

Thae Maung Maung. 2013. **Knowledge and Dispensing Practices of Anti-malarial Drugs in Myanmar**. Master of Public Health Thesis in Public Health Science, Graduate School, Khon Kaen University.

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ABSTRACT

The occurrence of artemisinin resistance in Greater Mekong Sub-region countries including Myanmar is a great problem in connection with the malaria situation in the world. Irrational use of anti-malarial drugs especially in private drug outlets, the main first contact point of malaria treatment, can lead to the emergence of drug resistance malaria. This cross-sectional descriptive study was conducted in 71 villages within tier1 and 2 malaria areas of Myanmar in 2012. Providers from 120 drug outlets were assessed using a face to face interview with structured questions by trained interviewers. About 42.0% of drug outlets did not have license and 45.0% of drug outlets were general stores or shops. More than half of the providers did not have an appropriate training and only 10.0% of the respondents attended training sessions about malaria. Although the knowledge about malaria signs and symptoms was sufficient, awareness about artemisinin resistance was low. Anti-malarial drug knowledge was very low and only 16.0% of the respondents could correctly identify the recommended drug of uncomplicated *P. falciparum* malaria. Artemisinin monotherapies (i.e., artesunate) and non-artemisinin (i.e., chloroquine) were widely available. Availability of artemisinin-based combination treatment (ACT) including Coartem was extremely low. About 80% of surveyed drug outlets sold anti-malarial drugs and irrational dispensing practices, such as selling partial package (55.2%) and cocktail treatment (25.0%) were found out. Most dispensed anti-malarial drugs were artesunate tablets, chloroquine and artemether. About 20.0% of drug outlets sold malaria tests mainly rapid diagnostic tests (RDT). Paracheck was mostly used RDT and found in 6.7% of drug outlets. Customer demand (67.0%) was found as a main reason for selling anti-malarial drugs and also this influenced dispensing practices of the drug sellers. Respondents' qualification and experience based on the participation in training workshops about malaria was significantly associated with correct knowledge and dispensing practices of the recommended anti-malarial drug for *P. falciparum*. The findings of this study highlight insufficient knowledge about malaria and irrational dispensing practices of anti-malarial drugs and the availability and common use of artemisinin monotherapies among private drug outlets. Intervention for control of private drug outlets is urgently needed for artemisinin resistance containment.