Investigation of Malaria Outbreak in Aswan, Egypt, 2014

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Abstract

Background: On May 26th 2014, new malaria cases were reported from Aswan in upper Egypt to the ministry of health and population (MOHP) through the national surveillance system (NEDSS), with no history of travel to a malaria-endemic country. MOHP interfered with a rapid response team (RRT) to investigate and contain any suspected outbreak. Efforts were concentrated on active-case finding, laboratory testing, entomological surveillance, proper treatment of patients and health education.

Objective: To investigate and contain any suspected outbreak.

Methods: Field investigation in the affected village and its surrounding 15 villages. started on May 28th, 2014 after confirmation of the first case. The RRT used a standardized case definition and distributed it to all hospitals and health units in Aswan. Cases were diagnosed clinically, and laboratory confirmed. Active case finding was done. Investigation continued till June 19th till no additional cases were reported.

Results: A total of 319 suspected cases at Edfu Fever Hospital; about 14,696 samples examined during active case-finding; where 4 samples proved positive and were transferred to Edfu Fever Hospital to receive proper treatment. A total of 22 cases were confirmed for malaria, all were caused by P. vivax. The median age of patients was 19 (range 6-90 years), with male: female ratio 1:1. No complications or deaths were reported. All cases were discharged after full recovery and after performing 4 blood films all of which are negative for plasmodia. The first onset of symptoms occurred on May 20th 2014 and the final case revealed symptoms on the 15th of June 2014.

Conclusions: The Egyptian MoHP succeeded in early detection and rapid containment of a new focus of re-emerged malaria cases at a village in Upper Egypt through intensive malaria control procedures. Malaria Surveillance should be continued and reinforced for early detection of future outbreaks.

(iproc 2018;4(1):e10636) doi: 10.2196/10636

Edited by Y Khader; this is a non–peer-reviewed article. Submitted 29.03.18; accepted 29.03.18; published 29.03.18.

Please cite as:
Keshk M, Elshourbagy S, Genedy M, Kandeel A
Investigation of Malaria Outbreak in Aswan, Egypt, 2014
iproc 2018;4(1):e10636
URL: http://www.iproc.org/2018/1/e10636/
doi: 10.2196/10636
PMID: 

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