Lurking Variables

For questions #1 and #2, follow the directions given.

1. Using the information in the plot, can you suggest what needs to be done in a country to increase the life expectancy? Explain.

2. Using the information in this plot, can you make another suggestion as to what needs to be done in a country to increase life expectancy?

Can you suggest another variable that is linked to life expectancy and the availability of doctors (and televisions) which explains the association between the life expectancy and the availability of doctors (and televisions)? We call this type of variable a lurking variable.
For each of the scenarios described below, list at least one possible lurking variable.

3. FIRE DAMAGE AND FIRE TRUCKS
   The amount of damage at the scene of a fire has a positive correlation with the number of fire trucks on the scene.

4. BUNDLED-UP BABIES AND OUTDOOR TEMPERATURE
   The age at which a baby first learns to crawl has a negative correlation with outdoor temperature.

5. DANGEROUS ICE CREAM AND DROWNINGS
   The number of ice cream servings consumed has a positive correlation with the number of drownings.

6. CAR COST AND GAS MILEAGE
   In 2005, there was a negative correlation between car cost and gas mileage.

7. FOOT SIZE AND READING ABILITY
   Foot size and reading ability have a positive correlation.