

This study guide focuses on what I consider to be the important material from the lectures. If you know the answers to these questions, you will be in excellent shape for the lecture portion of the midterm.

Health behavior

1. What are health behaviors? What are health habits? When do health habits usually develop?
2. What were the seven health habits identified in the Alameda County study? What did that study show about people who exhibited more health habits, compared to those who exhibited fewer?
3. What does it mean to say that 'health habits are autonomous and unstable'? Why is this so?
4. Describe the Health Beliefs Model as it was discussed in class. Describe the study that used HBM to determine what predicted intentions to use condoms among young vs. older gay men in Amsterdam. What were the results, and what were the implications for behavior change programs?
5. Describe the Stages of Change model. What are the stages and how does one define them when the behavior of interest is smoking? What role does relapse play in this model? What is the value of this model for developing strategies for behavior change?
6. In the DiClemente study of smoking cessation, how did individuals in the following 3 stages (precontemplation, contemplation, preparation) do relative to each other in terms of number of quit attempts and number who were successful in not smoking at 1-month and 6-month follow-up?
7. What percentage (approximately) of smokers in the population tend to be in pre-contemplation, contemplation, and preparation stages?
8. The Health Beliefs Model and Stages of Change model are generally models of rational choice. What does this mean, and what non-rational factor might account for people being inconsistent with the models? Is one model better than another with respect to accounting for non-rational factors?
9. What is the 'unrealistic optimism' that most people have about their health risk?
10. In what ways do individuals, families, health professionals, and the media provide barriers to health promotion?

Smoking

11. Know the following facts about smoking:
 - How many Americans die per year from cigarette smoking (all causes)?
 - How do death rates from smoking compare to those for alcohol and AIDS?
 - What percentage of adult smokers started before the age of 18?
 - According to prevalence figures, who smokes more – men or women? Whites or blacks?
12. What are the behavioral effects of nicotine?
13. What is the neurotransmitter and brain region believed to be heavily involved in the pleasurable/rewarding aspects of nicotine? How does nicotine affect this neurotransmitter?
14. Describe the process of respiration that takes place in your lungs. Be sure to know how the following structures figure into the process: alveoli, capillaries, cilia, alveolar macrophages. Describe how smoking interferes with this process and contributes to the development of emphysema. What is the role that carbon monoxide, found in cigarette smoke, plays in causing health problems?
15. How is smoking related to atherosclerosis and cancer? Be sure to make reference to p53 genes for the latter.
16. Can the damage done by smoking be repaired? What are some of the important factors in understanding how the risk for cancer decreases in former smokers? How is DNA damage related to the age at which one starts smoking?
17. What is the relationship between smoking prevalence and acculturation among African Americans?
18. Who are 'tobacco chippers'? How do they and dependent smokers differ, with respect to tobacco usage, physiological responses to smoking, and situations in which they are likely to smoke? Do chippers show signs of withdrawal following deprivation? Are there personality differences between chippers and dependent smokers? Which group of smokers reported being more sick/dizzy when they first started smoking?
19. Recently, evidence has been found that smokers and non-smokers differ in the type of gene they have that encodes a reuptake protein (dopamine transporter). What is the difference between the two alleles (forms of the same gene), and which set of people – smokers or nonsmokers – tend to have which allele?

AIDS

20. Contrast the pattern of the AIDS epidemic in the US and the rest of the world. Who gets infected, and how?
21. Which countries have the highest prevalence of HIV infection among adults, and what is that prevalence rate?
22. What is the definition of AIDS for an individual 13 years of age and older in the US? What are the criteria for

- individuals under 13-years old? Why is it difficult to determine whether an infant born to an HIV infected mother is itself HIV-infected?
23. What makes a retrovirus different from any other RNA virus (like measles)?
 24. Describe the main structures and the life cycle of HIV. What is necessary for viral entry to a cell? How do chemokine receptors fit in? What are chemokines? What do the following enzymes do: reverse transcriptase, integrase, protease? Discuss the different therapeutic drugs that are used or are under study to disrupt the life cycle of HIV.
 25. What is the median time course of HIV disease? How variable is the time course?
 26. Describe the course of HIV disease, from the acute phase to AIDS. What are opportunistic infections?
 27. How big a problem is adherence for HIV+ people? Discuss some of the barriers to adherence that people who are on HAART face.
 28. What does the phrase "harm reduction" refer to? Give an example of a harm reduction practice for reducing HIV transmission.
 29. What are needle exchange programs? What has been the federal government's policy on funding of NEPs?
 30. Discuss three sources of stress for HIV+ people. Describe some of the stigmatizing attitudes that Americans have toward people with AIDS. Have such attitudes changed in the last 10-15 years?
 31. In the late 1990s, public health officials argued that the need for anonymous HIV testing no longer existed. Why was anonymous testing started in the first place, and what was the argument that it could now be abolished? Do the data support that argument?
 32. What is the evidence that stress can have an impact on immune functioning in AIDS?

Student Health

33. In general, describe the health of the class. Why might there have been no class-members in the *healthiest* category of the Alameda index?
34. How did the class compare on the hassles score, compared to college students overall? Were scores on the hassles scale related to sex? to health? to coping style? to the heart rate/blood pressure data?
35. Describe the patterns of coping that characterized the class. Were there sex differences in coping? Was coping style related to health indicators? to the heart rate/blood pressure data?
36. Were there differences in heart rate and blood pressure between low stress and high stress times during the quarter?
37. Are the relationships that we found causal? Why or why not?