Total Dose Infusion Among Antenatal Mothers with Iron Deficiency Anaemia (IDA) in Seremban District Government Health Clinics During COVID-19 Pandemic

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Objectives. The COVID-19 pandemic has changed the way things are done in primary care. Total Dose Infusion (TDI) is one of the services introduced in Seremban government health clinics, which was previously done only in a hospital setting. The study aims to describe the effectiveness of TDI and its challenges.

Methods. This retrospective cross-sectional study is based on a universal sampling of secondary data from antenatal books of patients that received TDI from February to September 2021. Sociodemographic data were described descriptively, and the effectiveness of TDI was measured using paired t-test.

Results. Overall, 246 samples were included. The mean age was 29.71 years old with predominantly (68.7%) Malays followed by Indian (28%), Chinese (3%) and others (5%). The majority of samples had secondary educational levels (60.6%), were unemployed (57.3%) and had low parity (76%). The mean period of amenorrhea (POA) at TDI was 29.62 weeks with mean serum ferritin of 12.18ug/L, and the mean dose of intravenous iron dextran given was 963.51 mg. In comparison, mean haemoglobin preand-post TDI was 9.85g/dL and 11.20 g/dL, respectively, with p<0.001 showing a significant improvement of haemoglobin pre-and-post TDI.

Conclusion. This study has shown a significant difference between pre-TDI haemoglobin levels compared to the post-TDI haemoglobin level. Therefore, we concluded that this service is equally effective if given in government health clinic settings, despite some limitations.

Keywords: total dose infusion (TDI), government health clinic, antenatal mother

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