

Escherichia Coli Outbreak Among Camp Attendees in Sungai Congkak, Selangor

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ABSTRACT

INTRODUCTION: Hulu Langat District Health Office was notified of students presented with acute gastroenteritis symptoms from three different institutions on 28th February 2019. All the affected students went to the same motivational camp in Sungai Congkak on the 22nd-25th February 2019. A study was conducted to describe the outbreak, identify risk factors, and implement control measures. **METHODS:** Case control study was used. Case was defined as any individual who attended the camp on the 22nd-25th February 2019, presented with either nausea, vomiting, diarrhea, or abdominal pain from 23rd February 2019. Active case detection was conducted, and students were interviewed. Hazard analysis and critical control points (HACCP) and environmental investigations were done. **RESULTS:** Attack rate was 30.8% (124/403), 116 cases (93.5%) did not seek for any medical attention, and another eight cases (6.5%) was treated as outpatient. Main symptoms were abdominal pain (64.52%), diarrhoea (58.06%) and vomiting (47.58%). Food premise rating was 70.1%. The investigation found that the usage of untreated water in several process without sanitation process caused cross contamination. The laboratory result showed isolation of *Coliform Sp.* from two environmental swabs, and isolation of *Coliform Sp* and *E. Coli* from five different water samples from the Gravity Feed System (GFS) supported the analysis. **CONCLUSIONS:** The outbreak was most likely due to usage of untreated contaminated water from the GFS as the only source of water at the camp, and the suspected bacteria is *E. Coli* Health education was given on safe water practices and basic sanitation to the camp owner and food handlers.

KEYWORDS: E. Coli, Outbreak, Sungai Congkak, Gravity Feed System, Selangor

Estimating Burden of Disease Attributable to Physical Inactivity in Malaysia, 2015

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ABSTRACT

INTRODUCTION: Regular physical activity is a well-established protective factor for the prevention and treatment of the noncommunicable diseases. Globally, 23% of adults do not meet the WHO global recommendations on physical activity for health. The objective of the study was to estimate the BOD attributable to physical inactivity in adults aged 30 years and older in Malaysia. **METHODS:** The calculation of BOD in term of Disability Adjusted Life Years (DALYs) was done using the methodology used in the Global BOD Study whereas the calculation of attributable burden of physical inactivity was done using the World Health Organization Comparative Risk Assessment methodology. Mortality and population data were provided by the Department of Statistics, Malaysia and data on inactivity was obtained from National Health and Morbidity Survey 2015. **RESULTS:** Physical inactivity was estimated to have caused 7.8% of BOD among Malaysian population (7.4% in males and 8.3% in females). By age group, the highest BOD attributable to physical inactivity was in the 60-69 years old. Ischaemic Heart Disease was the largest contributors for DALYs attributable to physical inactivity in both males and females at 52.5% and 32.52% respectively. **DISCUSSION:** This study shows the importance of physical inactivity as a major risk to health particularly among females. Priority should be given on the implementation of effective policy and practice regarding the prevention of physical inactivity in the population.

KEYWORDS: Physical Inactivity, Attributable Burden of Disease, DALYs