

Thesis Title The Association Between Nutritional Practices and Protein Energy Malnutrition Among Under Five Years Old Children in Bogale Township, Myanmar

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ABSTRACT

The community based case-control study was conducted to determine the association between nutritional practices and protein energy malnutrition (PEM) among 6-59 months old children in Bogale Township, Myanmar. The target population was 6-59 months old children. One hundred and eighty six children of under five years of age together with their caregivers were enrolled. A semi-structured questionnaire was used to obtain the required information and anthropometric measurements were made to confirm cases. Cases and controls were matched in age and sex of the children. Simple random sampling method was used for sample selection with the ratio of 1:1 for case and control. Face-to-face interview was done to explore the knowledge, attitudes and practices of mothers or caregivers. Testing of intestinal parasitic infestation was identified for controlling as a confounding factor. Ethical approval was obtained from Mae Fah Luang University Ethics Committee on Human Research, Thailand (REH-55006). A chi-square test was used to determine the

significant differences at $\alpha=0.05$, and univariate and multivariate analyses of logistic regression were used to observe the magnitude of association.

The results showed that after controlling all possible confounding factors, family income, nutritional knowledge and nutritional practices of mothers or caregivers were significantly associated with PEM in under-5-years-old children with $OR_{adj}=9.21$ (95%CI=2.45-34.65) for the income less than 2,000 Kyats, $OR_{adj}=5.84$ (95%CI=1.76-19.35) for income 2,000-2,999 Kyats, $OR_{adj}=5.72$ (95%CI=1.92-17.00) for low to middle level of knowledge of mothers or caregivers on nutritional practices and $OR_{adj}=13.77$ (95%CI=5.44-34.86) for wrong nutritional practices of the mothers or caregivers respectively. The study indicated that the nutritional practice of mothers or caregivers was the main risk factor for PEM in under-five-years old children in Bogale Township, Myanmar.

In conclusion, right nutritional practice of mothers or caregivers was essential measure to prevent PEM among under-five-years old children at the study site together with improving nutritional knowledge and family income.

Keywords: Protein energy malnutrition/Under-five-years old children/Nutritional practices/Bogale Township