidelines for malaria case management in pregnancy among healthcare providers and drug outlets in western Kenya</td>
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**CHAIR: Meghna Desai, CDC**

- Dr. Rebecca Kiptui, NMCP, Ministry of Health, Kenya
- Feiko ter Kuile & Jenny Hill, Liverpool School of Tropical Medicine (LSTM)
- Patrick Walker, Imperial College London
- Michael Nambozi, Tropical Diseases Research Centre (TDRC), Zambia
- Feiko ter Kuile, LSTM
- Simon Kariuki, Kenya Medical Research Institute (KEMRI)
### Session 2 – **IPTp** with 2 vs 3 or more doses of SP, and the impact of SP resistance

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<th>Time</th>
<th>Topic</th>
<th>Presenter</th>
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<tbody>
<tr>
<td>11.30 – 12.00</td>
<td>Effectiveness and cost effectiveness of 2 vs 3+ doses of IPTp with SP</td>
<td>Feiko ter Kuile, LSTM</td>
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<tr>
<td>12.00 - 12.30</td>
<td>Impact of SP resistance on the effectiveness of IPTp with SP in sub-Saharan Africa</td>
<td>Annemieke van Eijk, LSTM</td>
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<td>12.30 – 13.00</td>
<td>Effectiveness of antenatal clinics to deliver IPTp-SP in context of other ANC services</td>
<td>Jenny Hill, LSTM</td>
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<td>13.00 - 14.00</td>
<td>LUNCH</td>
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### PM

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<tr>
<td>14.00 - 15.00</td>
<td>Experiences of implementing current MiP policies – national programme perspectives</td>
<td>MOH representatives - Kenya, Tanzania, Malawi, Mozambique &amp; Zambia</td>
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<td>15.00 – 15.30</td>
<td>Priority areas for research and support</td>
<td>Chair</td>
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<td>15.30 – 16.00</td>
<td>TEA</td>
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### Session 3 – Implications for current policies

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<td>16.00 – 17.00</td>
<td><strong>SUMMARY &amp; DISCUSSION</strong>: Implications of sessions 1&amp;2 on policies and programmes, and priorities for research</td>
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Tuesday 12 July

AM

Session 4 – Alternative drugs for IPTp and alternative screen and treat approaches (ISTp)

08.30 – 09.00 Lessons learnt from IPTp with Mefloquine clinical trials in Benin, Gabon, Kenya, Mozambique and Tanzania
Raquel Gonzales, IS Global

09.00 – 09.30 Intermittent screening and treatment (ISTp) compared to IPTp-SP in Kenya and Malawi
Mwayi Madanitsa, College of Medicine, Malawi

09.30 – 10.00 Alternative drugs for IPTp in Kenya and Uganda
Meghna Desai, CDC

10.00 – 10.30 User and provider acceptability of alternative drugs for IPTp and ISTp under trial conditions in Ghana, Malawi and Kenya
Jayne Webster, London School of Hygiene and Tropical Medicine (LSHTM)

10.30 - 11.00 COFFEE

Session 5 – Implications for national policies and programmes

11.00 – 12.00 Potential challenges for MiP policy change and implementation of new policies – national programme perspectives
MOH representatives - Kenya, Tanzania, Malawi, Mozambique & Zambia

12.00 - 12.30 MEETING SUMMARY:

1. Implications for programmes & support needed to take forward WHO recommendations

2. Research priorities

CHAIR: Feiko ter Kuile, LSTM

CHAIR: Jayne Webster, LSHTM

CHAIR: Feiko ter Kuile, LSTM
IMPPACT Overall Objective

• To ensure the translation of WHO recommendations on malaria in pregnancy control policy resulting from the MiP Consortium’s research into country level policy and implementation plans.
Specific Research Objectives

1) Develop and make widely-available a package of methodological tools which define optimal, cost-effective malaria in pregnancy interventions by drug resistance and transmission strata across sub-Saharan Africa using data from EDCTP-funded research;

2) Advance optimal uptake of evidence-base through analysis of national level policy decision-making architecture and processes for the control of malaria in pregnancy to inform support in four selected countries, and evaluate the success of the policy change support processes as an exemplar to other countries;

3) Provide expertise to support national policy change and preparation for implementation in the selected countries and ensure dissemination to policy stakeholders in the remaining trial countries;

4) Maintain the MiP Consortium’s advocacy, networking and dissemination functions and policy liaison activities with WHO
Partners

• Implemented under the auspices of the Bill and Melinda Gates Foundation and EDCTP co-funded Malaria in Pregnancy Consortium.

• African countries/institutions:
  – MRC, Gambia; MRTC, Mali; KEMRI, Kenya; CoM, Malawi; serving as sub-regional hubs;
  – East Africa research partners: TDRC Ndola, Zambia; Ifakara IHI, Tanzania; CISM Manhiça, Mozambique;
  – West Africa research partners: FSS, Cotonou, Benin; Clinical Trial Unit Nanoro, Burkina Faso; MRU, Lambaréné, Gabon; KNUST Kumasi Ghana

• LSTM, LSHTM and Imperial, UK

• CDC, US