Novel surveillance system demonstrates burden of enteric fever in India

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Background: Indian Academy of Pediatrics(IAP) in collaboration with its Kutch branch has started web based Infectious Disease Surveillance and AEFI (Adverse Event Following Immunization) reporting system. The Objectives of the project are to develop an early warning system for pediatric infectious diseases in India, to generate data on burden of infectious diseases in India and to generate data on serious AEFI. IDsurv relies on registered members to contribute case reports for 10 communicable diseases, including enteric fever.

Methods & Materials: At present only registered paediatricians can report cases on IDsurv.org. IDsurv is a voluntary project and passive spontaneous reporting occurs. Once a user registers on website, his identity is verified and then activated by admin.

Results: A total of 2281 cases of enteric fever were recorded from February 2011 – November 2013, including 41 paratyphii infections and 2240 typhi infections. 74.62% (1702/2281) of reported cases were laboratory confirmed by antibody detection or specimen culture. The age distribution ranged from 3 months – 18 years, with the highest burden among 5–9 year olds (38.14%), followed by 2–5 year olds (28.71%), 34.23% (781/2281) of case reports were female. No fatalities were reported, although 20% (457/2281) of cases were hospitalized. Reports were received from 17 states, 37.1% of which were from Uttar Pradesh, followed by Madhya Pradesh (30%).

Conclusion: The prevalence of colonization with ESBL-PE among pregnant women in the Madagascar community is high. In

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ESBL-producing Enterobacteriaceae colonization among pregnant women in community in Madagascar

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Background: The worldwide spread of expanded-spectrum beta-lactamase-producing Enterobacteriaceae (ESBL-PE) is a major public health issue in developing countries where the burden of bacterial diseases is high. Severe neonatal bacterial infections are of particular concern. Given the potential for mother-to-child transmission of these bacteria in community, the aim of the study was to investigate the ESBL-PE colonization among pregnant women in Madagascar and to determine factors associated with this colonization.

Methods & Materials: Women included in the pilot phase of Children's Antibiotic Resistance infections in Low Income countries project (http://www.charliproject.org) living in rural or urban areas in Madagascar and having given birth between June and September 2013 where enrolled in the study. Stool samples were collected during delivery and screened for ESBL production. Women's socio-demographic characteristics and living conditions, past medical and pregnancy history and detailed antibiotic consumption during the previous year were recorded to assess possible factors associated with ESBL-PE colonization in multivariate analysis.

Results: Among the 139 women interviewed, 11.5% (95% CI 6.1-16.9) were colonized with ESBL-PE, with no significant difference between urban and rural areas. Most ESBL-PE were identified as Escherichia coli. Previous antibiotic use within the last year was reported for 32% of the women. In univariate analysis, factors associated with colonization included graduate or post-graduate education (Odds Ratio (OR) 3.1; 95% CI 1-9.5), private access to tap drinking water (OR 8.9, 95% CI 2.2-33.8), toilet use restricted to family (OR 5.8; 95% CI 1.2-29.5), and antibiotics use in the last 3 months (OR 2.7; 95% CI 0.8-8.7). In multivariate analysis, only private access to tap drinking water was found significant (OR 7.3; 95% CI 1.7-30.7).

Conclusion: The prevalence of colonization with ESBL-PE among pregnant women in the Madagascar community is high. In