Supplement article

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Case Study

An outbreak of schistosomiasis in a primary school in Omusati region, Namibia, March, 2016

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Abstract

Schistosomiasis is endemic in some parts of northern Namibia and there is a control program in the country with the use of mass drug administration to control and prevent the disease. On the 1st March, 2016, there was a report of bloody urine among primary school pupils in a school in Omusati region, Namibia. A team of health professionals was dispatched to investigate. This case study describes steps in conducting a schistosomiasis outbreak investigation and how to determine the risk factors. This describes how to calculate both the basic and analytical measures of association with 95% confidence intervals. This case study provides a step-by-step approach and can be used as a tool to teach the fundamental principles of outbreak investigation and response and how to measure the appropriate measures of association. This case study is targeted at intermediate- and advanced-level residents of the Field Epidemiology and Laboratory Training Program and other epidemiology trainees.

How to use this Study

General instructions: ideally, 1 to 2 instructors facilitate the case study for 15 students in a classroom or conference room. The instructor should direct participants to read a paragraph out loud, going around the room to give each participant a chance to read. When the participant reads a question, the instructor directs all participants to perform calculations, construct graphs, or engage in discussions. The instructor may split the class to play different roles or take different sides in answering a question. As a result, participants learn from each other, not just from the instructors. There are also specific instructor's notes that are included with each question in the instructor's version of this case study.

Audience: residents in the 9-month intermediate and the 2-year advanced Field Epidemiology Training Programs (FETP), Masters of Public Health Training Programs, and others who are interested in this topic.

Prerequisites: before using this case study, participants should have received lectures or other instruction in outbreak investigation, epidemiological study designs and measures of association.

Materials needed: laptop with Microsoft Excel, Epi-info or graph paper, flipchart or white board with markers and calculators

Level of training and associated public health activity: Intermediate and Advanced – Outbreak investigation

Time required: approximately 3 hours

Language: English

Competing interest

The authors declare no competing interest.

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Resources

1. WHO. Schistosomiasis. WHO. 2016.
2. Sousa-Figueiredo JC, Stanton MC, Katokele S et al. Mapping of Schistosomiasis and Soil-Transmitted Helminths in Namibia: The First Large-Scale Protocol to Formally Include Rapid Diagnostic Tests. PLoS Negl Trop Dis. 2015 Jul 21; 9(7): e0003831.
3. Africa Health Observatory WHO. Analytical summary - Neglected tropical diseases. Accessed on 24 Oct 2017.
4. Google Search. Lifecycle of schistosomiasis. Accessed 24 Oct 2017.

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