Prize winner’s lecture

THE MALARIA VECTOR IN THE AREA SURROUNDED BY RICE FIELD IN KHAMMAOUNE PROVINCE, LAO PDR WITH THE DISCUSSION OF THE FUTURE ITM STRATEGY IN LAOS AND ALSO MEKONG AREA

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In the 1996, the malaria vector in Laos was not clear. It was suspected that the same vector in the North Thailand; Anopheles minimus, An. maculatus and An. dirus, were existed. In Nhommarath District in Khammouane Province, Lao PDR, a lot of malaria patients were reported in the district hospital located in the center of basin. It was supposed that patient came from the communities around hospital under the consideration of accessibility to hospital, thus the one community around hospital was selected for malaria survey. The prevalence of malaria infection in the inhabitant is high as more than 20%, however, only few number of An. minimus was collected, and An. maculates and An. dirus was not collected. On the other hand, An. nivipes is the majority in Anopheles, which was collected by human bait collection, and the larva of this mosquito was collected from the rice field. Thus, An. nivipes is suspected malaria vector in this basin surrounded by rice field. At present time, the distribution of the malaria vector in Lao PDR is estimated according to the results of a lot of surveys. It is supposed that the existence of An. dirus influence to the high endemic of malaria in the southern provinces. Moreover the biting habit of An. dirus in this area is one of the causes that an impregnated bed net was affected to control malaria.

The vector control using by impregnated bed net (IBM) is one component of the recent global malaria control strategy. It is well known that the health education is important not only to diffuse IBM but also to sustain the project. In the beginning of 2002, the review of Impregnated Treatment Materials (ITM) strategy was carried out in Roll Back Malaria Initiative in Africa. The new strategy consists of both sides between public and private sector in addition to social marketing. In the Mekong region, the ITM programs were carried out using by mainly public sector only, because the peripheral health administration system was well established in comparison with African countries. The other reason, that social marketing was not conducted in Mekong countries, was supposed that the rural areas without suitable media and market were the serious endemic of malaria. When the project is being carried out in the wide area from now on, however, the only public sector is supposed not to be able to sustain the project. In fact, ITM project was expanded to whole country in Lao PDR, the re-dipping of IBM was not carried out in several communities. It is recommended that the joining of private sectors becomes important to sustain the project from now on in Mekong countries.