

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

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Typhoid fever is a global health problem, caused by the bacterium *Salmonella typhi* and *paratyphi* A & B, foodborne pathogens worldwide. Clinicians usually diagnose mainly and only by single Widal test as quick management are needed. Blood culture is the mainstay of the diagnosis. Typhoid fever morbidity, mortality was one of the public health problems and multi drug resistant *S. typhi* is detected. Most cases occur in persons aged between 3 - 19 years. Typhoid fever vaccine is popular and commercially available. This Hospital and Laboratory-based, Prospective study was done aimed for 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, to identify the antibiotic sensitivity pattern. Depending on the age of the patient, 2 ml of venous blood collected for child case and 5 ml of venous blood collected for adult case prior to initiating antibiotic therapy by using disposable things and immediately inoculated to blood culture bottle after getting written informed consent, explaining the purpose and benefits. This Hospital and Laboratory-based study was performed from 1<sup>st</sup> Feb 2012 to 13<sup>th</sup> Nov 2013, a total of 324 participants(2-12 years was 304(93.8%) and above 12 years was 20(6.2%)) at emergency unit of medical ward Mandalay General Hospital, paediatric wards of both Children Hospitals were enrolled and analyzed. One hundred and forty six cases revealed no sign of growth in culture bottle. The rest showed no growth on sub-culture 56(31.5%), *Streptococcus* species due to skin contamination 3(1.7%), *Salmonella typhi* 8(4.5%) respectively. Not positive blood culture cases may be due to bacteraemia during the sample time and may be due to fastidious organisms and anaerobic bacteria in the sample. Antibiotic sensitivity pattern showed resistant to conventional antibiotics (Chloramphenicol, Septrin, Ampicillin).