FOCUS on Field Epidemiology

HYPOTHESIS-GENERATING INTERVIEWS: DISCUSSION QUESTIONS

1. Suppose you get a call from a physician in a small town asking for your help in an outbreak of gastroenteritis. Upon arrival, you find that it will be several days before you get lab results. However, the physician says that all case-patients, 11 at the time, have the same signs and symptoms. Should you begin a full investigation? What initial steps will you take?

Discussion Cues: After confirming that this really is an outbreak (the number of cases is greater than would be expected and all case-patients are suffering from the same illness), you should begin a full investigation. Confirmatory lab data is often absent. The first thing to do is to start generating hypotheses. Begin with a literature review on potential causative agents and narrow down the list based on the clinical findings reported by the physician. Then select three to four case-patients with differing demographics from the mid-period of the outbreak for hypothesis-generating interviews. These should shed light on potential sources of the outbreak and help you create a working hypothesis and case-definition while you wait for lab results.

2. What information should you collect in a hypothesis-generating interview?

Discussion Cues: In the interview, include questions on

Demographics (name, age, sex, contact information)

Clinical Signs and Symptoms

- Date of onset (usually 12-72 hours after infection)
- Duration of symptoms (for Salmonellosis, this is approximately 4-7 days)
- Hospitalization (diarrhea may be severe)
- Treatment (severe cases may require antibiotics)

Food History

- Consumption of beef, poultry, milk, eggs, vegetables
- Consumption of raw or undercooked foods, particularly meats
- Restaurant exposures

Other

- Handling of sick animals or animal feces
- Handling of reptiles and birds

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