

# Can you make informed health-care choices?

(adapted from *Informed Health Choices*, a non-profit working to educate children about medical claims in east Africa)

**Directions:** Answer each of the following questions. Connect each correct and incorrect answer with the appropriate explanation about what makes good science.



**1** Habibah has pain in her ear, and she asks her brother Hassan what to do about it. He says that once, when he had a pain like that, he rinsed his ear with hot water. The next day, his ear pain was gone. Based on his experience, he says rinsing with hot water is helpful for ear pain.

Do you agree with Hassan?

A. Yes, because this is Hassan's experience, it is likely to be true

B. No, Hassan's experience is not enough to be sure

C. Yes, Hassan rinsed his ear with hot water, and the next day his ear pain was gone



**2** Dr. Wasswa has done a research study giving a new medicine to people who were vomiting. Some of the people stopped vomiting after they got the new medicine. Dr. Wasswa says this means the medicine works.

Is Dr. Wasswa right?

A. No, the people who used the medicine were not compared with similar people who did not use the medicine

B. Yes, some of the people stopped vomiting

C. No, since not all of the people stopped vomiting



**3** Sarah has an illness. There is a medicine for it, but she is unsure if she should try it. A research study comparing the medicine with no medicine found that the medicine was helpful but also that it could be harmful. Three of Sarah's friends are giving her advice about what to do.

Which advice given to her by her friends is the best advice?

A. She should only take the medicine if many people have tried the medicine before

B. She should only take the medicine if she thinks it will help her more than it will harm her

C. If Sarah has enough money to buy the medicine, it could not hurt to try it

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## Quiz Answers

### **1. B. No, Hassan's experience is not enough to be sure**

People often believe that improvements in a health problem (e.g., recovery from a disease) were due to having received a treatment. Similarly, they might believe that an undesirable health outcome was due to having received a treatment. However, the fact that an individual got better after receiving a treatment does not mean that the treatment caused the improvement, or that others receiving the same treatment will also improve. The improvement (or undesirable health outcome) might have occurred even without treatment.

### **2. A. No, the people who used the medicine were not compared with similar people who did not use the medicine**

If a treatment is not compared with something else, it is not possible to know what would happen without the treatment, so it is difficult to attribute outcomes to the treatment.

### **3. B. She should only take the medicine if she thinks it will help her more than it will harm her**

Decisions about whether to use a treatment should be informed by the balance between the potential benefits and the potential harms, costs, and other advantages and disadvantages of the treatment. This balance often depends on your baseline risk (i.e., the likelihood of your experiencing an undesirable event), or on the severity of your symptoms. The balance between the advantages and disadvantages of a treatment is more likely to favor taking a treatment for people with a higher baseline risk or more severe symptoms.