**Characteristic of Leptospirosis Patients Admitted to Hospital Kuala Lumpur (HKL) From 2013 to 2018.**

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**ABSTRACT**

**INTRODUCTION:** Rapid urbanisation lead to high density population in large cities. These changing environments influence the epidemiological pattern of leptospirosis, to move from rural to urban areas. Objective of this study is to determine the demographic and clinical characteristics of leptospirosis patients admitted to HKL.

**METHODS:** This is a registry base retrospective study; carried out among all patients admitted with diagnosis of Leptospirosis to HKL between January 2013 and December 2018. A total list of 4270 suspected leptospirosis cases were downloaded from CDC-Excel format and then analysed using SPSS version 21.0. Only confirmed cases were included in this study, which were 1106 patients.

**RESULTS:** The admitted patients were from Kuala Lumpur 715 (64.6%), Selangor 372 (33.6%), and other states 19 (1.7%); consist of 841 (76.0%) males and 265 (24.0%) females. The mean age was 34-year (SD 15.4 year) with majority were in the age group of 18-30 (42.9%) and 31-60 (40.0%). Mostly was Malaysian 855 (77.3%) with ethnicity of Malays (55.5%), Indian (12.0%), and Chinese (5.9%). The most common clinical symptoms were fever 183 (35.95%), followed by diarrhoea 53 (10.5%), vomiting 61 (12.1%), myalgia 28 (5.5%), abdominal pain 26 (5.1%), headache 20 (4.0%), and arthralgia 28 (5.5%). Mostly admitted to Medical ward 912(82.5%), while 139 (12.6%) severe cases need intensive care, and death occurrence were 25 (2.3%).

**CONCLUSION:** Based on age, the most affected groups were the active working population. Clinical presentation varied from mild illness to life-threatening complications.

**KEYWORDS:** Leptospirosis, Hospital Kuala Lumpur

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**Ciguatera Fish Poisoning Outbreak in Penampang District, Sabah - December 2017**

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**ABSTRACT**

**BACKGROUND:** Ciguatera fish poisoning is caused by eating reef fish whose flesh is contaminated with ciguatoxin. A similar outbreak was reported in Kota Kinabalu District in 2012. On 15th February 2017, Area Health Office of Penampang received an unusual notification of suspected three food poisoning cases. Symptoms appeared after the cases had dinner at home. An investigation conducted aimed at verifying the outbreak, identifying the source and instituting control measures.

**METHODS:** An investigation was conducted to identify factors associated with the outbreak. A suspected case was one who presented with at least one of these symptoms; muscle pains, numbness, diarrhoea, vomiting, itchiness or abdominal pain. Active case detection was conducted for household and fishmongers in the market. Blood and stool samples were sent for microbial infection. Food samples included fish at the cases’ house and market were sent for confirmation.

**RESULTS:** Four cases out of five people were identified in the same household. Fifty percent of the cases were males and between the age of 20-59 years. The mean incubation period recorded was 7.3 hours. Muscle pain and numbness were present in all cases. Diarrhoea, vomiting, itchiness and abdominal pain were present in 50% of the cases. Food history revealed that all cases ate the red snapper and laboratory showed that it was positive for ciguatoxin. **CONCLUSION:** This was a household ciguatera fish poisoning related to ingesting food snapper. Further actions were required to monitor high risk fishes sold in the markets.

**KEYWORDS:** food poisoning, Sabah, ciguatera toxin, red snapper