

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

Biostat Final Exam –2012

Note:

some of the question are answered, keep in mind that those answers are not absolutely correct, so it's better to verify and make sure about them..

Dr.M. Jaghbeer:

1. black lung disease is caused by :
 - a- coal

2. theories of disease causation are :
 - a- humoral for fracastoro
 - b- germ theory
 - c- contagion for hippocrates
 - d- modern ... by pastur
 - e- all of the above

3. diseases according to the humoral theory arises from :
 - a- heredity
 - b- regimen
 - c- climate
 - d- natural causes
 - e- all of the above

4. sick building syndrome due to :
 - a- humidity
 - b- poor ventilation
 - c- radon
 - d- chemicals from inside the building
 - e-poor temperature control

5. which of the following is true:
 - a- three quarters of the global diseases burden are due to modifiable environmental factors

- b- one third of the burden among children due to modifiable environmental burden
- c- children bear the highest death toll with more than 4 million deaths in the developed countries
- d- total number of lives lost each year as a result of environmental factors was 15 times higher in developed than developing countries.
- e- all of the above

Dr.Farouq:

6. three tables to study the effect of family history on the occurrence of diabetes....

table (1) cross sectional study

table (2) case control study

table (3) cohort study

q (1) find the odds ratio:

>>> find from table (2)... 1.67

q (2) find incidence rate:

>>> find from table (3)... 3 %

7. odds ratio means which of the following:

>> degree of association between two variables

8. cross sectional study :

a- can be used even in rare diseases

b- a base for other studies

c- simple & quick (not sure about this one)

d- a+b+c

e- b+c only

9. prevalence of a disease :

a- can be calculated from a cross sectional study

b- a priority in the scaling of health problems

c- something cases of the disease that exist currently

- d- # of cases of a disease in a population a period of time
- e- it decrease by the use of a new drug, even if the drug did not result in cure

10. a question about the observational studies

all are true except :

- a- depend only on whats observed without the interpretation of the investigator
- b- easily done when it's impossible / impractical /unethical to do experimental studies
- c- it can be used to predict diseases in the present time, and from outcome back to occurrence, and (sth describe cohort study)
- d- describe the disease as it is without interference with the factors of its cause

11. all are true about control groups except :

- a- free of the disease
- b- share similar characteristics with the case
- c- it's size must be equal to that of the case group

12. the concept that describes " the risk factor should come before the disease :
temporality

13. a question about the incidence rate : " all are true except " :

- a) decrease if there was a drug invented to cure it.
- b)it calculate the current cases of the disease rather than giving the no of total cases (not sure)

14. from the data given below:

population = 99000

hepatitis A cases = 100

ages between () cases = 20

ages between () cases = 10

ages between () cases = 5

each age group is 1/3 of the population

**calculate the IR in 1990 knowing that there was no previous cases for the disease:

- a- .0010
- b-.35
- c)0.0035

d- cant be calculated

15. t-test is used to:

- a- compare the mean between two groups
- b- compare the standered deviation between two groups
- c- compare the between two groups
- d- use percentages in its calculation
- e- a and d

Dr.Samar questions:

16. the sixth leading cause of death in the USA :

- A- diabetes
- B- al zehimer

17. the percentage of NCDs in jordan :

- a- more than 50%
- b- more than 60 %
- c- more than 40%

18. all of the following are related to primodal prevention except:

- a- screening
- b- immunization
- c- nutrition

19. the most common type of child abuse is :

- a) physical
- b)emotional
- c)sexual

20. all are related to physical abuse except :

- a- hunger
- b- suffocation

- c- burns
- d- bruises

21. all are of the moderate risk factors of diabetes except :

- a- high blood sugar > 140
- b- high cholesterol > 200 mg
- c- high blood pressure > 140/90
- d- physical inactivity
- e- smoking

22. all of the following about communicable diseases true except :

- >>> majority of which curable

Dr.M. Nassar questions

23. one of the figures that used for normal distribution : a)histogram

- b)polygon
- c)line chart
- d)all of the above

24. the question is .. the best to use to discribe the occurance of a disease in a hospital

- a-mean
- b-frequency
- c-standard deviation
- d-range
- e- none of the above

25. 95% confidance interval means :

- a- you are 5% confident thatare not included
- b- you are 95 % confident that ... are included
- c-
- d- all of the above

26. to take all the possible samples and calculate the mean for each one then draw a line chart , this is called :
- a)sampling distribution
 - b)sample distribution
 - c)population distribution
27. the formula $M \pm 1.96 SE$:
- a- 95% confidence interval
 - b- 99%
28. the percentage of the sample that is in located in one standard deviation is : a)99%
- b)95%
 - c)68%
 - d)34%
29. used to calculate the correlation coefficient :
- a- chi-square ...
 - b- t-test for correlations
 - c- t- test
30. a study was made about the effect of age on incidence of a disease , knowing that the age was entered as continuous level of measurement , and the incidence was nominal . the data was severely negatively skewed . what type of tests is the best to use :
- a)Chi-square
 - b)Student T-test
 - c) MW
 - d)KW
31. in a study, Hospital (A) wanted to know if the patients' staying time differs from that in Hospital (B), given the mean and SD for each..
- a) the null hypothesis states that patients' staying time in hospital (A) differs from that in Hospital (B)
 - b) b- there is no difference in hospital stay time between hospital (a) and hospital (b)
 - c) hospital stay duration in hospital (a) is longer than stay in hospital (b)
 - d)....
 - e)we cannot determine from the given data

in the following **questions** answer according to the tables 1,2, and 3 that was obtained after doing an ANOVA test to compare between 3 drugs, and the 4th was control... all with 10 cases

table (1)... shows levene statistic, where sig value is 0.01

table (2)... shows ANOVA , where $f=9.34$, sig = .000

table (3)... shows posthoc test, where drug 2 and 3 are similar and significant, and both significant over drug 1 and control

**from table (1), you can tell that:

a- their is a significant variance that cause confinding results

** from table (1), what the researcher has to keep in mind:

a- stop ANOVA and go to non-parametric

b- repeat ANOVA to obtain consistent results

c- go through ANOVA and be confident of the results

d- go through ANOVA be take results with caustion

e-....

** from table (2) which is true:

a- the overall analysis is significant

** from table (2) what does F value mean:

** from table (3) which is true:

a- drug 3 is the most significant over other drugs

b- none of the three drugs is significant

**** وَمَا تَوْفِيقِي إِلَّا بِاللَّهِ عَلَيْهِ تَوَكَّلْتُ وَإِلَيْهِ أُنِيبُ ****