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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?

*The medical provider should have taken the husband to a private room. The medical provider should have been more sympathetic.

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

10 times

What do they quote as the range in which people touch their face in an hour?

2 or 3,000 x / day

3-5 x every waking minute

3. Identify the chain of infection:

Contagious agent (bat) → Reservoir → portal of exit → mode of transmission → portal of entry → susceptible host

4. What is/are the infectious agent?

MEV1 virus

5. What diseases did they rule out?

Encephalitis, meningitis, bird flu

6. What is the reservoir?

Person & inanimate objects

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

Touching infected person or object mucus membranes, skin, Secretions, blood, fluid - exit. Inhaled - entry

8. What are the fomites? Can the virus live for 6 days on a box?

Transmission from surfaces, no - can't live on a box for 5 days. Inanimate objects - door knobs

9. What is the process they take to determine what the disease is?

Sequences

10. What agencies get involved?

CDC (Homeland Security), WHO, Minnesota Department of Health, BSL 4, FEMA, National Guard, ABC

11. What precipitates these agencies getting involved?

mortality rates w/ no vaccine - so many cities across US + different countries

12. What is the role of these agencies?

TO contain the virus + find a vaccine, + track the disease

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

1 day - symptoms, 2 days - death

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

Isolation, social distancing

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

reproductive rate of virus

16. What do the investigators do to protect themselves?

Eye wear, gloves, gown, mask - N95, hair nets, footwear suits

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

Pending answer

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

Traces back movements to try to find where Beth was exposed.

19. What is an epidemic? versus a Pandemic?

Epidemic: infectious disease at a particular time in a community.

Pandemic: disease over a whole country or the world.

20. What is a quarantine?

An isolation period where certain individuals that meet the criteria are placed.

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

He has natural immunity

22. What are the symptoms of the virus?

Cough, fever, can't swallow, Severe headache

23. How do they develop a vaccine?

They find the initial virus, inject it into pigs, bats, subject animals to see if it slows it down + fight off the virus.

24. How is the vaccine administered?

Intranasally

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

Live attenuated virus

What is the difference?

live vaccines last longer + attenuated have the whole bacterial/virus that have been weakened → protect immune system but don't cause disease

26. What sort of immunity does the vaccine provide?

Active immunity

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

they drew birth dates

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

They help isolate, back track to find the initial source, test how to make a vaccine, + help those in need.

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

Yes

Explain your opinion?

they are able to look at the factors more closely that determines how to make + distribute it.

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

Yes, because while it may work long term effects aren't known.

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

Yes, some side effects may be neurological which may be irreversible.

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 - vaccine, education Tertiary - medical treatment
Secondary - Detect new cases, prevent/reduce risk of spreading.

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

Need to contain. Find the source, find out how it's spread, look at the resources available, call for help.