

Prevalence of Transfusion Transmitted Infection among Blood Donors in Perak State of Malaysia

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ABSTRACT

Introduction: Morbidity and mortality due to the transfusion of infected blood have severe economical and psychosocial cost. It affects not only the recipients, but also the family members of the inflicted patients. This study aimed to determine the prevalence of HIV, hepatitis B, hepatitis C and syphilis, and the associated socio-demographic of transfusion transmitted infection (TTI) among blood donors in Perak, Malaysia. **Methods:** This was a retrospective data review, among donors who were blood donors between years 2016 to 2020. Records of participants were retrieved from the database of donors from all the hospitals in Perak. Records of non-Malaysian donors and those with missing data were excluded. **Results:** Overall, there were 675 donors detected with TTI out of a total of 307,113 donations (0.22%) from 2016 to 2020. Majority of the donors with TTI were Malays (376, 55.7%), aged between 21-30 (214, 31.7%), males (580, 85.9%), first time donors (472, 69.9%) and with hepatitis B infections (282, 41.8%). Seroconverted donors constituted slightly more than a quarter (188, 27.9%) of the total TTI cases. The prevalence of TTI peaked in 2016 (0.25%) and decreased to 0.20% in year 2020. First time donors ($p<0.001$), males ($p=0.001$) and Malay donors ($p<0.001$) were associated with higher rate of TTI. Hepatitis B has the highest prevalence ($n=282$), followed by syphilis ($n=157$), hepatitis C ($n=130$), and HIV ($n=98$). **Conclusion:** Although the prevalence of transfusion transmitted infections among the Perak state donors was low, constant blood screening and vigilance system should be implemented to ensure blood safety among the recipients.

Comorbidity and Its Impact on COVID-19 Positive Patients Who Died in Malaysia

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ABSTRACT

Background: Battling the COVID-19 pandemic is still the main agenda of many countries in the world today. This study evaluated the association between comorbidities and its impact on COVID-19 mortality. **Method:** Public data set of the COVID-19 patient in Malaysia who passed away in 2020 due to the disease was obtained from the daily press statements made by the Ministry of Health Malaysia (MOH) and their known comorbidities. **Results:** Incidence of gout was more prevalent among patients ≥ 65 years ($n=14$ (6.1%)) and significantly associated with mortality ($p=0.011$), whereas obesity ($n=14$ (5.8%); $p=0.003$) and asthma ($n=11$ (4.5%); $p=0.040$) were more prevalent and significantly associated with mortality among patients < 65 years. Heart diseases ($p=0.013$) and obesity ($p=0.003$) were significantly affected with mortality in gender-based comparison. **Conclusion:** Conclusively, there was a high incidence of comorbidities hypertension and diabetes mellitus among COVID-19 patients who died in Malaysia in 2020, but there was a small proportion of deaths among patients without any pre-existing comorbidities.