

Abstract of Master's Thesis

No.1

Course	International Health development course	Name	Asuka Miyazaki
Thesis Title	Are rural Cambodian male infants more malnourished than female infants? The role of infection history and weaning practices.		
<p>Back ground</p> <p>Optimal nutritional status in the early life of children is an important element to improve child health. The increase in age and being male have a negative association with undernutrition were shown in a previous study, which has been carried out in rural Cambodia. Therefore, it is necessary to explore the risk factors for child undernutrition and the potential causes for the sex specific differences in relation to infectious history which can be caused by the poor setting environment and weaning practices.</p> <p>Objective</p> <p>To investigate the prevalence and risk factors for undernutrition among under one year children and if these differ by sex in Cambodian rural children.</p> <p>Method</p> <p>This study employed a cross-sectional descriptive design. Subjects were children who were 1-11 months old and living in 12 villages in Steung Trang district, Kampong Cham province, Cambodia. Data regarding anthropometric measurement, basic characteristics of household, demography of parents or main care giver and child, hygiene practice of the main care giver and weaning/feeding practices were collected. Multiple linear regression analysis was performed to find out the associations between a wasting (weight-for-length) indicator and each variable.</p> <p>Results</p> <p>The prevalence of wasting and stunting were 3.8% and 19.2%, respectively. There were no significant differences in the nutrition status between male and female children under one year old. On the other hand, Z-score of weight-for-length (WLZ) showed decreasing trends according to the age in both sexes ($p < 0.001$ in both, < 0.001 in male, 0.003 in female) while there was no statistical difference in length-for-age by age groups. Factors, “increase in age” (Coefficient=-0.12, 95%CI [-0.19, -0.06]), “living with other child aged less than 5 years” (Coefficient= -0.39, 95%CI [-0.80, 0.00]) and “using a feeding bottle” (Coefficient=-0.50, 95%CI [-0.90, -0.10]) negatively associated to “WLZ”. Positive affecting factor was only “washing hand with soap always before food preparation” (Coefficient=0.42, 95%CI [0.05, 0.79]).</p>			

- * The abstract, containing the objective, method, result and conclusion should not exceed c.1000 words (300-500words/page, double sided on A4 paper)

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Conclusion

There are no significant differences in the child nutrition between male and female aged under 1 year. This study identifies “living with other child aged less than 5 years”, “using a feeding bottle” and “no washing hand with soap always before food preparation” as a risk factors of child malnutrition. It suggests the importance of the daily habit of the child rearing and hygiene practice by main care-giver to improve the nutrition of the children in the resource limited country.