

Abstract of Master's Dissertation

No.1

Course	MTM	Name	Takahiro Ichikawa
Thesis Title	Characteristics of children admitted with vaccine preventable diseases from 2016 to 2019 to an infectious diseases hospital in Manila, Philippines		
Abstract of Master's Dissertation Objective : Vaccination is an effective measure to control infectious diseases. However, immunization coverage is insufficient in some parts of the world. The Philippines experienced the large measles outbreak in 2018 and 2019. This study aimed to analyze the association between background factors and vaccination status amongst measles patients in the Philippines. Method : This study uses data from two datasets from studies conducted at SLH: first, a retrospective, single-center study to analyze data of patients with measles admitted to the national tertiary hospital in the Philippines, from 1 January 2016 to 31 December 2019; and second, the data of community-acquired bacteremia (CAB) study from 16 June 2015 to 14 March 2021. Descriptive statistics were carried out for both datasets and simple descriptive statistical measures were summarized. Bivariable analyses were conducted in the measles dataset to assess the association of each patient's socio-demographic and clinical characteristics and vaccine status. I also performed a bivariable analysis to assess the association between patient's characteristics and reasons for not being vaccinated. A multivariable regression was implemented to adjust for all other covariates utilized in the bivariable logistic regression. Result : Of the 5,628 patients admitted with measles, 45% were female. 38% were aged under 8 months, and 39% were aged 16 to 71 months. Eighty-seven patients were admitted in 2016, and then the number reached 3,298 cases in 2019. 15% of patients have received at least one dose of measles vaccine. The most frequent reason for missing vaccination was "Child was sick" (824, 18%). 68.5% of patients had some complications, and 3.2% died in this study period.			

* The abstract, containing the objective, method, result and conclusion should not exceed 300-500 words and printed double sided on A4 paper)

Abstract of Master's Dissertation

No.2

Course	MTM	Name	Takahiro Ichikawa
<p>The CAB study included 77 measles patients and 85 diphtheria patients. Measles cases increased to 26 cases in 2018 and 50 cases in 2019, while diphtheria cases were constantly observed in the study period. The measles mortality was 1.3%, and diphtheria mortality was 20%.</p> <p>Vaccination rates were lower in the 9 to 11 age group compared with those aged 16 to 71 months (adjusted OR: 0.75, 95%CI: 0.54 to 0.85). Patients from Central Luzon (adjusted OR: 0.49, 95%CI: 0.26 to 0.92) and Calabarzon (adjusted OR: 0.70 95%CI: 0.53 to 0.94) had higher vaccination rates than those from NCR. Vaccination rates were higher among patients admitted in 2016 (adjusted OR: 10.6, 95%CI: 5.50 to 20.3) and 2017 (adjusted OR: 5.53, 95%CI: 3.32 to 9.23) than in 2019. Vaccination was not associated with complications or mortality.</p> <p>The odds of avoidable reasons for not receiving a measles vaccine were lower in those aged 9 to 11 months (adjusted OR: 0.15, 95%CI: 0.12 to 0.19) and 12 to 15 months (adjusted OR: 0.40, 95%CI: 0.29 to 0.50) compared with 16 to 71 months. The odds were also higher in patients admitted in 2017 (adjusted OR: 3.21, 95%CI: 1.01 to 10.1) and 2018 (adjusted OR: 1.34, 95%CI: 1.11 to 1.63) compared with in 2019.</p> <p>Conclusion :</p> <p>This study reports associations between measles patients socio-demographic characteristics and vaccine status, and their reasons for not being vaccinated. Those findings may contribute to evidence to improve immunization coverage.</p>			

* The abstract, containing the objective, method, result and conclusion should not exceed 300-500words and printed double sided on A4 paper)