High vaccination coverage and inadequate knowledge: Findings from a community-based cross-sectional study on Japanese Encephalitis in Yangon, Myanmar

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Background: Japanese encephalitis (JE) is a mosquito-borne disease with high case fatality and no specific treatment. Little is known about the community's (especially parents/guardians of children) awareness regarding JE and its vaccine in Yangon region, which bears the highest JE burden in Myanmar.

Methods: We conducted a community-based cross-sectional study in Yangon region (2019) to explore the knowledge and perception of parents/guardians of 1-15 year-old children about JE disease, its vaccination and to describe JE vaccine coverage among 1-15 year-old children. We followed multi-stage random sampling (three stages) to select the 600 households with 1-15 year-old children from 30 clusters in nine townships. Analyses were weighted (inverse probability sampling) for the multi-stage sampling design.

Results: Of 600 parents/guardians, 38% exhibited good knowledge of JE, 55% perceived JE as serious in children younger than 15 years and 59% perceived the vaccine to be effective. Among all the children in the 600 households, the vaccination coverage was 97% (831/855).

Conclusion: In order to reduce JE incidence in the community, focus on an intensified education program is necessary to sustain the high vaccine coverage in the community