

LONG-TERM IMPACT OF CHILDHOOD MALARIA INFECTION ON SCHOOL PERFORMANCE AND NUTRITIONAL STATUS AMONG SCHOOLCHILDREN IN A MALARIA ENDEMIC AREA ALONG THE THAI-MYARMAR BORDER

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ABSTRACT

This is retrospective cohort study among schoolchildren age 6 and older in a primary-secondary school of Tanousri subdistrict, Suanphuang district, Ratchaburi province, Thailand, during 2014. History of childhood malaria infection was obtained from the medical records of the RTIC. School performance was assessed based on students' subject scores in Thai Language and Mathematics. Primary data was collected by interviews using questionnaires and standard emotional intelligence test. Data analysis was calculated using computer statistical package SPSS and the significant association was set at $p < 0.05$.

A total of 457 students were included, 135 (30%) of whom had a history of uncomplicated malaria infection. About half of the malaria-infected children had suffered infection before the age of 4 years. Mean scores for both Mathematics and Thai Language decreased in relation to the increasing number of malaria attacks. Mean scores were not associated with duration since the last malaria attack. The association between malaria infection and school performance was not significant after adjusting for potential confounders. Malaria infection was also not associated with nutritional status after controlling for confounding factors.

This study investigated the long-term consequence of uncomplicated malaria during childhood. School performance and nutritional status were not associated with a history of malaria infection. These findings indicate that the impact of uncomplicated malaria infection on school performance and nutritional status may not be prolonged.

KEY WORDS: MALARIA / SCHOOL PERFORMANCE / NUTRITIONAL STATUS / EMOTIONAL INTELLIGENCE

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