ACTIVITY 7.1
A MARKET IN KIDNEYS

Maggie

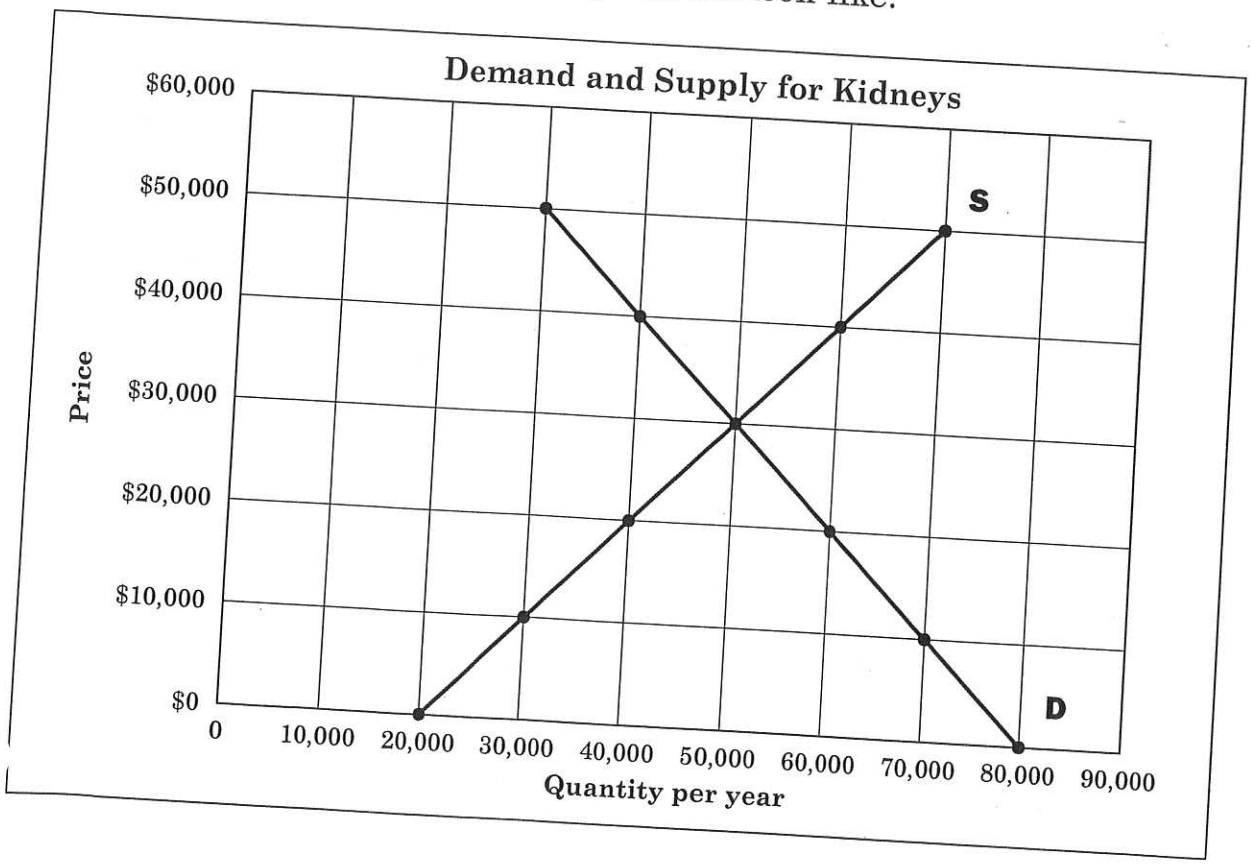
Directions: Read the information and write the answers to the questions.

In the United States about 60,000 patients are on a waiting list for a kidney. Many of these patients will die before receiving one. In this activity we will build a model to help us understand the nature of the kidney shortage. All numbers are hypothetical and for illustrative purposes only.

We start by examining the behavior of people who make kidneys available for transplanting. Kidneys are supplied for transplant in two ways:

- through people dying
- through living people giving up a kidney. Everyone has two kidneys and can survive on just one. Kidneys from living people are generally higher quality, and transplants with these kidneys tend to be more successful.

If people were allowed to buy and sell organs, here's what the hypothetical supply and demand curves for kidneys would look like:



ACTIVITY 7.1 (continued)
A MARKET IN KIDNEYS

The supply curve (S) shows the relationship between the price and the quantity of kidneys available for transplanting each year. This is a positive relationship because the higher the price, the greater the number of living individuals who would willingly give up a kidney in exchange for money. While it may seem gruesome to sell an organ for money, many poor people would make this decision with the hope of bettering their lives.

The demand curve (D) shows the relationship between the price and the quantity of kidneys patients are willing and able to buy each year. This is a negative relationship because the higher the price, the fewer the number of individuals who would be willing and able to buy a kidney. It might seem that patients would be willing to pay any price for a kidney if the alternative is death. However, patients have limits on their income and wealth. While they might want to pay a high price, their circumstances may not allow it. Hence, the demand curve for kidneys would not be vertical (perfectly inelastic).

Questions

1. Federal law currently bans the sale of kidneys. This effectively establishes a maximum legal price for kidneys of $0. This is called a *price ceiling*. Because of the ban, doctors may use only donated kidneys for transplants. Based on the graph, how many kidneys will people supply (donate) for transplanting when the price is $0?

20,000 kidneys will be donated at the price of $0.

2. Why would anybody donate a kidney if the price is $0?

Everyone has 2 kidneys and can survive on just one. Also, kidneys are available through dying people. It doesn't matter how much a kidney can be used to exchange money.

ACTIVITY 7.1 (continued)
A MARKET IN KIDNEYS

3. Based on the graph, how many kidneys do patients demand when the price is $0?

80,000 kidneys.

4. The shortage in kidneys is the difference between the quantity demanded and the quantity supplied when the price is $0. Based on the graph, what is the amount of the shortage? What do you think caused the shortage?

The shortage is 60,000 kidneys. no incentive,
when free, every patient who needs will want a kidney.
but for suppliers, they don't get any ~~normal~~ normal benefit
from donating a kidney.

5. In summary, how many kidney transplants will occur each year with the price ceiling of $0? How many patients will remain on the waiting list?

20,000.

60,000 will remain on the waiting list.

6. Suppose the federal government repealed the law banning the sale of organs. If this were to happen, some consumers on the waiting list would begin to offer higher prices for a kidney. The market would eventually reach equilibrium where supply and demand curves intersect. At this equilibrium, what is the market price? What would be the equilibrium number of kidneys people would buy?

Equi. Price : $30,000.

Equi. Quantity : 50,000

ACTIVITY 7.1 (continued)
A MARKET IN KIDNEYS

7. How has the rise in price affected the behavior of suppliers? To answer, compare the new equilibrium quantity with your answer to Question 1. Can you make any generalizations about the people who might sell a kidney at the equilibrium price but would not donate a kidney when the price is $0?

Suppliers are more willing to donate kidneys as price increases.
Money is the incentive for those people.

8. How has the rise in price affected the behavior of consumers (patients)? To answer, compare the new equilibrium quantity with your answer to Question 3. Can you make any generalizations about the people who might demand a kidney when the price is $0 but who will not buy one when the price reaches equilibrium?

Yes, Quantity demanded ↓
They are willing but not able to buy.
Because of their limited income and wealth.

9. According to the graph, how many kidney transplants would occur each year at the new equilibrium price? How much of a shortage exists at this price?

50,000

No shortage at this price.

=> we can't look at sth only from econ perspective

no economic shortage
but a social shortage

10. Assuming all other factors are constant, would a free market for kidneys result in more or fewer kidney-related deaths each year?

Fewer.

ACTIVITY 7.1 (continued)
A MARKET IN KIDNEYS

11. Would a free market in kidneys be fair to poor people? Argue both sides of this issue.

Yes.
They can get one as long as they get enough $.
And poor ppl can earn $ easily by selling their kidneys.

No.
Poor people are much less likely to get a kidney in free market because they don't have enough $.

12. If the legal price of kidneys is very high, does this pose a risk to public safety: Is there an incentive for organ theft?

Yes.
ppl might steal other's kidneys and sell them → for money

13. Do you think that either the supply or demand curve might shift if the government instituted a legal market for kidneys? If so, which curve would shift and in which direction?

Supply will ↑, shift rightwards.
As when kidney market becomes legal, more ppl will be willing to donate their kidneys.

14. Assume there was a successful campaign to encourage more donations of kidneys. How would this campaign shift the supply curve? How would this campaign affect the equilibrium price and quantity of kidneys? What would happen to the shortage of kidneys?

Supply curve would shift rightwards. Shortage ↓.
The equi. price will decrease (↓)
equi Q. will ↑

15. Is the graph for a market in kidneys realistic? Why?

No. the quantity shifts a lot every year, and factors like population, ~~government's~~ people's income, inflation, etc can change both curves.