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 the main character's wife dies realistically portrays how a medical provider could explain such a phenomenon**?

   The discussion with the physician after the main character's wife dies should have been in a private room. The main character should have been sat down and calmly told the news of his wife's death and the measures taken to try and save her.

2. **How many times do you touch your face during the movie?**

   12 times

   What do they quote as the range in which people touch their face in an hour?
   2-3,000 times a day = 180-300 times an hour

3. **Identify the chain of infection:**
   Bat to pig to chef to Paltrow (Wife of main character)

4. **What is/are the infectious agent?**
   Virus

5. **What diseases did they rule out?**

   Flu, H1N1, SARs

6. **What is the reservoir?**

   Pig, bat, human

7. **What are the portals of entry? The portals of exit?**

   The virus enters through mucous membranes via mouth, eyes, and nose. Portal of exit comes from coughing and sneezing.

8. **What are the fomites? Can the virus live for 6 days on a box?**
   Peanuts, binder, railing on the subway, pen, elevator button, door knobs
   No, viruses cannot live for 6 days in a box.

9. **What is the process they take to determine what the disease is?**
   Take samples from the brain of people who died from the virus and send it to experts to study the sample.

10. **What agencies get involved?**
    WHO and CDC and Minnesota public health

11. **What precipitates these agencies getting involved?**
    How quickly the disease spreads

12. **What is the role of these agencies?**

    Determine the seriousness of the issue and develop a plan of action to slow the spread of the virus. They develop vaccines and develop the best and fastest way to disperse the vaccine to people in the community.

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

    Symptoms present on day 2 and people die on day 4. The incubation period is the day of contraction to the day symptoms present. The incubation period would be 1 day.

14. **What are the actions taken by the CDC in terms of containing the infection?**
    Isolating the sick, quarantine the exposed, and contact tracing

15. **What is an "R naught" (**R_0**) ?**
    Reproductive rate of the virus

16. **What do the investigators do to protect themselves?**
    Hazmat suite with oxygen connection, gloves, and protective shield when handling samples, N-95 and gloves, goggles

17. **How do the personnel involved communicate the risks to the public?**
    Press conference from the CDC

18. **Calculate the mortality rate from the disease in the first 7 days in Minneapolis?**
    87 cases 15 deaths = 17.2%

19. **What does the epidemiologist from the WHO do to track the progression of the disease?**
    She traced the virus back to where the virus could have originated to determine where the virus spread start and how to stop it from happening again.

20. What is an epidemic? versus a Pandemic?

Pandemic is a disease or virus that spreads across countries and continents infecting multiple people in the community. An epidemic is a virus or disease that affects a large number of people within a community.

21. What is a quarantine?

It is essentially a shelter in place. People suspected of coming in contact with a virus or disease that can spread and cause harm to stay confined in their home or private room to prevent further spread.

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

He has immunity, natural immunity

23. What are the symptoms of the virus?

Headache, sore throat/dysphasia, fever, coughing

24. How do they develop a vaccine?

Animal testing on monkeys and testing on the investigator that developed the vaccine for the human testing

25. How is the vaccine administered?

Nasally

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

What is the difference?

Attenuated virus was used

A live vaccine is a wild version of the virus or bacteria. Attenuated is a weakened version of the virus or bacteria.

27. What sort of immunity does the vaccine provide?

Active immunity

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

Organization of vaccine clinics that is accessible to the public in a controlled manner.

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

Transportation helps to distribute the vaccine and samples to develop the vaccine. Communication between community leaders, CDC officials, WHO organization, and public officials helps to develop a plan of action to prevent the spread of the virus and keep as many people safe as possible. Essential services such as gas stations, hospitals,

grocery stores, and drug stores provided the population with the tools they needed to survive and function. Government officials helped establish necessary protocols and make decisions to keep the people safe. Health care facilities helped isolate individuals, do what they could for people who were infected, and harvest samples to produce a vaccine. The environment is involved based on the spread of the virus, because the cities are were the virus spread the most and by shutting down the cities it helped slow the spread.

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

Explain your opinion?

Yes, helps to establish the necessary teams in the development of vaccines, informing the public, finding the development of vaccine and PPE, and establishing protocol for social distancing/vaccine distribution

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

Yes, causes the public to question the validity of the vaccine

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

The side effects can dis-sway the public from getting the vaccine resulting and the lack herd immunity

33. 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: education on hand washing, vaccines when available, covering mouth when coughing, staying home when sick.

Secondary: screening at building entrances for temperatures and symptoms, Early interventions when sick, testing for viruses.

Tertiary: any treatment for chronic long lasting side effects such as referral to pulmonology for a cough that won't go away.

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

Identify the source, contact tracing, isolation, quarantining, education on disease and preventative measures, testing locations, vaccine development, distribution of vaccines.