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**Effectiveness of active malaria surveillance amongst in-ward patients in the phase of prevention of reintroduction of malaria to Sri Lanka**

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Malaria has been eliminated from Sri Lanka but imported malaria cases continue to be reported. This study was carried out over 14 months in four teaching hospitals in the Western Province (which recorded the highest number of malaria cases over the past three years) to determine the feasibility and usefulness for the Anti Malaria Campaign (AMC) to carry out active case detection (ACD) in hospitals amongst persons presented with risk factors for malaria.

As Health Care Providers (HCPs) often fail to consider malaria in the differential diagnosis of fever, resulting in delayed diagnosis, routine malaria surveillance practices amongst HCPs were also observed. Thirty four (34) Medical wards in these four hospitals were randomly divided into A (n=18) and B (n=16) groups. Group A wards were visited daily and 3238 febrile patients with risk factors for malaria were tested by microscopy and Rapid Diagnostic Test.

No one tested positive for malaria by ACD. Malaria was suspected in the differential diagnosis by HCPs in 7.16% of febrile persons with risk factors of malaria and recorded in the BHT in 1.45%. There were 214 malaria diagnostic tests requested by HCPs from Group A, and 194 tests requested from group B wards which were only passively observed during the study period. Among 169,772 patients admitted to the 34 medical wards, seven malaria cases were identified, 3 in Group A and 4 in Group B wards. These cases were notified verbally to the AMC but only four were entered into the notification register by the ward staff. Three of these patients were admitted to hospital after diagnosis of malaria made outside, and 4 were diagnosed by the routine hospital system, independent of the ACD system. Of these 4, two were detected accidentally during blood examination and not because of a request for malaria testing by the ward. The results suggest that active screening of hospital wards for malaria is not warranted, but that a greater effort should be made to improve the awareness of HCPs on the importance of suspecting and requesting testing for malaria, and on the need for reporting malaria cases to the AMC.

Keywords: malaria, re introduction, malaria surveillance

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