

## **Epidemiology of Typhoid in Neno, Malawi**

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**Background:** Neno district in Southern Malawi (150,000 population) is currently experiencing an epidemic of Typhoid fever (*Salmonella* Typhi). After confirmation of the epidemic by blood-culture, a case-definition based on fever for at least 3 days and a positive Typhoid antibody test was used. A sub-set of cases continue to be bloodculture confirmed. By October 2016, 13<sup>th</sup> week after index case, the district had treated 160 cases of Typhoid fever. We present demographic, clinical characteristics and outcomes of Typhoid fever cases in Neno.

**Methods:** Following clinical case-definition and fluoroquinolone treatment, Typhoid fever cases had a home-visit shortly after diagnosis. During the visit, we conducted household/community case identification and referral, education on food handling, sanitation and hygiene, and distribution of chlorine. We also retrospectively collected data on demographic, clinical and household characteristics of the cases. The data was entered in Microsoft Excel, cleaned and analyzed using StataIC version14.

**Results:** We tracked 63 Typhoid fever cases living in 54 households. The median age of the cases was 12 years (range: <1yr-66), with males slightly older than females (Median age for Males was 13 while females was 9); 68% (n=43) of all cases were less than 20 years old. Case-definition diagnosis was made median 10 days after onset of fever (range: 1-30 days). Apart from fever, other commonly-reported symptoms included headache (61%), abdominal pain (54%), diarrhea (47%), vomiting (30%), coughing (16%) and constipation (5%). No patient reported neurological and/or intestinal perforation as complications. Among all cases of Typhoid fever, only 8 patients were admitted to hospital and no case fatalities were reported.

**Conclusions:** Typhoid fever cases presented with symptoms similar to other common diseases like malaria. Since the epidemic is ongoing, we are intensifying community and facility case finding and treatment and updated data will be presented.