

# COVID-19 Chain Breaker Through Enhanced Movement Control Order in Selangor



**Pangie anak Bakit<sup>1</sup>, Hadita binti Sapari<sup>2</sup>, Hairusnizan binti Hamzah<sup>1</sup>, Nor Hayati binti Ibrahim<sup>1</sup>, Aniz Nor Sofea binti Muhamed<sup>2</sup>, Muhammad Akram bin Abd Kadir<sup>2</sup>, Mohamad Hafizan bin Abd Hadi<sup>2</sup>, Farahana binti Muhamad Pilus<sup>2</sup>, Norfazillah binti Ab Manan<sup>2</sup>, Wan Ming Keong<sup>2</sup>, Abdullah Husam bin A Shukor<sup>2</sup>, Zailiza binti Suli<sup>2</sup>.**

Institute for Health Management, Ministry of Health Malaysia<sup>1</sup>  
Hulu Langat District Health Office, Selangor State Health Department<sup>2</sup>

NMRR-20-809-54757

## Introduction

The COVID-19 pandemic has shaken the world since December 2019. Malaysia was not spared from this unprecedented crisis. The Malaysian government had declared Enhanced Movement Control Order (EMCO) in breaking the chain of COVID-19 transmissions in red zone areas in Hulu Langat, Selangor. For the EMCO, Hulu Langat District Health Office (PKDHL) had been responsible to provide the public health responses and measures in the area under the purview of Selangor State Health Department. The Hulu Langat District Health Officer who is a public health specialist led the taskforce for the planning, monitoring and implementing the public health activities while providing the medical services to the people. In this study, we aimed to identify the epidemiological characteristics of COVID-19 in Kampung Sungai Lui, Hulu Langat and the role of EMCO as a chain breaker for COVID-19.

## Methods

A retrospective cross-sectional study was done from March 30, 2020, until May 5, 2020, in the EMCO area in Kampung Sungai Lui, Hulu Langat. This study site was purposely selected due to a sudden surge of positive cases in the area that requires fast and critical public health measures. We collected primary data through Active Case Detection (ACD) and Passive Case Detection (PCD) and the 1,989 population was screened. The epidemiological characteristics and clinical manifestations were analysed using Microsoft Excel 2018 Software.

## Pre-EMCO

Before 30<sup>th</sup> March 2020

88

confirmed cases  
in Sg Lui area

### PRE-EMCO CHRONOLOGY

- 16 March** 1<sup>st</sup> confirmed case notified to CDC PKDHL was a cook from a Madrasah in Sungai Lui following voluntary testing after he attended gathering at Masjid Sri Petaling.
- 17 March** Rapid Response Team (RRT) was activated. Full investigations and massive samplings were carried out for 3 days.
- 20 March** The premise was closed under Prevention and Control of Infectious Disease Act 1988 by District Health Office. All Madrasah residents were quarantined and the area was controlled by PDRM and RELA.

## Results

### EMCO

Areas from Batu 21 to Batu 24, Sungai Lui, Hulu Langat, Selangor  
Medical Base Camp: Klinik Desa Sungai Lui

Period: 30<sup>th</sup> March until 5<sup>th</sup> May 2020

43

new confirmed  
cases detected  
during EMCO

2.16%

Incidence rate during  
EMCO period

Total population screened : 1,989  
Total RT-PCR sampling taken : 1,088  
Total houses screened : 429  
Total religious centre screened : 4

18

Person Under Investigation  
(PUI) cases referred to  
nearest hospital

16.7%

PUI cases were found  
positive COVID-19

0%

Case Fatality Rate

0

Healthcare transmission  
case detected

### CLUSTER PROFILE

- 95.3% were male
- 76.7% came from 21-30 age group
- 88.3% were non-Malaysians
- 95.3% were Madrasah residents
- 60.4% were symptomatic
- 39.6% attended gathering at Masjid Sri Petaling

### PUBLIC HEALTH MEASURES

- Medical Base Camp:
  - ACD and PCD
  - Sampling RT-PCR for high risk groups
  - Support services such as outpatient services, maternal and child health services, ambulance and emergency call services and medication supplies
- Disinfection at the common space in the EMCO areas
- Health promotion emphasising on good hand hygiene, social distancing, avoidance of 3Cs – (crowd, confined space and close conversation) and practice of 3W (wear, warn and wash)
- Involvement of inter-agencies such as District offices, PDRM, APM, RELA, JBPM, JKM, Ministry of Communication and Multimedia, Red Crescent Society and Jabatan Hal Ehwal Orang Asli

## Conclusion

A responsive public health measures with comprehensive early detection and adherence of Standard Operating Procedure (SOP) play a pivotal role in breaking the transmission chain of fast-spreading COVID-19 clusters. Epidemiological characterisation of COVID-19 confirmed cases, provides the basis in the development of effective control strategies.

## Acknowledgement

The authors would like to thank the Director General of Health Malaysia for the permission to present this study. We would like to express our sincere appreciation for the inter-agencies' cooperation and teamwork during the period of EMCO and making this study a success.

### Contact Info

Dr. Pangie anak Bakit  
Institute for Health Management  
Blok B1, Kompleks NIH,  
Seksyen U13, Bandar Setia Alam,  
40170 Shah Alam, Selangor.  
pangiebakit@moh.gov.my  
+603-33627400 / +60128077914



www.ihm.moh.gov.my