

Questions from the participants

DRC- Prof. Eric Sompwe Mukomena

What I didn't tell you we have just finish to assess our surveillance system 23 years after NMCP be created. We learnt a lot.

1. Do you involve the community in the surveillance system and if so do you use community health workers?

Yes we do, we do involve special community Health workers who are dedicated in ICCM, they report monthly to health center

Furthermore, we have trained a couple of CHW to participate to surveillance using mobile phone.

Currently community are being involved into entomological activities (mosquito capture)

2. Cross-border collaboration is important for malaria control and elimination. What are cross borders surveillance activities being implemented with your neighbors?

The East African community and DRC have just launched their malaria strategic plan last November. several activities are planned,

JOINT mass campaign,

Share experience between countries, entomological data, and resistance to insecticide

3. How does one manage to finance the surveillance of the fight against malaria? Are the political authorities getting involved or are all countries counting on donors? What will happen when donors can no longer finance?

Mainly it's donors the Country invest few money, 5 to 10% of all the investment should be invested in information system such as surveillance, but on the field the reality or the fact is far from that

4. What are big challenges on surveillance implementation in all the countries? How do you face those challenges?

High Turnover of human resource, poor motivation at peripheral level, they are spending time with patients, they can gain money and salary from out of pocket as many of them they are not getting salary, poor equipment

Staff are very busy dealing with several diseases, therefore poor quality

We are advocating for stability of staff, mobilizing more resources for training

We are organizing MOCC to increase quality of surveillance service, poor quality of data analysis, we need to appoint provincial staff level so that they can accompany the peripheral one. We do think also, we should computerize this level progressively

5. What are the advantages to separate the surveillance unit to M&E unit?"

One can focus on M and E, we do think that this is transversal, dealing with mass campaign, case management, drugs that need to be monitored. Surveillance required more skills, concentration and specialty, attention; it needs to be taken in a context like

DR Congo so that staff at central level can be focused on pure surveillance, not mixing it with M and E

How should we manage with: drugs, insecticide, cases, deaths, entomological, environment, meteorological data surveillance mix M and E ??????

6. We often see discrepancies between data for malaria variables in paper registers compared to what is in the surveillance system e.g. DHIS2 database. Noted that there may be several reasons for this e.g. reporting lags, incomplete tallying etc. and interventions to address each issue may be different. What types of interventions have you supported to address this accuracy issue?"

A monthly meeting between all district staff, this meeting will be hold on the supervision of provincial skilled staff , but we do think also we should computerize health facilities reporting

Rwanda – Dr. Aimable Mbituyumuremyi

1. How does one manage to finance the surveillance of the fight against malaria? Are the political authorities getting involved or are all countries counting on donors? What will happen when donors can no longer finance?

The Government of Rwanda is supporting some activities related to surveillance including the National Reporting System (HMIS, SISCOM, RapidSM) and also financially supports Entomology and Drug Resistance, Meteo Sites.

Of course, USAID, GF and WHO support some activities

2. What are big challenges on surveillance implementation in all the countries? How do you face those challenges?

- No National Malaria Specific Surveillance guidelines
- No early warning, early detection, and response system in place
- No real time data and stratification of data from cell level to help detect any outbreak and provide Rapid Local Response (Some key data Only come at the end of the month while response should come on time)
- No individual data in current reporting systems but soon we are digitalization the Community Package
- Still in Malaria control phase, and some interventions may not be appropriate right now
- Availability of real-time data from the sector/village level for use in real-time decision making or in outbreaks/epidemics (Rapid Local Response should come on time)
- Financial gaps to design, test and implement community-based surveillance in special settings

3. Cross border, collaboration is very important. What do you think about that, as we are your neighbors?

Currently Rwanda is working with EAC Partner States and DRC through the Great Lakes Malaria Initiative (GLMI) whereby we have a regional Strategic Plan 2021-2025 for cross border collaboration in malaria response.

Noting that our countries share the same risk factors for malaria, having almost the same context but mainly considering that mosquitos and people can cross borders with

either insecticide or drug resistance across the region, working as region is very key and having a regional surveillance system or at least data sharing will help addressing malaria if we want to reach malaria elimination in the region and in Africa. Currently we are putting in place Cross Border Health Posts that will support Surveillance component of the regional strategic plan.

4. Rwanda, what platform are you using for reporting?

Depending on the type of report, we have different platforms (HMIS using DHIS2, we have eLMIS for Health Commodities, we have RapidSMS using Mobile Phone)

5. Rwanda, are you implementing case classification? If yes, are there any interventions focusing to reduce cases importation like at the borders or community efforts?"

Not yet implemented. Still in Malaria Control Phase but considering the currently trends where 18 of 30 districts including those on border are below 100 cases per 1000 per year as incidence, we plan to start community based surveillance through Community health workers and implement case classification in targeted villages with possibility to detect imported cases

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- We have created dashboards in our HMIS comparing different variables (examples: Positive Cases and number of blisters dispensed at each health facility. When we see any discrepancy, we call the site or go there to check the issue through targeted DQA.
- We organize regular DQA visits on quarterly basis and check both registers and systems
- ISS-DQA (Integrated Supporting Supervision-DQA) are also organized every six months as per GF recommendation to check the quality of data
- Data Quality Reviews and Data Validation Meetings are organized by Health Facilities as well

Zanzibar – Ms. Raya Ibrahim

1. Entomological monitoring is a component of overall malaria surveillance. What is program routine entomological indicators being collected and how is this information used to support case based surveillance (CBS) and response?

ZAMEP started to implement routine entomological surveillance since 2005, where indicators such as vector species composition, susceptibility status of vectors to insecticides, vector behaviour; resting, feeding, biotype (indoor and outdoor), residual effectiveness of sprayed insecticides and the vector infection rates.

These results have been used to guide the selection of insecticides for IRS, the insecticide resistance monitoring helped the development of insecticide mitigation plan which is now used to help response to resistance. Moreover, prioritize where to focus more in vector control efforts like LLINs and larviciding when the resources are limited.

Furthermore, the way we implement surveillance in Zanzibar; Epidemiological (CBS) and entomological part and parcel. The CBS reports cases with some indications of continued transmission with a notification to entomology team who will go and investigate in detail. When the transmission is confirmed, both case management (ACD and entomology) and SBC interventions are activated effectively as the response.

2. How does one manage to finance the surveillance of the fight against malaria? Are the political authorities getting involved or are all countries counting on donors? What will happen when donors can no longer finance?

Zanzibar being a developing country was never possible to prioritize such resource demanding intervention specifically only to malaria. It has been a great heart of the PMI to first supported technically and later financially building into such a robust malaria surveillance the Islands. It should be noted that, PMI has also been a good partner to advocate and to ensure positive uptake by heads of states and politicians in such manner everyone is getting on board to strengthen, support and rely on surveillance outputs for decision-making. Government however been to facilitation on HR, infrastructures, and positive response to the given supports. On the same note, government has also been using local government setups to somehow reduce costs of implementing malaria surveillance as well as emphasizing the importance of quality data and use which is targeted to automatically in built into improve the ownership.

3. What are big challenges on surveillance implementation in all the countries? How do you face those challenges?

I would reference Zanzibar as I still believe that most of these countries shares the same positions.

- One being the funding, if no funding, then there are very low chance to implement a meaningful surveillance. Meaningful referrers to the one which can be used to illustrate findings that could being helpful for decision-making.
- Knowledge and skills, is part of the challenges, most countries they lack epidemiological appliance in implementing health services
- As surveillance becomes more robust when is built into digital world, at most countries the IT landscape, knowledge and skill is limited, hence relaying on very high costing plans to manage the system and therefore reach at unthinkable cost-ranges and therefore no courage of support is obtained.
- Political will, although Zanzibar is far beyond that, but if I can recall, even before the implementation of surveillance, it was hard to get even tiny reflection of support to surveillance, though I believe if also like SBC, with time things changes
- Follow-up of the implementation, outputs and feedback/motivation have always been the keys to improve surveillance and without them surveillance results become less important.

To address most of these challenges, the focus should be in creating a continued mechanism for capacity building in all areas technically, knowledge, skills, awareness and practices

Implementation should always focus on engagement and improve ownership

Creating political will and participation to reach a level such as a national agenda and off cause advocate for resources

Feedback and application of targeted information dissemination weekly, monthly, quarterly etc.

4. Was there any effect on data quality (completeness, timeliness, accuracy) when country shifted from a parallel to an integrated system?

In Zanzibar, it was not like integrating to two systems that were doing the same job, but it is somehow like an integration to complement missing part/component on NATIONAL SYSTEM. Therefore, is kind of reaching to a comprehensive system will all important component s. DHIS2 had only health facility data, and CBS has few of facility and most of the community data including cases and foci classification. Therefore, was to combine those data into national system.

The same intervention from the introduction to date, there has been to kinds of approaches to look into surveillance.

- Surveillance system performance which including completeness, timeliness, accuracy. Daily weekly, monthly data reviews, health facility visits and supervisions of CBS field staff, data verification evens, two weeks data cleaning even have been in practice to achieve data quality, but
- How are these information help the programme move through next steps in malaria elimination. Therefore the focus to ensure the utilization of surveillance data for operational and programmatic decision-making.

Madagascar – Ms. Andriamanohisoa Manitra

1. How does one manage to finance the surveillance of the fight against malaria? Are the political authorities getting involved or are all countries counting on donors? What will happen when donors can no longer finance?

Following the policy of the Malagasy Ministry of Public Health, the program tends towards the empowerment of local authorities as well as the ownership and accountability of all actors, especially at the operational level. This implies a real transfer of power, autonomy and decentralization of resources at the operational level for a timely and more effective response.

However, the Government of Madagascar also contributes to the program through infrastructure development, staff salaries, continuing education and other operating costs.

For the NMCP, the National Strategic Plan (NSP) Operational Plan for malaria control and Elimination is a consolidated document that includes all Malaria funds, including monitoring: Global Fund, USAID/PMI, WHO, UNICEF, State and others donors. The management of financial resources within the program is governed by a procedure manual validated by all the partners. The NMCP also allocates resources at the decentralized level (regions, districts) to ensure smooth and effective implementation. It

also provides technical and logistical support to the regions for the implementation of strategies at peripheral levels

Strengthen leadership, management and coordination capacities at all levels. It involves approaches geared towards improving program management, both at central and peripheral levels in order to achieve the objectives set by each service delivery area. The pillars of surveillance activities include strengthening partnership, program coordination unit, and the grant management capacity at all levels.

2. What are big challenges on surveillance implementation in all the countries? How do you face those challenges?

- Challenges include strengthening epidemiological surveillance system for malaria, preparedness and response to epidemics at the national level and strengthening elimination strategies. The main challenges to be met are as follows:
 - Timeliness of surveillance data for timely decision-making;
 - Extension of integrated electronic surveillance;
 - Availability of disease preparedness and response strategy at all health districts;
 - Effective implementation of investigations and responses by peripheral actors;
 - Strengthening health surveillance at the community level;
 - Scale-up of National malaria elimination plan, in all districts in the elimination pathway;
- Integrated malaria vector management as a vector control activity in elimination districts, where the MID and CAID campaign are no longer eligible. In Madagascar, the epidemiological surveillance of diseases with epidemic potential, including malaria, is the responsibility of the Ministry of Public Health. The surveillance system put in place is made up of tools, procedures, personnel and structures producing information on malaria. Priority interventions mainly aim to ensure coordinated management at all levels, to ensure rapid and efficient management of every single case, to protect populations at risk through vector control interventions. The timeliness of responses depends on the effectiveness of the surveillance system to detect, notify, investigate, record to respond to each case.
- Specific control strategies at elimination zones have been adopted with priority interventions aiming at strengthening malaria elimination system at all levels and the improvement of surveillance and response following the notification of index cases. Key related activities are as follows:
 - Biannual meeting of the National and Peripheral elimination Technical Working Group (GTT) for;
 - Regular Clinical OTSS (Outreach Training Supportive Supervision);
 - Semi-annual mentoring and coaching of Community Workers' elimination activities-related by health workers
 - Technical support for Integrated Vector Management (IVM) and reward of deserving households;
 - Electronic stock management at all levels;

- Surveillance and investigation (epidemiological, parasitological, entomological);
 - Advanced or Focused elimination strategy + Microstratification and identification of population at high risk of malaria.
3. We often see discrepancies between data for malaria variables in paper registers compared to what is in the surveillance system e.g. DHIS2 database. Noted that there may be several reasons for this e.g. reporting lags, incomplete tallying etc. and interventions to address each issue may be different. What types of interventions have you supported to address this accuracy issue?"

The NMCP, through regular meetings, was able to discuss critical data quality issues with partners and to propose possible solutions. Emphasis has also been placed on the use of data through the development of quarterly Malaria bulletins, which can be seen as a mean to disseminate malaria information and to promote data use for decision-making. The rollout of integrated supervision and RDQA in the targeted districts may have as well contribute in improving data quality at the operational level, and therefore promote data use for evidence-based decision-making. The main challenges remain the availability of an integrated and high standard malaria database into DHIS2 platform as well as the decentralization of integrated supervision and RDQA.

The major challenge remains the strengthening of the Program monitoring and evaluation system at all levels to ensure quality data. Improved data management and dissemination at all levels is key for measuring Program achievements, the impact of interventions, as well as building confidence the generated data. To achieve this, the following activities are undertaken: supervision and quality control of data at the peripheral level, operationalization of the coaching system at regional level, development and dissemination of quarterly malaria bulletin. The review of regional technical teams: Regional Technical Assistant (ATR), Regional Accounting Manager (GCR), Regional Malaria Manager (RPR) is key in order to ensure proper data management and use.

Strengthening CSBs services through regular Outreach Training Supportive Supervision, clinical OTSS has improved the reporting rate and disease response activities at districts level.

WHO – Dr. Elizabeth Juma

1. Without the input from community level data will be incomplete due to the difficulty of accessing care early. In many African setting CHWs only address malaria in under five years old children How is WHO AFRO encouraging the expansion of CHW roles to test and treat all fever cases not only those in under fives

WHO has guidelines for implementing interventions at community level. Each country determines what package can be implemented and the appropriate information collection tools. For malaria, there is the joint WHO/UNICEF guideline on iCCM. You do not only have to target <5 for community interventions. Rwanda provides community case management for malaria for all ages at community level. The MoH/Programme has to determine and make a strategy for community health services.

2. How feasible is a surveillance system with the objective of burden reduction and elimination at the same time?

It is feasible. Passive surveillance is mandatory for both burden reduction, elimination and prevention of re-introduction. In Elimination, active case detection is also implemented. It is therefore important to have clear case definitions, and to understand that data in elimination settings collected, analyzed and responded to (action) within 7 days. Your system must enable this, because the objective is to use data to interrupt malaria transmission

3. We have 47 counties in the country and 4 of them have been moved to elimination phase due to their malaria prevalence which has been below 1% for over 5 years. Does this mean that we should have 2 malaria M&E plans? One plan for the elimination counties and the other for the rest of the counties?

No. The M&E plan is for the MSP. Your surveillance system should be able to accommodate surveillance requirements for both burden reduction and elimination. The programme must determine the requirements and discuss with stakeholders. It is important to know your information needs for action in burden reduction and elimination. Zimbabwe, Namibia, Zambia, Ethiopia, Eritrea all implement sub-national elimination.