

QR Lesson Plan: Epidemiology of Suicide

Background of the Assignment.

This lesson is part of a course on psychopathology and diagnosis for masters-level mental health counselors-in-training. This lesson is new to the course and will be taught as part of a four-class arc that teaches the foundations of psychopathology. The topics covered will include: how to read a research article, psychometrics and categories versus dimensions (relating to the DSM 5). The goal of this lesson is to examine the concepts of prevalence and incidence of psychological disorders, specifically focusing on suicide in the United States and the research issues related to its prevention.

Learning Objectives.

- Use an interactive on-line database to obtain U.S. mortality data on suicide
- Construct tables displaying frequencies for completed suicides across age, gender and race
- State the difference between incidence and prevalence
- Evaluate the adequacy of the U.S. mortality data on suicide

Time Required for Instruction.

This lesson will require one class period.

Written Instructions.

Prior to the in class exercise, students will need basic information on frequencies, rates of illnesses, including incidence and prevalence of psychiatric disorders. The reading assignment for this class should prime the topic, such as research article on the rates of suicide among a particular group, i.e. race, gender or age group. A brief orientation to the CDC's site should also be provided.

Materials Required for Assignment or Exercise & Format.

Students will need computer and Internet access. Students will be given a worksheet (see handout) and log on to the CDC's website (<http://www.cdc.gov/injury/wisqars/>). Students should work in pairs to complete the assignment.

Assessment Plan & Instruments.

Students will be assessed prior to and after the class using BlackBoard. As part of the course, students take weekly quizzes prior to class therefore the pre-test will be substituted for their weekly quiz. The posttest will be administrated prior to the end of the class and reviewed. All students will be given participation points for corresponding correct answers.

How will student learning be evaluated? The outcomes of instruction should be narrowly focused on the learning objectives you have articulated in the lesson plan rather than the course in general.

Pre-Test

Jennifer Kyle

Which of the following websites would provide accurate and the most recent data on the number of suicides occurring in the United States?

- a) Pop sugar
- b) Centers of Disease Control
- c) American Foundation for Suicide Prevention
- d) National Institutes of Health

Susie loves watching the Real Housewives of Orange County and believes that the show is popular among male and female college students. Susie decides to conduct a brief survey of college students, asking if they enjoy the show (yes or no) and notes their gender (male or female). In order to graphically display her results, she should create:

- a) Picture-gram
- b) Cross plot table
- c) Pie chart
- d) None of the Above

"About 2% of adults have obsessive-compulsive disorder." This is a statement about the _____ of obsessive-compulsive disorder.

- a) incidence
- b) prevalence
- c) risk factor
- d) correlation coefficient

Post-Test

1) Which of the following are frequency measures?

- a) Birth rate
- b) Incidence
- c) Mortality rate
- d) All of the Above

2) "The lifetime prevalence rate of panic disorder is 3.5%." This statement indicates that

- a) there will be 3.5% of new cases of panic disorder in the population over the next year.
- b) there is a 3.5% chance of developing panic disorder following the interview until death.
- c) of individuals interviewed, 3.5% had experienced panic disorder at some point in their life.
- d) the proportion of chronic panic sufferers is 3.5%.

3) Use the following epidemiologic measures (A or B) and match it with the correct definition or features listed below:

- a) Incidence
- b) Prevalence

_____ Measure of risk

_____ Generally preferred for chronic diseases without clear date of onset

Jennifer Kyle

4) Within 2 days after attending a June wedding, an outbreak of stomach flu occurred among attendees. Of the 83 guests and wedding party members, 79 were interviewed; 54 of the 79 reported feeling ill. The following two-by-two table shows consumption of wedding cake and illness status.

		Ill	Well	Total
Ate wedding cake?	Yes	50	3	53
	No	4	22	26
	Total	54	25	79

Which ratio below shows the number of all the guests and party members who had cake and were ill?

- a) $54/79$
- b) $50/79$
- c) $50/54$
- d) None of the Above

Data Analysis Worksheet (Student Handout)

Data Analysis Exercise: On Suicide Rates

RATIONALE

- To examine the prevalence and incidence of suicide in the United States and the research issues related to its prevention.

LEARNING OBJECTIVES:

- Use an interactive on-line database to obtain U.S. mortality data on suicide
- Construct tables displaying frequencies for completed suicides across age, gender and race
- State the difference between incidence and prevalence
- Evaluate the adequacy of the U.S. mortality data on suicide (Hint: What about incidence of suicide? Or across ethnic groups, i.e., Dominicans, etc.?)

After log on to the CDC's website: http://webappa.cdc.gov/sasweb/ncipc/leadcaus10_us.html use the database search to complete the following tables.

1) **Age.** Suicide is among the top ten leading causes of death for persons 15 to 65+. Are there differences across age groups? Using data at the CDC's website, find the incidence of Blacks, Whites and Latinos' suicides in different age groups and copy the numbers into table 1.

Age Group	NL Whites	Blacks	Latinos
15-24			
25-34			
35-44			
45-54			
55-64			
65+			

Which age group(s) has the highest incidence of suicide?

Which race/ethnic group(s) has the highest incidence of suicide?

What are the implications of these findings for explaining differences in suicide rates between Blacks, Whites and Latinos in the United States?

2) **Gender.** Are there differences in gender? Using the CDC's website to collect the incidence of suicides to complete the following table:

Gender	NL Whites	Blacks	Latinos
Males	2,732		
Females	656		
Total	3,388		

Which gender has the highest incidence of suicide?

Which race/ethnic group(s) has the highest incidence of suicide?

What are the implications of these findings for explaining differences in suicide rates between Blacks, Whites and Latinos in the United States?

3) **Method.** Using the CDC's website to collect the incidence of suicides to complete the following table:

Method	NL Whites	Blacks	Latinos
#1	Firearms		
#2	Suffocation		
#3	Poisoning		

What are the implications of these findings for explaining differences in method of suicide among Blacks, Whites and Latinos in the United States?
