Day 1: Tackling Effective Radical Cure of *P. vivax*

Day one of the VxWg meeting was attended by more than 110 representatives from 18 partner countries and 21 institutional partner organizations. Apologies were sent from country partners from Bhutan, North Korea and Sri Lanka.

The meeting was opened by Elvieda Sariwati, representing the host nation’s NMCP. The morning meeting was divided into one session with presentations on the challenges of primaquine and radical cure, what we can learn from other disease programs in regards to adherence and an overview of the latest advances of tafenoquine. The consecutive discussions focused on the main impediments of adherence, how to improve adherence at patient and health care system, and what further research is needed.

The afternoon session focused on methodological issues to measure adherence and effectiveness. It was started with presentations on how to quantify primaquine efficacy and effectiveness, how social science can help to tackle effectiveness and adherence and follow by an example and preliminary results form a study in Timika, Papua. This was followed by round table discussions on what outcome measures are suitable, how observer bias can be reduced in effectiveness studies, how adherence can be measured and what qualitative studies can contribute.

Outcomes:
1. Increased awareness about the complexities of primaquine effectiveness compared to efficacy and the importance to tackle those.
2. Increased awareness about the importance of social science research in the context of improving adherence and increasing effectiveness of radical cure.
3. Findings from the day will be summarized in a more formal report which will be submitted to Malaria Journal.

Day 2: Malaria in Pregnancy


Day 3: Vivax Working Group Business Meeting

Day 3 started with an update on APMEN, the VxWg workplan and APLMA.

The APMEN VxWg surveys titled “Community and facility assessment to determine populations at risk of malaria and primaquine induced haemolysis (ACROSS)” were highlighted and selected sites were presented. The aim of the surveys is to assess the extent of the malaria burden in populations at risk of infection, the risk of severe side effects following malaria treatment by combining different patient
sampling strategies and the identification of potential barriers for the implementation of *P. vivax* control policies among health system stakeholders and at community level. The surveys will provide important local information for implementing targeted malaria control activities. In addition a priori pooling between sites of the data gathered, will allow additional issues to be addressed applicable to all APMEN countries.

The presentation was followed by a summary by MAP on population mapping and how data from the APMEN surveys will be used to update current estimates and an overview on the Gates Vivax Strategy.

The session was completed with separate round table discussions for country partners and research institutions discussing the VxWg priorities, how synergies between the working groups can be enhanced and what topics and deliverables future meetings should have.

Outcomes:
1. Current working group priorities were considered still relevant
2. Areas of synergy between working group identified were (i) Reactive case management, (ii) Integrating human surveillance to informing mosquito biting (e.g. serology), (iii) Communication between Working Groups, (iv) Online mapping tools in same location, (v) Sample biobank – between groups, (vi) Data-management workshops
3. Suggestions for next meeting were as follows: (i) more time for country partners to highlight their successes and difficulties, (ii) to stratify discussions on the challenges of different stages of malaria elimination (e.g. enhanced control vs. end stage) (iii) Advocacy, (iv) presentation of results of major new trials (e.g. in 2018 IMROV), (v) Update sessions (Diagnostics update, Surveillance updates, experience from Tfq pioneers etc.) (vi) Engaging non APMEN countries from Africa and S. America

**Day 4: Workshop for APMEN surveys**

Site PIs and study personnel for the Selected APMEN surveys sites were invited to attend the workshop. The aim of the workshop was to provide an overview of the different components of the protocol and discuss issues around study implementation and reach consensus on methods used.

Outcomes:
1. Agreement on methodologies used across sites
2. Agreement on site specific adaptations of the generic protocol