The Validity of Rapid Malaria Test and Microscopy in Detecting Malaria in a Preelimination Region of Egypt

Background: Malaria is a leading cause of morbidity and mortality worldwide. Rapid and accurate diagnosis of malaria would improve control measures and reduce morbidity and mortality. Objective. The aim of this study was to assess the prevalence of malaria in high risk foci in Egypt and the effectiveness of rapid diagnostic tests in diagnosis and subsequently control of malaria. Methodology: A total number of 600 cases of both sexes with different ages were included in the present study. Cases were included in 2 groups; first group (500 cases) were randomly selected from households in Fayoum Governorate and second group (100 cases) were admitted to Fayoum Fever Hospital with signs suggestive of malaria. Cases were subjected to detailed history taking, clinical examination, microscopic examination of thin and thick blood films, and immunological test to detect plasmodial antigens. Results: A total of 3 positive cases were detected by rapid diagnostic tests (RDTs). Out of these 3 cases, one case was positive for malaria parasite by microscopic examination of blood films. All positive cases in the study had history of travel to malaria endemic areas.

Conclusion: RDTs are simple and effective for rapid diagnosis of malaria to help in implication of control measures in different localities.