

Unfair Race

Student Activity

Method:

Students represent different countries and step forward or backward based on social and economic conditions in their borders. In a race for health at the end, certain countries are at a great advantage.

Introduction:

Affluence of a country is often a primary indicator of how healthy its citizens are. Wealthier countries tend to invest more into the health care system, train more doctors, disperse more vaccines, and provide better sanitation. This is the reason that many diseases that pose only minor threats in developed countries can become major, deadly epidemics in developing countries.

For instance, the United States used its extensive infrastructure to all but eradicate malaria after World War II. The government sprayed insecticides to kill the mosquitoes that harbor the disease and drained areas where mosquitoes bred. Other countries have not been able to launch such widespread efforts, and as a result, Africa now bears 90 percent of the one million deaths from malaria each year.¹ Water-borne illnesses such as diarrhea are spread through poor sanitation, so in countries without modern systems, children often fall sick and die. Cumulatively, such health disparities lead to a drastic difference in life expectancy. In North America, men live an average of 76 years and women live 81. In Sub-Saharan Africa, however, men's life expectancy is only 53 years; women's is 56.²

Preparation:

Read the procedure and facilitator script before commencing the activity.

Photocopy a card for each participant.

Identify the baseline where people should line up at the start of the game.

Identify the location of the finish line for the race, described in step 6.

Procedure:

1. Have the group stand shoulder-to-shoulder at the baseline, forming a straight line.
2. Give each person a card that describes nine social and economic conditions in a country. If there are more people than cards, give out multiple copies of some of the cards. Ask that they not share their information with others.
3. Stand at the baseline with the group and read the following aloud:
Each of you represents the country named on your card. For each of the nine categories, I will read out two different situations. Depending on how your country measures up, I will tell you to move forward either one or two steps. If neither situation applies to you, stay in place for that round.
4. Remain at the baseline and read the situations on the Facilitator Script aloud, one at a time.
5. After you have read all nine statements, the group will be fragmented and will no longer be in a straight line. Have each person call out the country he or she represents.
6. Challenge the group to a running race. Choose a "finish line" near the front-most group. Point out this finish line, and then say: *On the count of three, we are going to have a race to the finish line I've just pointed out to you. One, two, three, GO!* People holding cards from countries with well-functioning public health systems will already be very close to the finish line and will win easily.
7. Gather the group together. Process the activity by a discussion.



Concept:

Public health has social and economic dimensions (as well as political and geographic), and where one lives affects one's health because of each country's differing conditions.

Objectives:

Students will be able to:

- Connect a country's health to its social and economic conditions.
- Recognize which characteristics of a country help or harm citizens' health.

Subjects:

Social studies, health, economics

Skills:

Role playing, comparing data, critical thinking

Materials:

Facilitator script

Set of 24 game cards

Large room, gym, or outdoor space

Discussion Questions:

1. What kinds of countries came in first? Last?

People holding cards of countries in the developed world typically come in first. Those holding cards of developing countries typically come in last.

2. Why do you think the race turned out this way?

Answers will vary.

3. What are some of the social and economic factors that influence a country's public health situation?

The quality of public health relates to the quality of a country's economy, financial investment in health care, infrastructure, education systems, and preventive health programs.

3. What are some of the major impediments to good health or good healthcare?

Low per-capita income, lack of clean water, malnutrition, low vaccine rates.

4. What kinds of changes would improve the quality of health in the countries that remained near the base line in this activity?

The quality of health would improve with improved economies, increased healthcare spending, better access to clean drinking water, improved nutrition, and expanded educational programs.

5. What does this activity tell you about the health of the people in other countries?

Answers will vary.

6. How do people feel about the fairness of the race?

Answers will vary.

Follow-up Activity:

Have the students find out how much their families spend each year on healthcare. This should include insurance, prescriptions, immunizations, and over-the-counter medications or first aid supplies. How do they think these expenditures compare to people in other countries? What affects how much people spend?

Assessment Idea:

Have each student imagine a narrative for what his or her life would be like in one of these countries. Have them use statistics and facts to support the stories.

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Endnotes

¹ Okafor, Anwulika, "African Malaria Day 2007 pushes for global awareness and action." UNICEF, April 24, 2007, <http://www.unicef.org/health>.

² World Population Data Sheet, 2011, Population Reference Bureau, www.PRB.org.

Facilitator Script

1. Average annual income: If the average annual income in your country is:
 - above \$20,000, take two steps forward.
 - between \$5,000 and \$20,000, take one step forward.
2. Average annual healthcare spending: This amount includes both public and private healthcare expenditures. If this amount is:
 - more than \$1,500 per person, take two steps forward.
 - between \$500 and \$1,500 per person, take one step forward.
3. Immunization against measles: If the percentage of people immunized against measles is:
 - between 90% and 100%, take two steps forward.
 - between 65% and 90%, take one step forward.
4. Number of doctors per 100,000 people: If your country has:
 - more than 200 doctors per 100,000 people, take two steps forward.
 - between 50 and 200 per 100,000 people, take one step forward.
5. Average life expectancy: If the average life expectancy in your country is:
 - greater than 70 years, take two steps forward.
 - between 60 and 70 years, take one step forward.
6. Access to clean drinking water: If the percentage of people with access to clean drinking water is:
 - between 90% and 100%, take two steps forward.
 - between 70% and 90%, take one step forward.
7. Chance of reaching fifth birthday: If the percentage of children in your country who reach their fifth birthday is:
 - 95% or more, take two steps forward.
 - between 85% and 95%, take one step forward.
8. Malaria Threat: If the malaria threat in your country is:
 - low, take one step forward.
 - high, take one step back.
9. Enrolled in school: This is the average number of children enrolled in school at the appropriate level for their age, as a percentage of all children of the same age in your country. In your country, if:
 - 90–100% of the children are enrolled in school, take two steps forward.
 - 80–90% are enrolled, take one step forward.

(Statistics are from the United Nations Human Development Report for 2007–2008)

Unfair Race Game Cards

Albania

1. Average annual income: \$5,316/person
2. Average annual healthcare spending: \$339/person
3. Immunized against measles: 97%
4. Doctors: 1317 per 100,000 people
5. Average life expectancy: 76.2 years
6. Access to clean drinking water: 96%
7. Infant's chance of reaching 5th birthday: 98%
8. Malaria threat: low
9. Children in school: 94%

Bangladesh

1. Average annual income: \$2,053/person
2. Average annual healthcare spending: \$64/person
3. Immunized against measles: 81%
4. Doctors: 26 per 100,000 people
5. Average life expectancy: 63.1 years
6. Access to clean drinking water: 74%
7. Infant's chance of reaching 5th birthday: 93%
8. Malaria threat: high
9. Children in school: 94%

Bolivia

1. Average annual income: \$2,819/person
2. Average annual healthcare spending: \$186/person
3. Immunized against measles: 64%
4. Doctors: 122 per 100,000 people
5. Average life expectancy: 64.7 years
6. Access to clean drinking water: 85%
7. Infant's chance of reaching 5th birthday: 94%
8. Malaria threat: high
9. Children in school: 95%

Botswana

1. Average annual income: \$12,387/person
2. Average annual healthcare spending: \$504/person
3. Immunized against measles: 90%
4. Doctors: 40 per 100,000 people
5. Average life expectancy: 48.1 years
6. Access to clean drinking water: 95%
7. Infant's chance of reaching 5th birthday: 89%
8. Malaria threat: high
9. Children in school: 85%

Brazil

1. Average annual income: \$8,402/person
2. Average annual healthcare spending: \$1,520/person
3. Immunized against measles: 99%
4. Doctors: 115 per 100,000 people
5. Average life expectancy: 71.7 years
6. Access to clean drinking water: 90%
7. Infant's chance of reaching 5th birthday: 97%
8. Malaria threat: high
9. Children in school: 95%

Canada

1. Average annual income: \$33,375/person
2. Average annual healthcare spending: \$3,173/person
3. Immunized against measles: 94%
4. Doctors: 214 per 100,000 people
5. Average life expectancy: 80.3 years
6. Access to clean drinking water: 100%
7. Infant's chance of reaching 5th birthday: 99%
8. Malaria threat: low
9. Children in school: 99%

China

1. Average annual income: \$6,757/person
2. Average annual healthcare spending: \$227/person
3. Immunized against measles: 86%
4. Doctors: 106 per 100,000 people
5. Average life expectancy: 75.2 years
6. Access to clean drinking water: 77%
7. Infant's chance of reaching 5th birthday: 97%
8. Malaria threat: low
9. Children in school: 97%

Costa Rica

1. Average annual income: \$10,180/person
2. Average annual healthcare spending: \$592/person
3. Immunized against measles: 89%
4. Doctors: 132 per 100,000 people
5. Average life expectancy: 78.5 years
6. Access to clean drinking water: 97%
7. Infant's chance of reaching 5th birthday: 99%
8. Malaria threat: low
9. Children in school: 87%

Unfair Race Game Cards

Equatorial Guinea

1. Average annual income: \$7,874/person
2. Average annual healthcare spending: \$223/person
3. Immunized against measles: 51%
4. Doctors: 30 per 100,000 people
5. Average life expectancy: 50.4 years
6. Access to clean drinking water: 43%
7. Infant's chance of reaching 5th birthday: 80%
8. Malaria threat: high
9. Children in school: 81%

Ethiopia

1. Average annual income: \$1,095/person
2. Average annual healthcare spending: \$21/person
3. Immunized against measles: 59%
4. Doctors: 3 per 100,000 people
5. Average life expectancy: 51.8 years
6. Access to clean drinking water: 22%
7. Infant's chance of reaching 5th birthday: 84%
8. Malaria threat: high
9. Children in school: 61%

India

1. Average annual income: \$3,452/person
2. Average annual healthcare spending: \$91/person
3. Immunized against measles: 58%
4. Doctors: 60 per 100,000 people
5. Average life expectancy: 63.7 years
6. Access to clean drinking water: 86%
7. Infant's chance of reaching 5th birthday: 93%
8. Malaria threat: low
9. Children in school: 89%

Japan

1. Average annual income: \$31,267/person
2. Average annual healthcare spending: \$2,293/person
3. Immunized against measles: 99%
4. Doctors: 198 per 100,000 people
5. Average life expectancy: 82.3 years
6. Access to clean drinking water: 100%
7. Infant's chance of reaching 5th birthday: 99.6%
8. Malaria threat: low
9. Children in school: 100%

Kenya

1. Average annual income: \$1,240/person
2. Average annual healthcare spending: \$86/person
3. Immunized against measles: 69%
4. Doctors: 14 per 100,000 people
5. Average life expectancy: 52.1 years
6. Access to clean drinking water: 61%
7. Infant's chance of reaching 5th birthday: 88%
8. Malaria threat: high
9. Children in school: 79%

Mexico

1. Average annual income: \$10,751/person
2. Average annual healthcare spending: \$655/person
3. Immunized against measles: 96%
4. Doctors: 156 per 100,000 people
5. Average life expectancy: 75.6 years
6. Access to clean drinking water: 97%
7. Infant's chance of reaching 5th birthday: 97%
8. Malaria threat: low
9. Children in school: 98%

Mozambique

1. Average annual income: \$1,242/person
2. Average annual healthcare spending: \$42/person
3. Immunized against measles: 77%
4. Doctors: 3 per 100,000 people
5. Average life expectancy: 42.8 years
6. Access to clean drinking water: 43%
7. Infant's chance of reaching 5th birthday: 86%
8. Malaria threat: high
9. Children in school: 77%

Namibia

1. Average annual income: \$7,586/person
2. Average annual healthcare spending: \$407/person
3. Immunized against measles: 73%
4. Doctors: 30 per 100,000 people
5. Average life expectancy: 51.6 years
6. Access to clean drinking water: 87%
7. Infant's chance of reaching 5th birthday: 94%
8. Malaria threat: high
9. Children in school: 72%

Unfair Race Game Cards

Rwanda

1. Average annual income: \$1,206/person
2. Average annual healthcare spending: \$126/person
3. Immunized against measles: 89%
4. Doctors: 5 per 100,000 people
5. Average life expectancy: 45.2 years
6. Access to clean drinking water: 74%
7. Infant's chance of reaching 5th birthday: 80%
8. Malaria threat: high
9. Children in school: 74%

Saudi Arabia

1. Average annual income: \$15,711/person
2. Average annual healthcare spending: \$601/person
3. Immunized against measles: 96%
4. Doctors: 137 per 100,000 people
5. Average life expectancy: 72.2 years
6. Access to clean drinking water: 90%
7. Infant's chance of reaching 5th birthday: 97%
8. Malaria threat: low
9. Children in school: 78%

Sweden

1. Average annual income: \$32,525/person
2. Average annual healthcare spending: \$2,828/person
3. Immunized against measles: 94%
4. Doctors: 328 per 100,000 people
5. Average life expectancy: 80.5 years
6. Access to clean drinking water: 100%
7. Infant's chance of reaching 5th birthday: 99.6%
8. Malaria threat: low
9. Children in school: 96%

Syria

1. Average annual income: \$3,808/person
2. Average annual healthcare spending: \$109/person
3. Immunized against measles: 98%
4. Doctors: 140 per 100,000 people
5. Average life expectancy: 73.6 years
6. Access to clean drinking water: 93%
7. Infant's chance of reaching 5th birthday: 98%
8. Malaria threat: low
9. Children in school: 95%

Thailand

1. Average annual income: \$8,677/person
2. Average annual healthcare spending: \$293/person
3. Immunized against measles: 96%
4. Doctors: 37 per 100,000 people
5. Average life expectancy: 69.6 years
6. Access to clean drinking water: 99%
7. Infant's chance of reaching 5th birthday: 97%
8. Malaria threat: high
9. Children in school: 88%

United Kingdom

1. Average annual income: \$33,238/person
2. Average annual healthcare spending: \$2,560/person
3. Immunized against measles: 82%
4. Doctors: 230 per 100,000 people
5. Average life expectancy: 79.0 years
6. Access to clean drinking water: 100%
7. Infant's chance of reaching 5th birthday: 99%
8. Malaria threat: low
9. Children in school: 99%

United States

1. Average annual income: \$41,890/person
2. Average annual healthcare spending: \$6,096/person
3. Immunized against measles: 93%
4. Doctors: 256 per 100,000 people
5. Average life expectancy: 77.9 years
6. Access to clean drinking water: 100%
7. Infant's chance of reaching 5th birthday: 99%
8. Malaria threat: low
9. Children in school: 92%

Viet Nam

1. Average annual income: \$3,071/person
2. Average annual healthcare spending: \$184/person
3. Immunized against measles: 95%
4. Doctors: 53 per 100,000 people
5. Average life expectancy: 73.7 years
6. Access to clean drinking water: 85%
7. Infant's chance of reaching 5th birthday: 98%
8. Malaria threat: high
9. Children in school: 88%