

Co-Infection of SARS-CoV-2 With Other Respiratory Viruses in Symptomatic Patients During COVID-19 Pandemic

Adilahtul Bushro Zaini, MPath (Med Microb)¹, Nabila Farina Rosli, MD¹, Nurul Izzati Abdul Aziz, MD², Muhammad Asyraf Onn, MSc¹, Nabihah Mohd Zin, MSc¹, Fatin Sarah Abd Aziz, MD¹, Nadia Soliha Zulkipli, MD¹

¹Pathology Department, Sungai Buloh Hospital, ²Pathology Department, Tengku Ampuan Afzan Hospital

ABSTRACT

Introduction: Severe acute respiratory syndrome-coronavirus-2 (SARS-CoV-2) has become a global health problem. Co-infection of SARS-CoV-2 and other common respiratory viruses in symptomatic patients has been reported to be significantly common in the United States of America. To the best of our knowledge, there is no published evidence of SARS-CoV-2 co-infection reported in Malaysia. We performed a study on samples of patients with acute respiratory illnesses where the clinical symptoms are indistinguishable between both Coronavirus disease-19 (COVID-19) and other common respiratory virus infections to determine the extent of co-infections of SARS-CoV-2 with other common respiratory viruses. **Methods:** Archived samples from patients with respiratory symptoms to Sungai Buloh Hospital from February 2020 to August 2020 were screened for COVID-19 using Allplex SARS-CoV-2 Assay as well as Allplex RV Essential Assay for detection of Influenza Virus (Flu A and B), Respiratory Syncytial Virus (RSV), Metapneumovirus (MPV), Adenovirus (AdV), Rhinovirus (HRV) and Parainfluenza Virus (PIV) using real-time PCR (RT-PCR). **Results:** A total of 354 samples were tested of which 32.2% (114/354) were positive for SARS-CoV-2 and 6.8% (24/354) were positive for HRV, AdV, MPV and RSV. The rate of SARS-CoV-2 co-infection with other common respiratory viruses was 2.2% (7/308), where the patients were all males aged between 4 to 27 years old with cough and fever as the common symptoms. HRV was the most common other respiratory virus infection which accounts for 71.4% (5/7) of co-infection with SARS-CoV-2. **Conclusion:** The rate of SARS-CoV-2 co-infection with other common respiratory viruses was quite low. However, SARS-CoV-2 infection during the COVID-19 pandemic could not rule out co-infection with other respiratory viruses.

Discharge Against Medical Advice: A Retrospective Study in Hospital Pakar Sultanah Fatimah

Bidari binti Rasol, BNS1, Azlina binti Dahlan, MNS1, Rafidah binti Darjat, BNS1, Mazni binti Mohamed1

1Nursing Unit, Hospital Pakar Sultanah Fatimah Muar

ABSTRACT

Introduction: Patient discharge against medical advice (DAMA) are a vulnerable population and suffer increased morbidity and mortality, healthcare costs, and rates of readmission. This study aimed to evaluate the demographic, clinical characteristics, factor influencing and reason of DAMA in Hospital Pakar Sultanah Fatimah Muar, (HPSF), Malaysia. **Methods:** A retrospective cross-sectional study. Patient DAMA data record in HPSF, (Medical, Surgical, Obstetrics & Gynea departments) were collected from January to December 2019, by the nursing administration. SPSS version 22 was used to describe the study outcome. **Results:** In our study, department, male gender, adult ages, race, counselling of the patient DAMA health condition and consent were significant predictors for DAMA. The three highest predictor of clinical diagnosis (ICD10) characteristics, are: circulatory was 136 (25.3%), infection was 135(25.1%) and respiratory was 53(9.9%). Category admission of DAMA, was, from non-trauma (58%) and trauma patients (42%). The highest influencing factors and reasons related serviced provided are to obtain treatment /expertise at another hospital was 140(26%), to get alternative treatment and uncomfortable environment was 44(8.2%) and to continue the treatment hospital at near home was 44(8.2%). There was less association between department and services provided of patients leaving DAMA in HPSF, $r = 0.170$, $P < .001$ is significant. The healthcare management can build strategies to assist patients to receive optimal medical care and prevent unfavourable outcomes. **Conclusion:** DAMA is considered to be a significant problem in hospitalization.