

Initiation of Hospital-based Active Typhoid Fever Sentinel Surveillance among Suspected Cases in Mandalay

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Abstract

Typhoid fever is a global health problem, caused by the bacterium *Salmonella typhi* and *paratyphi* A & B, foodborne pathogens worldwide. Although blood culture is the mainstay of the diagnosis, clinicians usually diagnose mainly and only by single Widal test as quick management. Typhoid fever vaccine is popular and commercially available, however typhoid fever morbidity, mortality is one of the public health problems and multi drug resistant *S. typhi* is also detected. This Hospital and Laboratory-based study was performed from 1st Feb 2013 to 13th Nov 2013, at emergency unit of medical wards, Mandalay General Hospital and pediatric wards of two Children Hospitals (Mandalay). This study aimed to apply in a preventive programme that can potentially be given in the expanded programme on (EPI) schedule of infant immunizations, to assess the public health burden in the population and to identify the antibiotic sensitivity pattern. Depending on the age of patient, 2-5 ml of venous blood collected prior to initiating antibiotic therapy by using disposable things and immediately inoculated into blood culture bottle after getting written informed consent. Out of 324 participants, 2-12 years was 304 (93.8%) and above 12 years was 20 (6.2%). One hundred and forty six cases revealed no sign of growth in culture bottle. Fifty-six out of 178 cases showed no growth on sub-culture, *Streptococcus* species due to skin contamination were detected in 3 cases (1.7%), *Salmonella typhi* in 8 cases(4.5%), respectively. Antibiotic sensitivity pattern showed resistance to conventional antibiotics (Chloramphenicol, Septrin, Amoxilcillin, Ampicillin).