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N442 Contagion Video handout

Use your textbooks to understand epidemiology and nursing implications for communicable diseases.

1. Do you think the discussion with the physician right after his wife dies realistically portrays how a medical provider could explain such a phenomenon?
Unfortunately I do think this is a realistic scene in the movie that portrays could explain this phenomenon. The Doctor didn't have any answers for the husband but tried his best to also be empathetic.

2. How many times do you touch your face during the movie?
~~120000 3000~~ I touched my face at least 20 times during the movie.
What do they quote as the range in which people touch their face in an hour?
2,000-3,000 per day.

3. Identify the chain of infection:
Infectious agent → Reservoir → Portal of exit → Mode of transp. → Portal of entry → susceptible host

4. What is/are the infectious agent?
Examples of infectious agents are bacteria, fungi, viruses, and parasites. An organism that can produce disease.

5. What diseases did they rule out?
Measles, Nile (West), Polio, and swine flu.

6. What is the reservoir?
The habitat where the infectious agent lives. The agent can also grow and multiply in the reservoir.

7. What are the portals of entry? The portals of exit?
Portals of entry are the mouth, nose, and eyes.
Portals of exit are feces, bodily secretions, and coughing/sneezing.

8. What are the fomites? Can the virus live for 6 days on a box? (NO)
Examples of fomites includes sinus, silverware, doornobs, railings. Anything commonly touched. No a virus can't live for 6 days on a box.

9. What is the process they take to determine what the disease is?
Determining where the virus came from.
Also, studying the symptoms to rule out other diseases.

10. What agencies get involved?
The CDC, WHO, and homeland security.

11. What precipitates these agencies getting involved?

The high amount of deaths and the investigation of an outbreak.

12. What is the role of these agencies?

These agencies find out what the virus is and other factors of the disease. They also inform citizens on how to fight diseases and to make a vaccine.

13. What is the time frame from onset to manifestations of symptoms i.e. incubation period and then to death?

* Under 10 days.
* 3-10 days.

14. What are the actions taken by the CDC in terms of containing the infection?

Quarentine, investigations, contact tracing, and lab testing.

15. What is an "R naught" (R_0)?

The contagiousness and transmissibility of infectious pathogens.

16. What do the investigators do to protect themselves?

Use proper equipment such as PPE, masks, gloves, and hazmat suits.

17. Calculate the mortality rate from the disease in the first 7 days in Minneapolis?

87 cases & 15 deaths
17% mortality rate

18. What does the epidemiologist from the WHO do to track the progression of the disease?

Try to find the cause of the disease and identify who is at risk.

19. What is an epidemic? versus a Pandemic?

Epidemic refers to a disease that affects a large number of people within a community, population, or region. A pandemic is an epidmic that's spread over multiple countries or populations

20. What is a quarantine?

Quarantine seperates and restricts the movement of people who were exposed to a contagious disease

21. Why does the husband not get sick? What type of immunity does he have?

The husband doesn't get sick because he is immune to the virus. He has active immunity.

22. What are the symptoms of the virus?

Coughing, fever, cannot swallow, headache, and seizures.

23. How do they develop a vaccine?

They test vaccines on monkeys and develop it by multiplying the virus and growing it.

24. How is the vaccine administered?

Vaccine is administered IM and intranasally.

25. Is it a live virus vaccine versus an attenuated virus vaccine?

It's an attenuated vaccine.

What is the difference?

A live virus vaccine is a virus in it's whole form vs an attenuated that means the virus is weakened.

26. What sort of immunity does the vaccine provide?

The vaccine provides active immunity.

27. How can the vaccine be administered to the greatest number of people?

Low cost/Free, Available to all age ranges, and having many facilities/areas administering the vaccine.

28. How does the environment, transportation, communication, essential services, government, and health care facilities get involved?

The facilities were notified and got involved by tracking down the virus.

29. In your opinion do local, national, and global politics make a difference in the development and distribution of the vaccine?

Yes it does, in my opinion.

Explain your opinion?

Access to funds to provide the vaccine, as well as the freedom to take the vaccine.

30. Does it make a difference if there is a rush to develop the vaccine?

Yes, trials can't be done thoroughly if vaccines are rushed.

31. Does it make a difference that a vaccine may have other side effects? Ex: 1976—Swine Flu vaccine.

The swine flu vaccine caused deaths.

32. As a community health nurse: Identify the primary, secondary, and tertiary prevention methods that could be used for infectious diseases at both the individual and community levels.

Primary examples are education, hand washing, and wearing gloves/masking. Secondary examples are vaccines and screening. Tertiary examples are

33. What are the steps that a community needs to do to respond to an infectious disease outbreak?

Social distancing, wearing masks, quarentining, vaccines, staying home!