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PS04.24 (267)

Post-COVID-19 Syndrome in Healthcare Personnel in Dr. Mohammad Hoesin General Hospital Palembang Indonesia

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Purpose: Coronavirus infectious disease 2019 (COVID-19) had been infecting the world including healthcare personnel (HCP), but many survivors still experienced symptoms although had recovered with negative PCR results. This study aimed to identify post-COVID-19 syndrome among HCP in our hospital.

Methods & Materials: We conducted a cross-sectional study, asking HCP, surviving COVID-19 from April 2020 until February 2021, confirmed by twice negative PCR SARS CoV-2, and still working at the hospital at the time the research was conducted, to fill in an online questionnaire asking questions about symptoms related to post COVID-19 syndrome.

Results: Total study participants who completed the questionnaire were 164, 106 (65%) of them were women, consisted of 21 (13%) specialists, 52 (32%) residents, and 91 (55%) nurses. The average age was 37 (26 – 69) years old. When they experienced COVID-19, 60 (37%) participants were in asymptomatic, 76 (46%) mild, 26 (16%) moderate, and 2 (1%) severe-critical condition. Among participants, 78 (48%) still had symptoms by the time the survey was conducted, 61 (78.2%) were women, and these symptoms were still experienced in 41 (53%) survivors who had recovered more than 3 months. Fatigue was the most common symptom reported (55, 71%), followed by cough (15, 19%), joint pain (12, 15%), headache (10, 13%), muscle pain (9, 12%), breathing difficulty (7,9%), anosmia (5, 6%), bitter tongue (4, 5%).

Conclusion: Post-COVID-19 syndrome was quite common in HCP and this might cause the inability to work, treat, and care for patients optimally. Particular attention should be paid to this condition.

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Beyond Diagnostics: The role of a RT-PCR laboratory in a pandemic

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Purpose: The gold standard for the detection of SARS-CoV-2 is Real Time Reverse Transcriptase PCR (rRT-PCR). A combination of nasopharyngeal and oropharyngeal swabs improves the sensitivity of detection of SARS-CoV-2 in samples. The first wave of COVID-19 impacted Chennai in May 2020 and lasted till October 2020. The

second wave began in March 2021 and lasted till June 2021. The aim of this study is to compare and analyze the COVID-19 waves in 2020 and 2021 based on the data from a tertiary care centre in Chennai, India.

Methods & Materials: A total of 42,374 samples were tested by rRT-PCR (Rotor Gene-Q) between March 2020 and June 2021. RNA was extracted using Zybionucleic acid extraction kit. The target regions of the RT-PCR kits (ViroQ SARS CoV2, Bag Diagnostics, Germany) were the E-gene and RdRp gene. Quality control is maintained by routine participation in the external quality assurance scheme (EQAS).

Results: In 2020, 22,905 samples were tested and 3,415 samples tested positive for COVID 19. During the first wave of COVID-19 between May-October 2020, 2989 samples tested positive for COVID 19. Between January and June 2021, 19,469 samples were tested and 2,320 samples were COVID-19 positive. A total of 2,155 samples were positive for COVID-19 in the second wave between March-June 2020. The duration of the first wave was longer with a smaller peak in incidence of COVID 19. The second wave in 2021 had a shorter duration with a more pronounced spike in COVID-19 cases in April 2021.

Conclusion: The number of COVID 19 positive cases are similar between the two waves of COVID 19. However, the first wave of COVID-19 took place over a period of nearly six months, while the second wave occurred over three to four months. There is a noticeable surge in COVID-19 incidence observed in April-May 2021. This could indicate the increased infectivity of the virus as observed with the cases doubling rapidly during this time. Documenting the characteristics of the wave in terms of its rapidity of onset of disease and peaks in incidence would offer insight into the progression of COVID-19.

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Seroprevalence of SARS-CoV-2 Antibodies Among Blood Donors in Malaysia During the Pre-Vaccination Period

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Purpose: We aimed to investigate the prevalence of antibodies against SARS-CoV-2 virus among blood donors in Klang Valley; a cohort that represent healthy individuals in a city which recorded a high number of COVID-19 infections in the country.

Methods & Materials: A total of 806 blood donors at the National Blood Centre were recruited between February to March 2021 during the third wave of the pandemic in Malaysia, a period just prior to the national COVID-19 vaccination programme began. 5 ml of blood were collected from each donor and the serum was subjected to qualitative determination of antibodies against SARS-CoV-2 virus using two tests. The first test detected total antibodies against SARS CoV-2 nucleocapsid (N) [Elecsys® Anti-SARS-CoV-2 Electrochemiluminescence immunoassay (ECLIA), Roche Diagnostics] while the second test detected the total antibodies against SARS-CoV-2 receptor binding domain (RBD) [WANTAI SARS-CoV-2 Antibody (Enzyme linked immunoassay (ELISA), China]. The tests were performed according to the manufacturer guidelines. The sera which produced positive results from both screening tests were then subjected to quantitative determination of antibodies against