



Government of Nepal  
 Ministry of Health  
 Department of Health Services  
 Epidemiology and Disease Control Division  
 Teku, Kathmandu, Nepal  
 ewarsedcd@gmail.com  
 www.edcd.gov.np

# Malaria Update

Volume 2, Issue 3

Quarterly Bulletin

May-Jul, 2017

## Inside this issue

Mid Term Review Visit | **Page 2**

Malaria Microscopic Refresher Training  
 | **Page 2**

Distribution of LLINs | **Page 3**

Response in the Community | **Page 3**

Physician Orientation | **Page 3**

Accessibility of Malaria Treatment | **Page 4**

Glimpse of Program Activities | **Page 4**



*Group discussion in National Consultation Meeting to set priority interventions for funding application.*

## National Consultation Meeting on Malaria

Nepal Country Coordination Mechanism (CCM) in coordination with Epidemiology & Disease Control Division (EDCD) organized a National Consultation Meeting on 9<sup>th</sup> June 2017 at Hotel Shanker, Kathmandu. The objective of the meeting was to share the recommendations and priorities from the community and regional consultations held across various regions. The meeting also aimed to identify priority interventions to be incorporated into the development of the Global Fund (GF) funding application (2018-2021AD).

Dr. Ramesh Bikram Singh, Deputy Director from Department of Health Services (DoHS) attended the program as the chief guest while Dr. Bhim Acharya, Director of EDCCD chaired the program. CCM Coordinator, Mr. Mahesh Dhungel and CCM member, Mr. Bal Krishna Sedai from Nepal Red Cross Society facilitated the whole event.

Dr. Bibek Lal, Senior Health Administrator from EDCCD welcomed all the participants and shared the objective of the program. There were altogether 62 participants from government sectors, development agencies, and community level to discuss on the issues and to provide appropriate feedback and suggestion.

The participants were divided into groups to discuss and identify gaps on major topics such as; (i) Community Based Testing and Treatment, (ii) Interrupting Transmission and Vulnerable Groups, (iii) Diagnosis Access and Quality, (iv) Surveillance and Data Management Strengthening, (v) Private Sector Engagement, and (vi) Supply Chain Management Strengthening. Each group set their prioritization area and presented their idea for further development to incorporate in the funding application. The meeting was later followed by a sharing session on Mid Term Review (MTR) preliminary findings from national & international consultants. This event was attended by key personnel from the Ministry of Health including the Secretary.



*MTR Team Leader Dr. Rossitza Mintcheva presenting the findings of their visits.*

## Mid-Term Review Visit



*House hold visit to verify use of LLIN at Dharan, Sunsari.*

An external Malaria Program Review for Malaria program was conducted from 3<sup>rd</sup> to 7<sup>th</sup> June 2017. The aim of this review was to assess the current status of the malaria program as it heads into elimination and provide feedback on the areas of improvement. The team of experts conducting the review was led by Dr. Rossitza Mintcheva (the expert who headed the team that declared Srilanka malaria elimination). Four teams of external/internal experts from WHO and independent consultants combined with the program team from EDCD to visit high malaria endemic areas for the review. Altogether the teams visited 8 districts; Jhapa, Sunsari, Morang, Kapilvastu, Rupandehi, Banke, Baridya, Surkhet, Kailali and Kanchanpur to assess the existing malaria program. During the review, the team also visited Vector Borne Disease Research and Training Centre (VBDRTC), District Public Health Offices, District Hospitals, PHCs, Health Posts, Private Hospitals, Medical College/Teaching Hospitals, Private Clinics, Private Pharmacies, Boarder Health Desk, Partner NGOs, Communities, FCHVs and past malaria patients.

The general objective of the review was to help the program identify areas of improvement and pave the way for the program to accelerate its activities to help reach zero transmission by 2020 and malaria elimination by 2023 (two years before the targeted 2025 as per recent recommendation made by the WHO meeting in Geneva). The specific recommendation was also meant to support evidence and identify needs for the new round of Global Fund application (2018-2021AD). Some of the main recommendations from the review team were:

- Need of a vigorous advocacy campaign to ensure high level political involvement and secure domestic and international funding to help the country reach malaria elimination.

- Need to take Immediate and concrete steps to strengthen and expand surveillance.
- Engagement of the private sector is mandatory to identify the missing and loss to reporting cases.
- Reestablishment of the national system of external quality assurance for malaria laboratory diagnosis and need to further extend this to cover all laboratories including the private sector.
- Need to strengthen the supply chain systems.
- Need to strengthen community engagement for malaria elimination.

## Malaria Microscopic Refresher Training

Malaria Microscopic Refresher Training was conducted in the newly established training hall at DPHO, Kanchanpur. The two week long training was conducted from 9<sup>th</sup> to 23<sup>rd</sup> of May 2017. A total of 13 lab personnel from Jhapa, Ilam, Morang, Saptari, Udaypur, Mahottari, Dhading, Bardiya, Kailali & Kanchanpur districts took part in the training.

The microscopic training helped build the capacity of the participants to confidently identify species and stages of malaria parasites and quantify malaria parasites in a given sample. The methods used in the training program were lectures, demonstration, practice and discussion. Each topic was briefly presented by the facilitators and followed by the actual demonstrations during the practical sessions. Pre and post-analysis of the participants demonstrated that the training program has significantly improved the microscopic skills in differential diagnosis of the parasites. Average knowledge level of participants in pre-test was 61.69% and in post-test was 86.3%. The participants had not received training for more than two years, so they also managed to see slides on *P. malariae*, and *P. ovale* which they had not seen before.



*Participants on theoretical session at the training program.*

## Distribution of LLINs



*LLIN distribution to mass population living at Hetauda municipality, Makwanpur district.*

As the country heads into elimination, universal distribution of LLIN is necessary. As a part of the regular distribution a mass distribution of Long Lasting Insecticidal Net (LLIN) was done across 93 high & moderate risk wards of 5 districts (based on the recent microstratification 2016). The districts where mass distribution took place were Sinduli, Chitwan, Makwanpur, Kaski and Surkhet. A total of 178,759 LLINs were distributed to 61,064 households with 319,793 household members as per the LLIN distribution guideline 2016. In addition to this a further 39,919 LLINs were handed-over to D/PHOs of 27 high districts to be sent to high & moderate risk wards within their district for continuous distribution (during 1<sup>st</sup> ANC visit).

## Response in the Community

A focal outbreak of malaria was detected in Shivanath and Maharudra VDC of Baitadi district during this period. Altogether 43 cases of malaria, mostly indigenous, were confirmed in these two VDCs. A team of lab personnel, entomologists and vector control inspectors from the center, region and district team conducted a foci investigation of the area and based on their recommendation of high vector density in these two VDCs. A team of local spraymen from nearby district, Dadeldhura, was deployed along with the Baitadi district focal team to conduct a responsive spraying in the area. All the houses and structures in wards of Shivanath VDC and Maharudra were sprayed with IRS. During this event a local team was also established and they were coached on site for any future sprays to be conducted in the area. Altogether 5 spray pumps and 12 drums of insecticide were sent to Melauli for future spraying after the event.

## Physician Orientation

EDCD in coordination with Save the Children-Global Fund organized an orientation program to physicians on 19 May 2017 at Pokhara, Kaski. The program was organized to orient the practicing medical doctors and physicians on the revised National Malaria Treatment Protocol (NMTP) 2015. The program also aimed at prompt reporting of malaria cases through the private sector from where currently hardly any cases are reported. Even those that have been reported are notified late leaving a high possibility of local transmission through the infected. The program also aimed at recording and reporting the positive cases through both the Malaria Disease Information System (MDIS) and Demographic Health Information System (DHIS). The participants for the program were from District Hospitals of Gulmi, Parbat, Gorkha and Tanahu districts, Dhaulagiri Zonal Hospital and 2 PHCs of Tanahu, Western Regional Hospital, Manipal Medical College, Gandaki Medical College, Fewa City Hospital and Charak Hospital of Kaski district.

Dr. Bhim Acharya, Director of EDCCD chaired the program. During the event, Dr. Acharya presented the National Malaria Strategic Plan (2014-2025AD) and the current ongoing malaria related programs in the country. During his presentation, he also elaborated the epidemiologic status of the country and the current trend of malaria transmission as well as the population under the risk and vulnerability. Dr. Suman Thapa, Technical Specialist from Save the Children International debriefed the participants on Malaria Case Management as per the revised NMTP 2015. He emphasized the importance of immediate treatment and the need of following the primaquine therapy to clear the hypnozoites. He also addressed on how to manage a case of uncomplicated falciparum malaria in children of any various age group with ACT and severe malaria through Inj. Artesunate.



*Dr. Acharya, sharing epidemiologic status during his presentation.*

## Accessibility of Malaria Treatment

Since Nepal is heading towards malaria elimination, the program aims to interrupt local transmission of malaria in order to ensure zero indigenous case of malaria. This requires the detection of all malaria infections, and their immediate radical treatment to avoid generation of secondary cases. Early diagnosis and prompt effective treatment of all malaria cases in the community is a very crucial step.

Reactive and Proactive case detection (RACD, PACD) is therefore both equally important for a country heading into elimination. This enables detection of malaria infections early in vulnerable population such as those dwelling in slums and forest fringe areas, working at brick factories, irrigation canals as well as mobile migrant population who return home for various occasions and festivities. The PACD started in the form of Malaria Mobile Clinics (MMCs) from June 2017 across four high risk districts with major disease burden (Kapilvastu, Bardiya, Kailali and Kanchanpur). Altogether teams (3 in Kailali, 2 in Kanchanpur, 1 each in Bardiya and Kapilvastu) including a lab person and health assistant are mobilized in the community for malaria testing with the prior notice to the locals in coordination with FCHVs and local leaders. The program has increased access to diagnosis and treatment of malaria in the community level in the high and moderate risk VDCs/Municipalities of the districts. Through this clinic, it is expected to early identify all malaria cases and promptly tested, treated & tracked in order to prevent the generation of secondary cases. Besides this, testing in the community has an additional advantage whereby it motivates vulnerable population to accept testing despite being asymptomatic which on a longer term will be beneficial for detection of asymptomatic malaria.

## Glimpse of Program Activities



Case Based Investigation at Bansgadi, Bardiya.



Orientation to FCHVs for their roles in community at Dadeldhura.



Malaria data validation program at Sindhuli district.



Malaria testing during MMCs at Kanchanpur district.

