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Malaria Update

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Disclosure of Nepal Malaria Strategic Plan (NMSP), 2014-2025

Meetings & Workshops

EDCD with technical and financial support from Save the Children-Global Fund organized a 2 day workshop on 28th & 29th May, 2016 with an objective to draft and implementation guideline for Case Base Investigation, Foci Investigation and Response. It was also focused to understand effectiveness of the program and share knowledge on the current practices. There were 20 participants including district focal staffs representing Eastern, Central, Western, Mid-Western and Far-Western region. At the end of the two day program a draft implementation guideline was prepared which was later endorsed through the TWG meeting with some new inputs from the technical expertise.

Similarly, a multisectoral advocacy meeting was conducted on 14th July 2016 at Grand Hotel, Kathmandu.

The objective of the meeting was to formally disseminate the progress, way ahead and roles and responsibilities of multi stakeholders in implementing the Nepal Malaria Strategic Plan (NMSP) to take malaria into elimination. The Chief guest for the event, Dr. Padam Chand, Secretary Ministry of Health and Dr. Baburam Marasini, Director from EDCC jointly presented the printed Nepali version of NMSP 2014-2025.

In the program, Dr. Chand expected support from all the stakeholders for malaria elimination. Dr. Marasini highlighted the various surveys and studies that were ongoing and those that had been conducted in the past. The workshop was attended by representatives from the MoH, MoFALD, MoAD, WHO, JHPIEGO, National Planning Commission, National Public Health Laboratory, NHEICC, VBDRTC, Nepal Army Hospital, Nepal Police Hospital, Kathmandu Medical College, Alka Hospital, Sahid Memorial Hospital, Vayodha Hospital etc.

Furthermore with the support of JHPIEGO, EDCC organized a one day workshop on 24th July, 2016 to address the increasing scarcity of entomologist in the country. The program was conducted with the involvement of representatives from different universities, WHO, existing entomologist/experts and focal persons from disease control section, planning and surveillance section and outbreak section of EDCC. The meeting stressed on the necessity to formulate a curriculum for entomology study in the Undergraduate and Post graduate studies thereby producing entomologist within country on a long term. For immediate purpose the team suggested short course entomological trainings for incumbent malaria staff working in districts and regions with external experts to be facilitated by the WHO.

Malaria Microscopy Trainings



Malaria Competency Assessment Workshop at VBDRTC

Malaria Microscopy Refresher Training was conducted from 9th May to 22nd May at VBDRTC, Hetauda. The general objective of the training was to strengthen skills and capacity of laboratory staffs in malaria microscopy. A total of 15 laboratory professionals attended this training. Similarly, a Malaria Competency Assessment workshop was conducted from 23rd to 26th May, 2016 at VBDRTC to enhance and assess internal competency and capacity of laboratory staffs in malaria microscopy. A total of 11 competent laboratory professionals were selected to attend this workshop to enhance their knowledge on malaria microscopy. Likewise, a Basic Malaria Microscopy Training was also organized to improve parasite diagnosing capacity of the laboratory staffs who had never taken a malaria microscopy ever was conducted from 15th June to 9th July, 2016 at VBDRTC. Pre and Post-analysis of total 13 participants demonstrated that the training program has significantly improved the microscopic skills of the participants and has improved their parasite diagnosing capacity. The participants were also trained to make good quality smears and stain the slides properly.

LLIN Distribution

A total 304,437 LLINs distributed in 10 VDCs/ municipalities till the end of this period. For ANC, total 58,280 LLINs distributed in high & moderated risks VDCs of all global fund program districts except Sunsari district as they had enough LLINs for ANC in their stock. Similarly, mass distribution was conducted in 10 VDCs of 8 districts; Bara, Chitwan, Makwanpur, Rupandehi, Kapilbastu, Dang, Kailali, and Surkhet. A total of 246,157 LLINs were distributed through mass distribution.

During the mass LLIN distribution, social mobilizers visited each and every household with GPS machines to map the households that receive a LLIN, provide awareness on malaria as well as preventive measures. The team also oriented on the washing modality of the LLINs. Furthermore, monitoring & supervision visits were conducted by the central team of EDCCD during this period to assess quality of the data collected via GPS logbooks and provide onsite orientation to field officers and social mobilizers.

Awareness Raising Program

Till the end of July 2016, school health program were conducted in 95 schools of high & moderate risk VDCs at 25 program districts where more than 9,000 students received orientation and awareness on malaria and their roles & responsibilities to help prevent the transmission of the disease in their community. Similarly, Private Practitioner's meeting was conducted in 17 districts to orient them on the revised malaria treatment protocol, the importance of reporting & recording each case through the HMIS database and their individual roles in reporting such cases. Through this meeting, it is expected to trace and track malaria positive cases that have been missing through the private sector. An estimated 20% of the cases are not recorded/ reported under the national reporting system which presumably gets treated by private practitioner.



School health program at Shree Kankai HS School, Danabari, Ilam

Orientation to FCHV was conducted in 17 high risks hard to reach VDCs of Kailali, Kanchanpur and Bardiya districts. A total of 424 FCHVs were oriented on malaria disease so that they can easily identify any suspected malaria cases in the community. Likewise, mothers' group program was conducted across Nawalparasi, Kapilbastu, Rupandehi, Kanchanpur and Dadeldhura to orient women in the communities on malaria.

Moreover, IEC materials such as; flip chart, leaflets, malaria treatment charts, malaria calendar were developed and disseminated to all 25 Global Fund program districts.

Ward-Level Micro-stratification

Ward Level Micro-stratification was conducted in 383 VDCs of 44 districts including 255 high & moderate risk VDCs of 25 program districts till the end of this period. The microstratification was conducted in high, moderate and low risk districts namely Jhapa, Ilam, Panchthar, Morang, Sunsari, Tehrathum, Dhankuta, Saptari, Siraha, Udaypur, Dhanusa, Mahottari, Sarlahi, Sindhuli, Dhading, Lalitpur, Kavrepalanchowk, Sindhupalchowk, Bara, Parsa, Rautahat, Chitwan, Makwanpur, Gorkha, Kaski, Lamjung, Kapilvastu, Nawalparasi, Rupandehi, Arghakhanchi, Palpa, Parbat, Dang, Pyuthan, Banke, Bardiya, Surkhet, Dailekh, Kailali, Achham, Doti, Kanchanpur, Dadeldhura and Baitadi. The study will provide ward level malaria burden and risk which will be instrumental in planning, monitoring and evaluating effective interventions to achieve malaria elimination.



Verifying & validating data in Mangalpur Health Post at Chitwan district during microstratification

Entomological Study

Entomological study was conducted in 4 different sites; Meghauri VDC of Chitwan, Kerabari VDC of Morang, Baniyabar VDC of Bardiya and Tamsariya VDC of Nawalparasi districts. The study had proposed to conduct similar studies across 28 sites which will help to detect geographical distribution & distribution of various vectors, and to determine the role of the vector mosquito in the dynamics of transmission, their behavior and seasonal prevalence. For controlling malaria vectors, entomological investigation is key and essential aspect as this investigation will provide crucial information on vector species, their distribution, density, bionomics and susceptibility/resistance to insecticides used for Indoor Residual Spraying. The study will continue to other sites in 2017 and 2018.

G6PDd Survey



Conducting G6PDd Survey at Gunjanagar VDC, Chitwan

A prevalence survey for G6PD deficiency has commenced. The preliminary results have indicated that out of a total 3,653 participants (2,353 males and 1,300 females) tested 108 people were resulted positive for G6PD deficiency. The survey was conducted in 27 sites of 12 districts. As per the survey, the preliminary result shows an average G6PD deficiency prevalence of 2.95% with areas such as Gunjanagar of Chitwan showing prevalence as high as 13.33%. The survey has hinted a higher prevalence of G6PD deficiency among specific ethnic groups mainly the Tharu Community.

The aim of this survey was to map areas with high prevalence of G6PD deficiency which would provide evidence for the national program to make informed decision for the provision of point of care G6PD test (rapid care test) while administering primaquine for malaria patient. In areas where there are more than 5% prevalence of G6PD deficiency, health facilities of such areas will be equipped with rapid test kits.



Field and laboratory works for entomological study

Case Study:

MDIS and its effects in the community

Malaria program under Save the Children/Global Fund in coordination with Epidemiology & Disease Control Division (EDCD) has introduced mobile SMS to notify any malaria cases seen in the community. Such notified SMS information will be automatically recorded in Malaria Disease Information System (MDIS) which will be later followed by case based investigation by the district team. These days, most of the malaria cases are recorded in MDIS as mobile SMS is an easy way to report the cases seen in the community.

Tulsi Chauraha, previously a high risk and now a moderate risk VDC for malaria disease at Dhanusa district, had not reported any single malaria positive cases for more than five years. And so, there had not been any intervention regarding malaria disease in the later years. The malaria positive cases in this VDC might had been neglected or not recorded properly in the system which could ultimately lead to malaria outbreak. Eventually, MDIS showed its effect in this VDC as the cases from Dhaad Khola village at Tulsi Chauraha VDC was recorded in the system. A team from EDCD and DPHO responded promptly and mobilized for case based investigation. The team diagnosed 23 indigenous malaria cases in the same village which was surprisingly more than the reported cases. Among the identified cases, there were children below 2 years old, mother and child from the same family and one pregnant lady in her late third trimester.

All diagnosed cases were treated in the community but Dil Maya Majhi, 34, was referred to the district hospital as she was pregnant and her condition was deteriorating. Her laboratory reports confirmed Plasmodium Vivax with heavy parasitemia. The team consulted with a local gynecologist and she was immediately given treatment for malaria. Her condition improved dramatically within 24 hours. She recovered completely and gave birth to a healthy baby boy a week later. This way, MDIS has substantially supported the malaria program to track the positive cases seen in the community and to prevent malaria transmission through early intervention.

Glimpse of Program Activities



Presenting malaria case trend of Banke district during private practitioners meeting



People eagerly waiting for LLIN during mass distribution of LLIN at Chinchu VDC, Surkhet



Workshop to discuss on developing curriculum for entomology study

