

### **Clinical and epidemiological features of typhus fever notified by Teaching Hospital Jaffna to selected MOH areas in Jaffna District**

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**Background and Objective:** Typhus is an emerging notifiable disease in Sri Lanka and is fairly common in Jaffna. This study aims to describe the clinical and epidemiological features of typhus fever in four selected Medical Officer of Health (MOH) areas in Jaffna district.

**Methods:** This is a cross-sectional analytical study of 384 typhus fever cases notified by Teaching Hospital Jaffna to Jaffna, Sandilippay, Kopay, and Nallur MOH areas, which accounted for the highest number of notified cases in Jaffna district in 2019 and 2020. Data were extracted from 384 BHTs and 237 H411 forms using the KoboCollect app. Chi-square test, independent t-test, and ANOVA were used to assess the associations in SPSS (critical level 0.05).

**Results:** Out of the 384 notified cases, only 237 H411 forms were identified at the MOH level. Typhus was more common in the age group <19 years (31.5%) and distributed evenly between the sexes. Common symptoms were fever (96.9%), headache (50%), cough (43.8%), chills and rigors (40.6%), arthralgia (25%), and myalgia (23.4%). Eschar rash (39.8%), lymphadenopathy (12.2%), hepatomegaly (6%), splenomegaly (4.9%), and pneumonitis (2.1%) were recorded in BHTs. With respect to investigations, 61 (15.6%) and 39 (10.2%) cases had leukocytosis and leucopenia, respectively, and 39.1% had an abnormal platelet count. The highest proportion of cases was reported from the Jaffna MOH area (31.2%). The mean time between onset and hospitalization was 5.7 (SD 2.7) days with a median of 4 (IQR 3-6). The highest and lowest mean times between admission and notification were in Jaffna (mean 2.12, SD 2.55) and Sandilippay (mean 0.93 SD 1.62) MOH areas, respectively. The mean time between notification to MOH and field investigation was 1.49 (SD 2.18) days with a median of 1 (IQR 0-2). The latter differed significantly by MOH area ( $p < 0.05$ ).

**Conclusions:** Typhus fever presents with non-specific symptoms and signs, which may partly explain the delays in notification. Health authorities need to raise awareness in the community regarding early health seeking for fever. Further research is needed to evaluate the reasons for delays in notification and the lack of H 411 forms at the hospital and MOH levels.

**Keywords:** Typhus, Notification, Clinical features, Jaffna