

**MALNUTRITION IN DIARRHEA, MALARIA AND DENGUE
AMONG CHILDREN IN THA SONG YANG, TAK, THAILAND**



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ABSTRACT

We retrospectively investigated the association of malnutrition with diarrhea, malaria and dengue. Our study included 225 children, divided into 3 groups of 75 patients, who attended Tha Song Yang Hospital, Tak Province in Thailand before the end of December 2015. Six (8.0%), 0 and 6 (8.0%) were severe cases in diarrhea, malaria and dengue, respectively. Seven (9.3%), 11 (14.7%) and 9 (12.0%) cases in the diarrhea, malaria and dengue groups, respectively, had malnutrition [Cut-off points for BMI for thinners in children equivalent to children at 18 years old age with BMI 17 for patients aged ≥ 5 years old and weigh-for-age z score, weight-for-height z score or height-for-z score < -2 for patients aged < 5 years old]. Four (5.3%) diarrhea, 7 (9.3%) malaria and 0 dengue patients had severe malnutrition. There was no statistical difference in the prevalence of malnutrition between the 3 diseases. The prevalence of severe malnutrition was significantly highest in malaria. The prevalence of severe malnutrition was significantly higher in malaria compared to dengue in the patients aged < 5 years old in a subgroup analysis. In conclusion, severe malnutrition was associated with malaria for children aged < 5 years old. Studying malnutrition in Tha Song Yang may help solve the malnutrition problem in this rural area on Thai-Myanmar border.

KEY WORDS: MALNUTRITION/CHILDREN/DIARRHEA/MALARIA/DENGUE

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