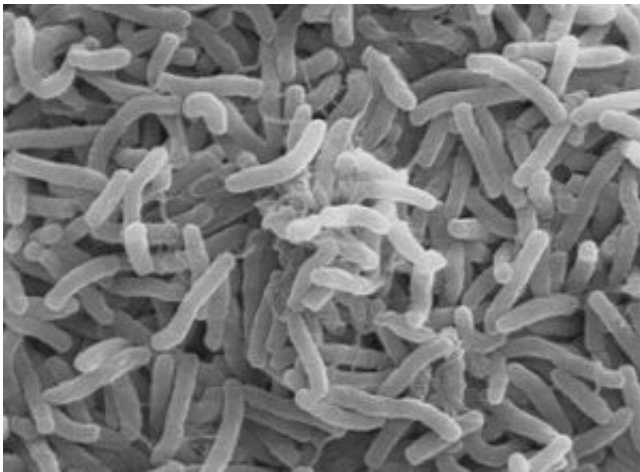


New method helps compare cholera vaccine costs

December 8 2016



Cholera bacteria. Credit: Public Domain

Every year around the world, up to 4 million people are diagnosed with cholera, an acute diarrheal disease that's usually spread through contaminated water in developing countries. In the long term, advances in water supply and sanitation are thought to be the ideal way to control the spread of the disease, but a handful of vaccines have also been developed—or are in development—to prevent cholera. Now, researchers have described, in *PLOS Neglected Tropical Diseases*, a standardized method to analyze the full costs for the implementation and delivery of cholera vaccines in low and middle income countries. The approach, they hope, will be a boon to programs planning or reviewing vaccination efforts.

In the new work, Vittal Mogasale, of International Vaccine Institute, South Korea, and colleagues reviewed ten previous papers outlining cholera vaccine programs in low and [middle income countries](#)—those with a gross national income per capita of \$4,035 or less. For each vaccine deployment, [costs](#) described in the previous papers were categorized into four groups: vaccination program preparation, vaccine administration, adverse events following immunization, and vaccine procurement. Within each group, costs for various subgroups were also tallied. The researchers presented overall vaccination program costs as the sum of all categories, and converted the numbers from local currencies to both 2014 US dollars and 2014 international dollars.

The researchers found a wide variability in costs between different cholera vaccination efforts. Vaccine delivery costs—the sum of preparation, administration, and adverse event costs—ranged from US\$0.36 to US\$6.32 per person vaccinated, while the [vaccine](#) procurement costs ranged from US\$0.29 to US\$29.70. Costs were varied even between different efforts in the same country, they found. The scale of vaccination efforts only partially explained differences. The study, offering numbers for those outlining the budgets of future efforts, was limited by the fact that the categories were not standardized from the outset and so some budget items could have been misclassified.

"Understanding the costs of [cholera](#) vaccination campaigns is of paramount importance in the economic evaluation as well as in planning future vaccination programs," the researchers conclude. "The categories described herein allow for a clear, comparative understanding of vaccination campaign costs that can better describe decision-making."

More information: Mogasale V, Ramani E, Wee H, Kim JH (2016) Oral Cholera Vaccination Delivery Cost in Low- and Middle-Income Countries: An Analysis Based on Systematic Review. *PLoS Negl Trop Dis* 10(12): e0005124. [DOI: 10.1371/journal.pntd.0005124](https://doi.org/10.1371/journal.pntd.0005124)

Provided by Public Library of Science

Citation: New method helps compare cholera vaccine costs (2016, December 8) retrieved 26 April 2024 from <https://medicalxpress.com/news/2016-12-method-cholera-vaccine.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.