ROLL BACK MALARIA- MALARIA IN PREGNANCY WORKING GROUP
18th ANNUAL MEETING
July 12-13, 2016, NAIROBI, KENYA

EXECUTIVE SUMMARY & FULL REPORT
Executive Summary:
The 18th Roll Back Malaria- Malaria in Pregnancy (MIP) Working Group (WG) meeting was held as part of a joint meeting with the Malaria in Pregnancy Consortium (MIPc) from July 11-13, 2016 in Nairobi, Kenya. The meeting was organized in collaboration with the MIPc, the RBM partnership, The Global Fund, Jhpiego and the USAID supported Maternal and Child Survival Program.

The objectives of the meeting were:
1. Present and discuss best practices for scaling up prevention, including IPTp3 and ITN interventions, in different country contexts.
2. Review and discuss approaches for effective case management to advance MIP programming and RMNCH related programming.
3. Present and discuss strategies for integration between MIP and RMNCHA platforms with a focus on the prevention and case management of malaria in pregnancy.
4. Present and discuss key malaria in pregnancy updates and tools from partners.
5. Outline work plan priorities and future actions to be taken to accelerate MIP programming and achieve global targets.

These objectives were achieved through a diverse list of presentations, building upon the research presented during the first 1.5 day MIPc meeting. Speakers included NMCP and Reproductive Health MOH country representatives who shared their country experiences with MiP targets and interventions.

Participants:
Forty three participants made up of technical and programmatic leaders, donors, and researchers included: World Health Organization, Global Fund, President’s Malaria Initiative, Jhpiego, CDC, ISGlobal, London School of Hygiene and Tropical Medicine, Liverpool School of Tropical Medicine, Malaria in Pregnancy Consortium, the Maternal Health Task Force at the Harvard TH Chan School of Public Health, Medicines for Malaria Venture, Tropical Diseases Research Center, the Malaria Consortium, Institut de Recherche pour leDéveloppement, KEMRI, Imperial College of London, the World Bank, Johns Hopkins University, and National Malaria Control Program and Reproductive and Maternal Health Program delegates from Kenya, Tanzania, Malawi, Mozambique, Ghana and Zambia.
KEY MESSAGES FROM THE MEETING:

- The Roll Back Malaria Global Call to Action to Increase National Coverage of Intermittent Preventive Treatment of Malaria in Pregnancy for Immediate Impact helped to elevate awareness of and prioritization for accelerating actions to increase coverage of IPTp, among global and country level stakeholders. The MiP WG remains committed to supporting these efforts and recognizes the anticipated launch of the WHO ANC guidelines as an important opportunity to reinvigorate country momentum.
  - The WG will work with countries to review progress to date (since the WHO policy change for IPTp, 2012) and remaining challenges with IPTp uptake, ITN use and case management for pregnant women.

- Tracking coverage of IPTp uptake remains a consistent challenge across countries. The denominator definition - ‘eligible women’ for IPTp is a core factor.
  - The WG will work closely with WHO and the RBM MERG to develop a short country brief that will support countries in applying, at facility and national level, all WHO MiP supported indicators.

- Country programs shared diverse perspectives and successes. Key commonalities include pervasive SP stock-outs at central and peripheral levels, and deployment of strategies for increasing service utilization including various community-targeted interventions.
  - The WG recognizes that many countries are making great strides to accelerate MIP but many of these efforts have not yet reached scale including full coverage. The review process with countries (see above) will help to identify what’s working, what’s not and what remains to be done.

- There are clear synergies between WHO’s global strategy for Women’s, Children’s and Adolescents’ Health and WHO’s Global Malaria Program efforts to accelerate efforts to control MiP. The intersection of these efforts is antenatal care and positions countries and global partners to leverage comprehensive support that will lend to better health outcomes for women and their babies.

- Advancing MiP programming and attaining full coverage requires recognition and support for the ‘vulnerable of the vulnerable’. This includes adolescents, women living in rural areas, HIV+ women as well as women of reproductive age, who should be sleeping under an insecticide treated bed-net so that they enter pregnancy protected from malaria.

- Partner-developed tools to facilitate the implementation of quality MiP services were presented, including the toolkit to improve early and sustained IPTp, the case management job aid, and the MiP Advocacy Guide for National Stakeholders.
  - These tools, in addition to other WG advocacy tools, will assist in key efforts to support strengthened implementation of MiP interventions at country-level.

- The WG recognizes that to attain coverage, community interventions that both promote and support services are essential going forward. These efforts are building now in countries like Burkina Faso and are expected to expand in new countries in the next 12-18 months.

- WHO RHR has led the process and updating of the WHO ANC guidelines. An overview of these guidelines was presented to the WG. The WG provided feedback to ensure inclusion of key MiP prevention measures, including promotion of bed-nets and ensuring the promotion of a visit schedule that allows for IPTp1 uptake at 13 weeks.
Illustrative Priorities identified for WG action 2016-2017:

The MiP WG identified multiple priorities to support the acceleration of MiP action. Through September the WG members will finalize the identification of priorities for the WG work plan. Below highlights some of the priorities discussed.

- Policy, including supporting the roll out of the updated WHO ANC guidelines and implementation of sub-national MiP policies.
- Advocacy, including continued promotion of the Call to Action and development of strategies and guidance on increasing uptake of critical MiP interventions among target populations
- Tools and products, including roll-out of toolkits and job aides to improve IPTp uptake and appropriate case management of malaria in pregnancy
- M&E, including improved guidance on application of MiP indicators for use in programs, and a potential review of country progress since the 2012 IPTp policy revision
- Coordination and collaboration, including continued engagement with relevant partners and SRNs.
DAY 1
Opening Session: Welcome and Introduction, Dr. Mangiaterra & Ms. Roman
Welcome and Introductions
Review of agenda and meeting objectives and expected outcomes
WG Priorities and Work Plan Priorities and Achievements

Dr. Mangiaterra reviewed the meeting agenda and the following meeting objectives: (i) present and discuss best practices for scaling up prevention, including IPTp3 and ITN interventions, in different country contexts, (ii) review and discuss approaches for effective case management to advance MIP programming and RMNCH related programming, (iii) present and discuss strategies for integration between MIP and RMNCHA platforms with a focus on the prevention and case management of malaria in pregnancy, (iv) present and discuss key malaria in pregnancy updates and tools from partners and (v) outline work plan priorities and future actions to be taken to accelerate MIP programming and achieve global targets.

Ms. Roman summarized the purpose and areas of focus for the Working Group. She also highlighted some of the key achievements of the 2016 work plan at mid-year:

Global Events:
- Partner meeting at ASTMH 2015: used this as an opportunity to share key products with WG members as well as hear from country representatives about their priorities for MIP programming.

Advocacy:
- Development of tools and strategies to highlight the importance of IPTp-SP and reduce confusion at the country level about the use of IPTp-SP (i.e.: MiP Infographic)

New Products and Tools:
- Case management aid as well as tool to determine gestational age for early uptake of IPTp

Policy Development and Promotion:
- Input to the WHO ANC guideline development

Innovation:
- With support from the Bill and Melinda Gates Foundation, ISGlobal led a review process across sub-Saharan Africa to assess country readiness to implement community IPTp.

Session: Snapshot: Global Priorities in MiP

Presentation: From MDGs to SDGs: Maternal and Newborn Health Priorities of the WHO
Maurice Bucagu

WHO’s global strategy for Women’s, Children’s and Adolescents’ Health is threefold:
1. Survive: End preventable deaths
2. Thrive: Ensure health and well-being
3. Transform: Expand enabling environments

The global strategy for 2016-2030 includes new approaches/focus including the following:
- Equity, Universality, Adolescents, Life-course approach, Multi-sector approach
- The targets to be achieved by 2030 under each of the goals are primarily drawn from the targets
for the SDGs.

- They build on globally agreed goals and targets of specific strategies and action plans, many of which have been endorsed by Member States in the World Health Assembly in recent years.
- These targets are ambitious, but feasible. They cut across the health sector – for example, working closely with the HIV, TB, malaria and noncommunicable disease communities. They also require concerted action across sectors – for example, with nutrition, education, and environmental actors.

The WHO approach will also focus on:

- Strengthening the maternal death surveillance and response system
- Harnessing the power of families and communities
- Building linkages between MNH and Malaria programs and strengthening the integrated service delivery of the MNH platform

Why it is essential to build on the linkages between MNH & Malaria programmes

Key effective interventions for MNH/Malaria are:

- Preventive Interventions—Antenatal Care
- Treatment Interventions—Anti-malarials (ACTs, SP-IPTp)

In summary, the WHO priorities for scaling up the quality of MNH interventions are as follows:

- Survive, Thrive and Transform
- National Leadership and Commitment
- Universal Health Coverage
- Quality of MNH Care
- MNH & MiP Integrated Responses

Presentation: Malaria in Pregnancy Priorities of the President’s Malaria Initiative

Daniel Wacira

PMI works in 19 focus countries in sub-Saharan Africa as well as 3 focus countries in the greater Mekong sub-region. Over the last decade, significant progress has been made in PMI focus countries in reducing the malaria burden. In PMI focus countries, reductions are seen in all-cause mortality rates of children under five years of age. Success in part is due to the scale-up of proven, cost-effective, and life-saving
malaria control interventions, namely insecticide-treated mosquito nets, indoor residual spraying, intermittent preventive treatment for pregnant women, diagnostic tests, and highly effective antimalarial drugs. In regard to malaria in pregnancy and the use of IPTp, of the 19 PMI focus countries in Sub-Saharan Africa, 17 countries have IPTp policies. The two exceptions are Rwanda and Ethiopia.

Presentation: UNICEF’s Priorities to Combat Malaria in Pregnancy

Marie-Reine Fabry

UNICEF’s actions to address gaps in the “continuum of care” and improve service delivery for mothers and their children against malaria;

- **Strengthening the community platform** *(Demand generation, social accountability, service delivery, social inclusion and reduction of financing barriers)*
- **Quality of care:** Scaling up an **appropriate & focused** antenatal care package
  - Beyond focusing mainly on coverage, it is important to also consider **quality as an essential component of improving health systems**,  
  - Poor quality at facilities, perceived or actual, is now recognized as an important deterrent to care seeking and use.

  => Efforts to improve ANC need to include more sensitive metrics for monitoring progress not only of population coverage, but quality and patient satisfaction as well.
- **Equity:** Improving the quality of service provision means paying close attention to equity and advancing policies that help reduce disparities between advantaged and more vulnerable people. Poorer, less educated, and rural women have been shown to have lower coverage of antenatal care/IPTp and experience more discrimination and disrespect in facilities as well.

**Priorities to address MIP challenges**

- Ensure vulnerable populations are the priority even within the context of universal coverage
- Ensure a true continuum of care from health facilities to the periphery and community level
- Improve governance and decentralized management (E.g. Results based financing)
- Build capacity among providers at both facility and community level (retraining...)
- Dedicated financing for MIP, especially free ANC & SP
- Resource Mobilization
- Develop strategies for HR training and retention
- Effective mobilization for technical assistance to countries
- Procurement and supply chain strengthening
- Improving data quality & gathering (M&E)
- Integration of malaria control into health systems, particularly at district level

Presentation: Global Fund: Investing to End Epidemics

Viviana Mangiaterra

Prevention and treatment of malaria in pregnancy as a Global Fund priority

**Key disease-specific components of MiP programming**

- IPTp
- LLINs
- Case management
Key HSS components of strengthening ANC

- Ensuring non-HIV, TB and malaria commodities (e.g., iron, folic acid) use the same supply chains
- Ensuring information systems capture service delivery and health outcomes beyond HIV, TB and malaria
- Ensuring health workforce capacity to deliver integrated services at ANC (e.g., MiP, PMCTC, family planning, TB screening, etc.)
- Supporting high quality service delivery, including laboratory strengthening
- Addressing demand-side barriers through community empowerment and engagement

Global Fund’s Strategic Framework 2017-2022:

- Maximize Impact Against HIV, TB and Malaria
- Build Resilient & Sustainable Systems for Health
- Promote and Protect Human Rights & Gender Equality
- Mobilize Increased Resources

Promote and protect human rights and gender equality

1. Scale-up programs to support women and girls, including programs to advance sexual and reproductive health and rights.
2. Invest to reduce health inequities including gender- and age-related disparities.
3. Introduce and scale up programs that remove human rights barriers to accessing HIV, TB, and malaria services.
4. Integrate human rights considerations throughout the grant cycle and in policies and policy-making processes.
5. Support meaningful engagement of key and vulnerable populations and networks in Global Fund-related processes.
6. Strengthen and align to robust national health strategies and national disease-specific strategic plans
7. Strengthen financial management and oversight

Integrated service delivery:

New strategy supports reproductive, women’s, children’s and adolescent health (RMNCAH) and platforms for integrated service delivery

Priority Efforts/Initiatives

1. Ensure RMNCAH integration approaches are firmly part of application materials, guidance and tools.
2. Strengthen knowledge of Secretariat and GF guidance on RMNCAH and integrated platforms during development of applications, grant negotiation and implementation.
3. Scale up integrated approaches, including advocacy with governments, by leveraging RMNCAH-related technical partners’ expertise and resources, including UNICEF, UNFPA and Global Financing Facility.
4. Develop a program quality initiative in collaboration with academic institutions to improve quality of integration of HIV, TB and malaria into ante-natal and post-natal care at primary care.

Innovative partnerships are necessary to align investments for RMNCAH

- MOUs signed with UNICEF and UNFPA in 2014
- World Bank RBF Collaboration

Presentation: Global Priorities: UNITAID

Alexandra Cameron

UNITAID is part of the global response to HIV/AIDS, tuberculosis (TB) and malaria. It plays a strategic role in enabling others (Global Health partners and implementers) to “do more with less”. UNITAID
plays a unique and catalytic role transforming game changing ideas into solutions for real world problems by: (i) connecting the upstream (academia, industry, and partners) and the downstream (populations in need) and (ii) investing in innovative solutions that match identified needs and expand the tools accessible to donors, countries, communities and other purchasers in resource-limited settings. In this context, UNITAID’s role is to enable faster access to new, better and more affordable medicines, technologies and systems for those in need. UNITAID’s interventions can target different elements of the value chain, e.g. price reductions, improvements in quality and supply, and compilation of data or evidence to enable use of optimized tools. UNITAID’s success is commensurate to the scale-up and sustainability of its projects.

In November 2015, the UNITAID Executive Board endorsed expanding access to chemoprevention in pregnant women as a strategic area of focus (“area for intervention”). Areas of intervention allow the UNITAID Secretariat to launch related Calls for Proposals for a period of about 2 years. A first Call for Proposals on IPTp was launched in November 2015, with two areas of focus: 1) support adequate supply of quality SP, including adapted packaging; 2) generate evidence for innovative approaches to delivery and demand generation, to support global guidance & scale-up. Selection of successful proposals is currently being finalized, with grant development expected to start in the coming weeks.

Discussion:
There is a linkage needed with adolescent health in order to start key interventions prior to women becoming pregnant.

- **Tanzania:** adolescent health is a special group cutting across multiple sectors so designing a program is a challenge and adolescents tend to not visit facilities until they are sick. Tanzania has program of adolescent friendly services that is mainly available in health facilities and in schools. However, for those in schools the challenge is on the capacity of teachers to deliver sexual education to students. Moreover, Tanzania does not have a properly designed program to reach this population that is out of schools thus presenting many policy challenges regarding sexual education, etc.

- **Kenya:** In Kenya there are youth friendly centers set up at some of the hospitals and ideally CHV's can share information at the community level to raise awareness of these centers. Centers are staffed by nurses who provide care. Some of the CHVs are also adolescents so it is a form of peer to peer mentorship to get them to the facilities for proper care. The youth centers seem to be most utilized when multiple services are offered, not just health. The health workers often go there outside of working hours, such as on the weekends, when the youth are present for other purposes/activities.
  - In the Kenyan context it’s not access that is the problem, but actually it’s use. For example with ITN use sometimes it is a problem of lack of sleeping space in rural settings.

- **Malawi:** In Malawi there are youth friendly services within the hospitals. They are run by nurses. Malawi also has problems with the Ministry of Education in regards to family planning. They have tried to work hard with the Department of Population Services to help the MOH in developing family planning services.

- **Mozambique** has similar issues. They have tried through the Ministry of Health in collaboration with the Ministry of Education to develop proper programs for adolescents, but there are similar policy issues in implementing this at the schools.

- **Zambia** provides youth friendly health services, but the link is weak and needs to be strengthened. There are new initiatives such as ITN distribution through schools to target adolescents, but additional strengthening is needed.

- From the Global Fund perspective, women and girls will be the priority for the next cycle. They have been piloting programs for adolescents in South African and Zambia to use as an
opportunity for cross-cutting messages. A big priority is to keep girls in secondary education and how to provide health services outside of the health sector. The Global Fund is exploring new partnerships with UNICEF and UNFPA which both have strong experience in adolescent health. This conversation is really linked with the necessity to address the most vulnerable, most hard-to-reach populations and we need to think about increasing coverage in these populations with MiP programming. If we don’t do this, it will be very difficult to increase coverage.

Session: Snapshot: Where are We in Achieving Targets and Increasing Coverage for IPTp3 and ITN Interventions: Country Experiences?

Presentation: Country Updates on Malaria in Pregnancy in Kenya
Peter Njiru & Elizabeth Washika

Kenya IPTp1 Policy: Administer SP as IPTp with every scheduled visit after quickening in malaria endemic areas at intervals of at least 4 weeks

14 Malaria Endemic Counties:

Kenya has four malaria epidemiological zones a) Lake and coast endemic b) Highland epidemic prone c) Arid and semi-arid seasonal transmission d) Low risk. Good policy support and guidance has enabled availability and dissemination of sound policy documents to health care workers and education of the community health volunteers has facilitated scaling up of effective malaria control interventions over the last decade. This led to the country to start moving towards achievement of set national targets. Although the coverage rates of interventions are below the national targets there has been a steady increase in uptake of MIP interventions. Between 2007 and 2015, IPTp2 coverage increased by 44% from 22% to 56% and ITN use increased by 22% from 57% to 79%; IPTp3 increased by 31% from 7% to 38%. Kenya will use IPTp3 to monitor IPTp uptake.

These coverage rates freed a large proportion of the population from the effects of malaria evidenced by reduction of prevalence rates from 38% to 27% between 2010 and 2015 in the lake endemic area. The achieved coverage rates are maintained by continued training of health care workers on MIP guidelines, adequate supply of SP and promotion of MIP at community level by community health volunteers.
Between 2014 and now, capacity of malaria endemic counties has been built to provide MIP services by orienting total of 5,074 HCWs and 6,414 CHVs and regular supply of SP. The CHVs have reached 58,877 pregnant women with MIP messages to sensitize them to receive IPTp early in second trimester at ANC. Implementation of MIP interventions has not been without challenges including frequent health commodity stock-outs following devolution of health services to county government and poor data management practices. There is a concern in the long term on major risk in sustainability of achieved targets given that currently health commodity security is heavily dependent on donor support. However, Kenya is among the 4 frontrunner countries for GFF to support RMNCAH interventions and this could be looked at as a possible way towards sustainability.

**Discussion:**

Kenya only gives IPTp in endemic areas. In 1998 Kenya worked throughout the country, but then they realized that they didn’t need women in low-risk areas to take SP. When they did a program review they revised all of the documents and then disseminated them to counties. In low-risk seasonal areas they do not include those facilities on the SP distribution list. There have been some issues as the money from the government is not always enough and they are expecting counties to procure SP on their own. So some counties in low-risk areas are securing their own SP even though it is not part of the guidelines to do so. The IPTp target of 80% is a global target, not a country specific target.

**Presentation: Tanzania Experiences**

Georgina Msemo

**Tanzania IPTp1 Policy:** *IPTp1 is given at 14 weeks and then for every visit after with at least a 4 week interval, as per policy guideline adopted in 2014*

**MiP Prevention Interventions:**

![Graph showing ITN ownership, U5 slept under LLIN last night, Pregnant slept under LLIN last night, and IPTp2 over years 2005 to 2015]

Major key points for policy process and actors for policy change for MiP were:

1. Policy change usually follows the normal formed working groups within the health system. It begins within the Malaria Technical Working Group, specifically the Case Management Subcommittee. Thereafter it has to be discussed within the National MiP Task Force members including RCH, NMCP, MSD (Medical Stores Department) and Implementing partners. After
consensus being reached, then it is discussed within the Malaria Advisory Committee for Case Management that is chaired by Director of Curative Services before being taken to the high level management of the Ministry. In the high level management decision makers it is important for them to have sound data preferably from research findings within the country for buy-in. The issues of the implementation of new strategies need to be discussed as well as what it will cost for the country. When the Ministry management level is convinced it goes into the TC SWAP TWGs for Donors and Partners for resources mobilization, data capturing, monitoring and evaluation process before endorsement.

2. If there is policy issues like increasing doses of like SP this goes like a circular without going through TC SWAP TWG.

Major challenges for implementation according to level:

1. **National level** - Issues of Funding for a new strategy in terms of commodities needed for a change, preparing for guidelines, training of health care providers

2. **Council level** - Issues on how to change the ANC programming to capture the new change including extra workload to health care providers, issues of integration with other services, implementing partners willingness for the change

3. **Health care providers** - issues of capacity building for the change, change of behavior of provider to deliver appropriate services accordingly

**Discussion:**
Regarding the high SP resistance in Northwestern Tanzania, Tanzania needed a sound data to convince the government to change the drugs used in those areas.
The Integrated Logistic system data (ILS) data comes through DHIS and it is possible to visualize the stock status required within certain facilities. It helps with forecasting/surveillance to reduce stock-outs. Malaria testing for pregnant women is not just when they are sick, it is routine testing. When a woman books at ANC she is tested with mRDT first. If she is infected, she is given full treatment before being given SP.
There are striking regional differences in coverage. In Kilimanjaro, for example, there is strong early utilization of services and very good access, leading to higher IPTp2 and IPTp4 uptake rates.
Given that Tanzania is the only country doing SST and that there are areas with high SP resistance, it would be very valuable for Tanzania to look at the data they have to see how this is affecting health outcomes, i.e.: changes in low birth weight and MiP prevalence rates since the introduction of SST. The mRDT data from first time mothers when they first appear at the ANC, when captured, could be used to also monitor the prevalence of infection in all women of child-bearing age from across the country at all times of year. This would be an incredibly useful resource for research and operational questions to do with all malaria interventions and the trajectory of malaria transmission and burden within the country.

**Presentation: Malaria Control in Pregnancy: Progress towards achieving targets and increasing coverage for IPTp3 and ITN interventions in Malawi**
Shadreck Mulenga & Diana Khonje

**Malawi IPTp1 Policy:** Malawi has been promoting a policy which emphasizes that pregnant women receive at least 2 doses of IPTp-SP from 16 weeks gestation

Malawi has about 17 million people out of which 5% are pregnant women. MIP continues to be a major public health problem in Malawi which has MMR of 675 per 100,000 live births. About 38% of women are anemic and up to 40% of women pregnant in their 1st or 2nd pregnancies have placental malaria at
delivery. MIP strategies for Malawi include IPTp, LLINs, IRS (in selected districts) and effective case management.

Malawi began implementing IPTp in 1993. To date SP has remained the only drug of choice. However, due to reported malaria parasite resistance to SP, Malawi conducted a study to determine the effectiveness of IPTp with SP in the context of reported resistance. The results demonstrated that there was declining effectiveness of SP as compromised by the high parasite resistance. However, the study also noted that there was increased effectiveness with increased number of doses taken.

The study results, together with recommendations from the WHO, informed the Government of Malawi to adopt a new policy in 2014 promoting 3+ doses. Apart from advocating for 3+ doses during pregnancy, the new policy also emphasizes the need to increase LLIN utilization coverage amongst the pregnant women. Throughout Malawi, IPTp has been provided through directly observed treatment (DOT) during antenatal clinics whilst LLINs have been provided for free during both antenatal and under five clinics. Malawi also provides universal coverage of LLINS to the larger population through mass distribution campaigns conducted every 3 years.

Since the introduction of the new policy, Malawi has recorded increased coverage in both IPTp 3 and LLINs. The LLIN coverage is expected to increase since Malawi has just completed conduction of a mass distribution campaign of the LLINs in May, 2016. Malawi also intends to explore the feasibility of community IPTp to increase further the coverage of IPTp3 uptake in a bid to reach at least 80% coverage.

<table>
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<th>Indicator</th>
<th>Baseline 2010 MIS</th>
<th>2012 MIS</th>
<th>2014 MIS</th>
<th>2015/16 MDHS</th>
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<td>% of pregnant women who have access to and receive two or more doses of IPTp for malaria prevention</td>
<td>60.3</td>
<td>55</td>
<td>63</td>
<td></td>
</tr>
<tr>
<td>% of pregnant women who have access to and receive three or more doses of IPTp for malaria prevention</td>
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<td>No data</td>
<td>12.6</td>
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<tr>
<td>% of households owning at least one ITN</td>
<td>58.1</td>
<td>55</td>
<td>70</td>
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<tr>
<td>% of pregnant women sleep under an ITN</td>
<td>49.4</td>
<td>51</td>
<td>62</td>
<td></td>
</tr>
</tbody>
</table>

Discussion:
Discrepancies in IPTp coverage between different regions are attributed to the literacy levels. In particular in the northern region where there are high literacy levels, there is also high coverage of IPTp. To try to mitigate the repurposing of nets Malawi has engaged several partners, including legal partners since using mosquito nets for other purposes is illegal in Malawi. However, enforcement is an issue. Malawi would like it to be more punitive.

Malawi has also engaged a fishing NGO and is working to get the community involved, using the argument that using nets for fishing is toxic to aquatic life because of the chemicals found in ITNs. The structures for monitoring the fisheries show that they are making strides in reducing the repurposing of nets for fishing.

Malawi currently does not have clear guidelines for the disposal or recycling of old nets. They have defined very well what repurposing means and what misuse means. The focus is on the misuse of new nets as this is particularly worrisome.

In Malawi, there is a pilot in a few districts where money is given to those that are attending ANC in the 1st trimester. ANC is free throughout Malawi. Malawi developed the registers with the HIV/AIDS
Department so there are two programs using the same register. Women come to ANC in large numbers, but writing on the register that a woman is pregnant depends on whether the health provider feels something indicating the woman is pregnant. They have requested pregnancy test kits to determine pregnancy early, but they don’t have enough tests. When women come and feel they are pregnant, even if the health provider hasn’t felt anything, then they should still be registered on their ANC card as being pregnant, but this is not happening.

**General Discussion on country updates for IPTp3 and ITN coverage:**
Survey vs. Surveillance data: Using routine DHIS data to see progress over time, rather than at specific points in time.

- **Tanzania** gets data from the scorecards and can see in the system how they are doing at every level. Graphs are used to see where they are faring well and where the challenges are.

You can take the donkey to the well, but you can’t force it to drink. How did countries get people to utilize services?

- **Malawi** has community maternal health interventions in most districts and a surveillance system in the communities to encourage women to go to the health facility after missing a period. Health workers have been very helpful in getting women to attend ANC. Malawi has also used Ministers of Parliament to encourage this. Malawi also allows women to attend private clinics and have the government pay for the services there.

- **Kenya** makes use of social mobilization to make sure that whenever there is a mobilization activity that MiP is also promoted to raise awareness.

- **Tanzania** has several interventions in place to get women to attend early ANC. They are moving from having CHW volunteers to paid CHWs with an RMNCH package that would include testing for malaria. They are also working closely with the Health Promotion Section which does a lot of BCC. They also use a lot of avenues from the community. If communities are well engaged, then the delivery is very good. In one village they were forcing families to pay a fine if there was a pregnant woman not accessing ANC services and this village has not had maternal deaths for a very long time.

- **Ghana** is providing ANC for free and using BCC to address ANC utilization.
DAY 2

Session: Snapshot: Where are We in Achieving Targets and Increasing Coverage for IPTp3 and ITN Interventions: Country Experiences, continued

Presentation: Mozambique Malaria in Pregnancy
Baltazar Candrinho & Marcelino Adui

Mozambique IPTp1 Policy: From July 2014, IPTp-SP is to be administered from 13 weeks with an interval of 4 weeks until birth

Malaria Prevention- Coverage (MIS 2015)
- 66% households with at least one LLIN
- 47.9% of children under 5 years who slept under a LLIN in the last night
- 1.5 Average of LLINS per households
- 57.6% Pregnant Women who slept under a LLIN in the last night
- 79% Proportion of pregnant women who slept under a LLIN in the last night

Mozambique Malaria LLIN National Policy: The Ministry of Health (MoH) ensures that pregnant women receive a free mosquito net treated with long-lasting insecticidal (LLINS) during Antenatal Care

IPTp Coverage:
- In 2012 there was disruption of SP across the country due to logistical problems.
- In the year 2013 the amount of SP was re-established in all provinces and orientations were given to restart the activities.
- These activities are controlled by the Case Management team in NMCP in coordination with the Department of the mother and child.
IPTp Coverage in Mozambique 2011-2015:

- Delay in disbursement of funds for acquisition of SP
- The low capacity on logistics for anti-malarials at all levels
- Lack of control in the private sector
- Qualified human resources insufficient
- Stocks-outs of SP and LLINs in HFs
- Difficult to complete 4 ANC visits
- Poor knowledge of the standards in the handling of IPTp in HIV positive women
- Lack of IEC material in health facilities

Discussion:
Mozambique has two ways to distribute ACT, either through a kit or through a requisition, but for SP the only way is through a requisition so it is much easier for ACTs. SP stock outs in 2012 were a national stock out and this was a problem with logistics and the supply chain, but UNICEF and the government worked to rectify this and now Mozambique has a drug supply which will last through 2017.
UNICEF, the Global Fund, etc. all use the same channels for distributing drugs. All drugs go through central stores in Maputo, but the problem is at the facility level where they are not using the database so it’s difficult to know what the status of drug supplies is at the facilities.
Mother and Child Department changed the tools and they collect information from 4 ANC visits which is helping to encourage women to come earlier to ANC, but it is still an issue to get women to come early enough to take SP at 13 weeks.
In Kenya, they used to set targets based on what they thought the country would achieve, but this had shortcomings. They changed the targets to the global targets so they are able to identify the gaps in resources to achieve those targets.
Mozambique is waiting for WHO to come evaluate their malaria programs and based on this review they will develop the new strategic plan and the targets.
Zambia IPTp1 Policy:
*Surfhoixine-pyrimethamine (SP) is the medicine of choice for IPTp. One adult treatment dose (3 tablets) is given monthly after quickening (16 weeks following the last menstrual period. The same adult treatment dose of SP (3 tablets) should be given monthly (at least 4 weeks apart) during the second and third trimesters at every scheduled antenatal care visit. The total number of doses recommended for the entire duration of pregnancy is three or more doses, under direct observation when possible.*

In Zambia, malaria is one of the top ten causes of morbidity and mortality especially in pregnant women and children. Under five-year-old children and pregnant women are the most vulnerable, especially those in more remote and impoverished areas, with 35-50 percent of under-five mortality and 20 percent of maternal mortality attributable to malaria. An estimated 45% of health facility visits are due to malaria in Zambia.

Malaria in pregnancy (MIP) is delivered as a package under the guiding principles of “focused antenatal care” and includes: Treatment of malaria cases in pregnancy, Provision of IPT with SP, Provision of ITNs routinely, IEC/BCC, Folic acid supplementation and Routine surveillance of MIP. These interventions are in addition to interventions for HIV, family planning, new born care, immunization etc.

Policy Making Process and Actors
The NMCC have TWGs for each service delivery area. MiP is the preserve of the Case Management TWG (CM TWG) which comprises of various stakeholders including:

- MoH (NMCC, Child Health Unit, Reproductive Health, Accounts and Procurement)
- Partners (PMI, WHO, MACEPA, Global Funds, Unicef)
- Research institutions (TDRC, MACHA, UNZA, regional and international)
- Private sector

The role of the CM TWG is to guide and oversee policy implementation. For the purposes of monitoring and planning, data on Malaria in pregnancy is collected through the National Health Management...
information system and the following are the data elements routinely collected: All suspected MIP cases, All clinically diagnosed MIP cases and All confirmed MIP cases.

**Intermittent Preventive Treatment in Pregnancy (IPTp) in Zambia**

The Zambian Government adopted IPTp from World Health Organization (WHO) to treat pregnant women from malaria. There has been a steady increase over the years in IPTp2 and IPTp3 uptake. This has been attributed to Health facility staff training, community based “safe motherhood action groups (SMAGS)” who conduct community based sensitization of women on the importance of institutional delivery and antenatal care, Communication strategy to address behavior change issues, Mentoring and supervision and data audits of routinely reported data.

**Long lasting Insecticide Treated Bed nets for MiP Programs**

In order to achieve high LLIN coverage, various delivery methods have been adopted which include: Mass distribution, Commercial distribution, and a pilot on continuous distribution through schools will be conducted this year. During antenatal and under-five care, 1 ITN free is provided for each pregnancy at first antenatal visit and 1 ITN at 8 months for the baby at time of measles vaccination.

**Experiences of Implementing MiP Programs and policies in Zambia**

- MIP is high on the government agenda – Strong political will
- ANC is an active platform for ITN distribution, IPTp provision and general health education
- CHWs play a role of additional screening as they refer mothers at any stage of pregnancy
- SMAGs are actively involved in community health education and encourage IPT access
- Mothers benefit from the general implementation of IRS
- Capacity building at District and Health facility levels through technical supervisory support contributes to MiP
  - Mentorships and trainings/orientations
  - Performance assessment

**Potential challenges for MiP policy change and implementation of new policies – national programme perspectives**

- With most mothers initiating ANC late this is a challenge to ensure before they deliver they take the third dose
- Distances to health facilities--despite Government efforts to expand infrastructure, and building new hospitals and health posts, some areas of our country still have substantial distances and huge catchment areas around a facility that pose challenges for mothers to walk to the facility for ANC and ultimately have all the IPT doses or be treated when they have MIP
- SP resistance---since 2000, documented resistance of over 5% and this has been increasing steadily to over 25% in recent studies
- Low literacy levels---general issue in the country for both men and women and hence need to have more health education and promotion programs coupled to IEC
- Challenges with reporting completeness, timeliness etc., may lead to underestimation of needs
- Training costs for health workers

**Discussion:**

The rural areas in Zambia are doing slightly better than the urban areas in IPTp uptake as of 2015. Zambia is one of the highest IPTp uptake countries, but there haven’t been major increases in uptake levels of IPTp2 in the last 6-8 years. There are further efforts to improve their health systems including the infrastructure with a huge investment in expanding health outposts. With these additional facilities, they hope there will be increases in IPTp uptake. Training and mentorship will also help increase uptake, but addressing access issues hopefully will contribute to an increase in IPTp uptake. In addition, there are
efforts to reinforce treatment guidelines. Zambia is trying to determine where the remaining 20% is and what can be done differently to reach this part of the population that is not yet receiving IPTp.

In the schools there are two models. One model targets older children in boarding schools to ensure they have nets. The second is to pilot continuous distribution in younger children, grades 1 and 4, and this will be done in 4 districts in the high burden area. Teachers are involved in the distribution and provide education around how to use the net. Zambia is still working on how to operationalize this. In 2017 Zambia will do a mass net distribution and that will be followed up by additional continuous distribution efforts.

Zambia’s private sector and mission hospitals working on health care delivery are part of the stakeholders under the case management technical working group. They are required to submit their health data in the HMIS and they are involved in all of the processes behind the policy shifts in the country. 95% of Zambians go to the public sector for health care.

Session: New MiP Tools & Resources from Partners

Presentation: Toolkit to Improve Early and Sustained IPTp Uptake & Case Management Job Aid, Maternal and Child Survival Program

Elaine Roman

**Toolkit to Improve Early and Sustained IPTp Uptake:**
WHO policy promotes IPTp1 at 13 weeks. This ensures early protection, clearing of malaria parasites with IPTp-SP, which is essential given the effect of MiP early in pregnancy. However, the vast majority of providers do not have the confidence and skill to accurately determine pregnancy at 13 weeks and it is known that many countries default to giving IPTp1 at quickening. Receiving IPTp1 at quickening can occur as late as 21 weeks in first pregnancies, which puts the mother and her baby at unnecessary risk for 8 weeks. Jhpiego, through MCSP and PMI have created a toolkit to improve early and sustained IPTp uptake. The toolkit contains the following:

- Algorithm- Step by step process from patient history, to exam, to provision of IPTp and counseling as part of routine ANC visit
- Technical Summary- WHO guidance and background on gestational age assessment
- Power Point- Orientation on how to determine early gestational age clinically
- Toolkit Implementation Guide- Guidance on how, when and where to use guide

Currently field testing is being done to evaluate the utility and clarity of the toolkit among multiple cadres of ANC and OPD providers in Mozambique and Madagascar. The toolkit is expected to be finalized and disseminated by the end of this calendar year.

**Case Management Job Aid:**
Case management in pregnancy is often not standardized within or across countries. Correct malaria case management of a woman of reproductive age requires determining if she is pregnant. If pregnant, it is important to provide treatment according to trimester and ensure ongoing ANC and use of LLINs and IPTp. Jhpiego, through MCSP in collaboration with PMI, developed a Case Management Job Aid to help providers correctly diagnosis and treat malaria among women of reproductive age. It includes a flow-chart on the steps for diagnosis and treatment of malaria, as well as guidance on the signs and symptoms and medications to use, categorized by uncomplicated and severe malaria and by trimester of pregnancy. It is being field tested in Nigeria to better understand usefulness and clarity of job aid among multiple cadres of ANC and OPD providers.
The idea is that both tools can be adapted by countries according to national guidelines and the plan is to eventually roll them out in additional countries. The job aid is expected to be finalized and disseminated by the end of this calendar year.

**Discussion:**
Burkina Faso was not able to do the field test for the Case Management Job Aid, but they are very interested in the tool. The Maternal and Child Survival Program (MCSP) has asked them for feedback in a very informal way as MCSP would like to get input from a Francophone country. Both tools will eventually be available in English, French and Portuguese.

For MiP specifically there is a paucity of information for providers at the facility level so for both tools MCSP promotes that these are part of routine services. They are not meant to be standalone pieces and should be integrated into routine service delivery.

When MCSP was conceptualizing the toolkit to improve early and sustained IPTp uptake, they kept in mind that ultrasound is the gold standard, but recognize that ultrasound is not widely available.

**Presentation: Malaria Game, Maternal and Child Survival Program**  
*Patricia Bentil & Kristen Vibbert*

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Hello Nurse, an interactive malaria game, will be used to supplement classroom learning for both midwifery and Community Health Nursing Students, totaling about 8000 in 38 midwifery schools and 12 community Health Nursing Schools between now and the end of 2017. Hello Nurse has numerous scenarios in malaria case management and prevention at the community, facility and hospitals levels, and it uses points and rewards to engage and motivate learners and showcase their expertise.

A situational analysis of most community health training facilities and midwifery schools in Ghana showed great need for practical courses to be supplemented due to the following:
- High student to tutor ratio (the average noted was 37 students to a tutor; ideal was 15 students to a tutor or even lower).
- Inadequate IT infrastructure (computers and skilled labor). The average was 22 students to a computer.
- Poor internet connectivity
- Poor storage of models and simulators in community health nursing schools, leading to broken down and unstable models. So none of the schools had a complete set of all models and simulators needed for practical trainings.
- More than 57% of the tutors had not received training in the last 4 years on the use of models and simulators.
- About 25% of students had personal laptops and 50% had android smart phones
- Most students learn and retain things better pictorially.

Hello Nurse was created by Jhpiego through MCSP with support from PMI, and in conjunction with Leti Arts which is based in Ghana and Kenya. The game is not a user guide, but rather a mobile platform learning tool for case management and malaria prevention at both the community and facility levels. It is currently being tested in midwifery and nursing schools in Ghana as part of pre-service education. Currently it is possible to collect data on who is using it and what scores they are getting, but there are ongoing discussions regarding what other data can be collected and how it can be used. Ideally it would be great to be able to tie the game to information on the school exams to encourage increased utilization. The plan is to eventually add additional components, such as an MiP module, but first additional testing is needed on the current version.

The game is an interactive platform in which the player is a nurse who can choose which situation she would like to undergo. At different stages through the game the nurse can gain points and badges by making the correct choices in how she interacts with the clients, what steps she chooses to make and what advice/diagnoses she provides. When the nurse chooses poorly then she has an opportunity to go back and choose the correct answer. Eventually she reaches the stage where there is a final exam and upon passing this the game ends. There are excellent graphics and sounds and the game can be downloaded directly from the Google Play Store onto any android device.

Discussion:
The game still needs to go through the testing phases in Ghana to update the technology so that it is as user friendly as possible. In addition, through the testing phase MCSP hopes to identify the data we can capture through the utilization of the game and how this can be used to identify gaps in learning. The hope is that once the tool is finalized, it can be adapted to other countries, with cultural updates and country specific technical aspects based on national guidelines.

Presentation: Malaria in Pregnancy Advocacy for National Stakeholders, Johns Hopkins Center for Communication Programs
Matthew Lynch

Successful advocacy is characterized by country-specific strategies based on solid technical grounds, and embedded within the social network of key decision-makers in endemic countries. One persistent challenge in advocacy is a lack of national-level advocates consistently working on the ground. The Malaria in Pregnancy Advocacy Guide provides guidance and tools for malaria and RMNCH stakeholders at the country level, particularly technical implementers, to advocate for the scale up of MiP interventions.

What is the MiP Advocacy Guide for National Stakeholders?
  ✓ A step-by-step technical implementation guide to conduct advocacy
MiP Accountability Tool to help track MiP interventions at the country level
Templates and worksheets

Advocacy designed to ensure:
- Countries are in compliance with the latest WHO guidance on MiP (2015, 2012).
- There are improvements in ANC platforms so there is a comprehensive package of MiP prevention and care.
- Resources are available to scale up MIP interventions at the national and local level.
- Investments in MiP interventions are maintained even as transmission rates decline.

MiP Advocacy Toolkit
This and other resources will be available as part of a comprehensive online MiP Advocacy Toolkit that will also include:
- MiP Infographic: Investing in Malaria in Pregnancy in Sub-Saharan Africa
- MiP Consensus Statements
- RBM Global Call to Action to Increase National Coverage with Intermittent Preventative Treatment of Malaria in Pregnancy

It is geared towards: Stakeholders focusing on malaria and RMNCH, who can advocate to key decision-makers at the country level for the scale-up of life saving MiP interventions. Includes:
- Country- and district-level government officials
- Implementing partners and advocates

The Guide has a 4 phase approach:

**PHASE I: ASSESS the MiP Landscape**
- Review Existing Data Sources and Resource Gaps
- Assess National Malaria and RMNCH Policy and Service Delivery Documents and Additional Malaria in Pregnancy Resources
- Identify MiP Advocacy Problems and Solutions

**PHASE 2: MAKE THE CASE with Messengers and Messages**
- Know Who Influences Malaria in Pregnancy Policies and Implementation
- Develop and Tailor MiP Advocacy Message
- Use Your Messages Effectively

**PHASE 3: IGNITE with MiP Partnerships and Opportunities**
- Form a MiP Technical Working Group
- Engage Implementing Partners and Civil Society Organizations
- Conduct Resource Mobilization with the Private Sector
- Identify and Develop Advocacy Opportunities for MiP
- Generate Media and Developing Op-Eds and Human Interest Stories

**PHASE 4: MONITOR AND EVALUATE MiP Advocacy**
- Develop SMART MiP Advocacy Objectives and Indicators
- Establish Reference Points and Targets
- Use the Malaria in Pregnancy Accountability Tool

Discussion:
Meeting participants feel that at the global level it is fine to have this tool in an electronic form, but at the country level it is helpful to have hard copies. They also agreed that this tool would be useful if translated into additional languages.

**Session: Expanding MiP Services in Coordination with GFF: Country Experiences**

**Presentation: Overview of the GFF: Country-powered investments for every women, every child**

*Erin Ferenchick*
GFF is a financing partnership in support of EWEC and country leadership. The GFF facilitates smart, scaled, and sustainable financing to help end preventable deaths in 63 high-burden countries by 2030.

GFF was announced in September, 2014 so there are two years of initiation and progress. Frontrunner countries are DRC, Ethiopia, Kenya and Tanzania. The GFF model is in early stages with second wave countries which include: Bangladesh, Cameroon, India, Liberia, Mozambique, Nigeria, Senegal, and Uganda.

The intention behind the GFF is that it is catalyst funding to bridge the funding gap for women, adolescent and child health. It attempts to leverage additional investments in RMNCAH to close the current gap of 33.3 billion to 7.4 billion. The combined effect of this would prevent 24-38 million deaths of women, adolescents and children by 2030. The approach of GFF governance at the country level is that the governments are driving the process and it is built on existing structures while embodying the two key principles of inclusiveness and transparency.

Discussion:
Countries develop the investment case and then key stakeholders and donors decide which parts of the case they would like to cover (i.e.: GAVI would choose to cover the vaccination activities). Within the Trust Fund, countries can leverage their IDA grant from the World Bank and the Trust Fund will match at an expected ratio of 1:4.

Civil Registration and Vital Statistics (CRVS) is a priority of the GFF and countries can include this in their investment case to draw upon money that has been earmarked specifically for CRVS.

Presentation: Kenya’s experience with the Global Financing Facility in support of Every Women, Every Child

Dr. Omar

- Kenya is one of the four GFF frontrunner countries. Other countries are: Ethiopia, DRC Congo and Tanzania
- Kenya has been fully engaged in both the GFF Business Planning process leading to GFF launch in Addis Ababa in 2015

<table>
<thead>
<tr>
<th>GFF Strategic focus</th>
<th>Activity</th>
<th>GFF support</th>
<th>Status as at June 30, 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scaled financing</td>
<td>Mobilizing additional resources necessary to finance fully the RMNCAH agenda, from both domestic and external, and both public and private sources</td>
<td>Technical support</td>
<td>1. Prioritization of health interventions within the RMNCAH Investment Framework to enhance allocative efficiency for health sector budget done</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Technical support</td>
<td>2. Health Sector Partnership Framework to enhance alignment and harmonization of external resources revised. Final draft pending validation</td>
</tr>
</tbody>
</table>
New WHO ANC Guidelines:

- Goal is to provide evidence-based recommendations on practices during antenatal period that are aimed at improving maternal, fetal and newborn outcomes
- Capture and examine the complex nature of issues surrounding the ANC period within the context of health systems and continuum of care
- WHO’s legitimacy and technical authority lie in its internal process for guideline development. The organization has adopted international standards to ensure that its guidelines are of the highest quality.
- The GRC monitors development process and ensures that the relevant regulations and standards are applied, as published in the WHO handbook for guideline development.
- All WHO guidelines must be approved by the GRC according to WHO policies and procedures since 2007. The new WHO ANC guidelines have been developed from these perspectives.

New/Updated Recommendations:

**Interventions to improve antenatal care utilization and quality (9 recommendations)**
- Women-held case notes
- Midwife-led continuity of care
- Group antenatal care
- Community-based interventions to improve communication and support
- Task-shifting components of antenatal care delivery
- Recruitment and retention of staff in rural and remote areas
- Antenatal care visit schedule of four visits

**Recommendations integrated from other WHO Guidelines:**

**Preventative measures (2 recommendations)**
- Malaria prevention: Intermittent preventative treatment in pregnancy (IPTp)
Next Steps:
- Launch – Fall 2016
- Interactive web-based version: Instant updates (cross-referenced recommendations)
- Integration of the recommendations within the SEARCH engine
- Web stories
- Practical tools

Discussion:
The ANC schedule is flexible so there is room for adaptation to allow for IPTp1. The RBMMiPWG recommends including LLIN use as part of the guidelines on preventive measures as there is concern that they don’t seem to be included in the current draft of the new guidelines. This is absolutely critical and is part of the existing WHO guidelines for MiP. Additionally, the WG recommends an ANC scheduling visit that allows countries to give IPTp1 at 13 weeks.

Launch of new guidelines is scheduled for Fall, 2016. WHO uses an in-house approach for dissemination. First it will appear on the WHO website and they will share the link with all of their partners/stakeholders. WHO also tries to generate an article describing the new guidelines and publish it in the Lancet or another journal with wide distribution. They also try to use opportunistic meetings and conferences to use as a platform for launching.

Actions:
Ms. Roman and Dr. Mangiaterra to follow up with WHO/RHR regarding the inclusion of LLIN use as well as the timing of the updated ANC schedule in the updated ANC guidelines.

Presentation: Integration of MiP Services to Improve Health Outcomes for Women and Newborns: Ideas for exploration and analysis
Mary Nell Wegner

Integration is the organization, coordination, and management of multiple activities and resources to ensure the delivery and demand of more efficient and coherent services in relation to cost, output, impact and use (acceptability).

Discussion:
What factors facilitate/inhibit integration?

Facilitating:
- Linking vertical programs, consolidating procedures, tools, team supervision and registers
- All departments in MOH are reporting to the same big boss and that boss holds quarterly meetings (RH, NMCP, MH)
- Having someone in charge host quarterly meetings with all relevant players in the MOH (for ex: M & E, Pharma, NMCP, and MCH). This provides visible leadership and support and underlines the importance of the work and the fact that it is a shared responsibility.
- Making IPTp a national indicator that gets reported out at the parliamentary level annually. This figure then serves as a proxy for the MOH’s performance and holds them accountable.
- Conducting joint work planning with Reproductive Health or MCH and NMCP—or inviting NMCP to sit with the RH or MCH departments---to help guide the part of their work planning related to MiP. If the MOH divides services into prevention and treatment, then making sure that they do joint work planning as well.
Supporting providers to have comprehensive training so that they can address an array of issues. Their capacity to deliver integrated services will help to save the individual woman time and the inconvenience of getting referred or having to come back.

**Inhibiting:**
- Time factor: By having providers equipped to address a variety of issues, it may create a bottleneck in the waiting room at the facility as each patient visit will take longer.
- Education: lots of information at once so difficult for women to remember everything, but also difficult to include prevention/education when there are so many other pieces to the comprehensive ANC visit

**Presentation: Malaria in Pregnancy in Low Transmission Settings**
*Azucena Bardaji*

The technical capacity at the venue was unable to successfully support this remote presentation and therefore Azucena was unable to present to the meeting participants. Her full presentation will be posted on the RBMMiPWG website along with all meeting presentations.

**Presentation: Addressing Malaria Prevention in HIV-infected pregnant women**
*Raquel Gonzalez*

Sub-Saharan concentrates the greatest burden of both malaria and HIV infection. In this region approximately 30 million pregnancies occur annually in areas of intense *Plasmodium falciparum* transmission and HIV-infected women are known to be the most vulnerable to malaria infection. Of note, an estimated 20 million HIV-infected individuals in sub-Saharan Africa live in malaria endemic areas, and over 12 million are women of reproductive age. IPTp-SP is contraindicated in HIV-infected women to avoid the potentially serious drug interactions with concomitant cotrimoxazole prophylaxis (CTXp), which is currently recommended in all HIV-infected pregnant women to prevent opportunistic infections. Thus, even though IPTp-SP is a life-saving and highly cost-effective intervention it cannot be used in the most vulnerable group, HIV-infected women.

In a recent study, the addition of an efficacious antimalarial drug (mefloquine) to CTXp in HIV-infected pregnant women improved malaria prevention as evidenced by reductions in peripheral parasitemia and placental infection, as well as improvement in overall maternal health with decreased hospital admissions. However, mefloquine prophylaxis was not well tolerated, and importantly, was found to be associated with both an increased maternal HIV viral load at delivery and risk of MTCT-HIV.

Unfortunately, little progress has been done in the last decade to address malaria prevention in this particularly vulnerable group of pregnant women. Action is urgently needed to raise global awareness to evaluate specific preventive antimalarials that can be safely administered in HIV-infected pregnant on antiretroviral treatment and cotrimoxazole prophylaxis.

**Discussion:**
There is not conclusive evidence on the effects of cotrimoxazole use and development of SP resistance.

- **Zambia:** the ART guidelines were recently updated and at health worker trainings they have been stressing the importance of not distributing SP to HIV-infected women taking cotrimoxazole.
- **Mozambique:** every pregnant woman visiting ANC is tested for HIV and using that information they decide whether or not to give SP.
- **Kenya:** is similar to Mozambique where pregnant women are tested for HIV at ANC. Currently pregnant women taking cotrimoxazole are included in the data of women who are not receiving SP.
It is difficult to exclude HIV-infected women who are not receiving SP from the IPTp coverage data. The HIV status is included in the ANC registers, but the complication occurs when the data is uploaded into DHIS because the columns for HIV and IPTp are separate.

**Presentation: Prevention of Placental Malaria: Designing the first generation PAMVAC vaccine**  
*Nicaise T. Ndam*

As malaria prevention strategies in pregnancy are under revisions to maximize coverage rate by increasing IPTp doses to be administered, there remain topical questions to cover the first trimester of pregnancy. Because few drugs are safe for this early period of pregnancy, and because women usually arrive late for their first ANC visit, it remains necessary to consider new strategies capable of ensuring the prevention of malaria in the early phase of pregnancy, especially since early infections are known to have an impact on the pregnancy and birth outcomes.

In this context the development of a specific vaccine that can protect against placental infection is a component of great interest for MiP prevention. A parasite protein, VAR2CSA, which mediates sequestration of P. falciparum infected red blood cells in the placenta, has been identified. Its immunological properties were characterized and have demonstrated protective effects by the ability of induced antibodies that block parasites’ cytoadherence in the placenta. Two candidate vaccines are currently in development and one of them, PAMVAC (Pregnancy-Associated Malaria Vaccine), has just entered Phase 1 clinical testing in humans. Volunteers will be vaccinated for the first time this year in Benin and the results of safety will be reported by 2017. Given this major advance, it seems important to plan advocacy actions for this promising strategy within the working group.

**Discussion:**

There is great excitement amongst the working group for this vaccine, but we realize that it is a bit early to celebrate as there is still a long way to go with the development and trials of the vaccine. Phase 1 will be completed in 2016 with a report in 2017 and then they will begin Phase 2 which they anticipate will take 3 years. Then there will be a Phase 3 efficacy trial which will take an additional 3 years. They expect, based on modeling, that the efficacy will be around 30%.

Money for development of the vaccine is always an issue. Suggestions for funding were Gates Foundation, GAVI, and the EU.

**Session: Moving Forward & Next Steps for RBMMiPWG**  
*Viviana Mangiaterra & Elaine Roman*

**Next Steps:**

- Compile minutes and priority actions
- Development of draft work plan
  - The above will be circulated for review and input.