

#لجنة_2013

Biostatistics

Mid exams:

- Find the messing value in the case-control table, OR = 10 10
- Find the prevalence in the cross-sectional table 30%
- "asbestos exposure precedes lung cancer" is connected to which Hill's postulate temporality
 100 children with lead exposure, 5 years they got disease
- Find incidence among exposed 0.4
- Find RR 8
- Find AR 0.35
- Wrong about RR less than 1 indicates a protective factor for the unexposed group
- RR measures magnitude of association between disease and exposure Z-test
- The hypothesis H0: M1=M2 ; HA: M1<>M2 ; two sided
- Do you reject the null hypothesis yes, because z equals 2.58 and is > than *the number*
- P-value 0.0104 (not sure of the number)
- Selection bias is a problem of case-control study
- Definition of determinant in epidemiology agent, host and environment
- Not an advantage in case control study multiple diseases in one study
- The unit in ecological studies population
- Affect internal validity A, B and C

Distribution table

- P(<4) 0.93
- P(1<=x<=3) 0.48
- Variance in a binomial distribution, n = 75 and p = 0.6 18
- Prevalence is almost equal to incidence in C & D (fatal and short duration diseases)
- Chi square with a X2 value less than that for an alpha = 0.05 we accept the null hypothesis (maybe)
- Degree of freedom in paired samples with a size of 17 16
 Airfighters
- T value 2.7

- Conclusion airfighters have a faster decrease in their respiratory thing
- If left handed people in population where 0.5, probability of having right handed people 0.95
- Probability of a patient for surgery given he is a male 0.343
- Sensitivity: 0.8 Specificity: 0.87, rate of disease 0.004, what is predictive value positive 0.0204 (mostly)
- A has a probability of 1/2 and B 1/3, they are independent, the probability of both happening 0.167
- Arab country with most depression rates Jordan
- Not a risk factor for depression Old age
- First to acknowledge occupational health old Egyptians
- Industrial revolution unions were most interested in wages
- Correct statement OSHA is a worldwide source of occupational health information
- A physical trauma light
- Burnout is due to stresses
- True about bullying all of the others
- A struck against trauma head hitting low ceilings
- Pneumoconiosis dust in lungs
- Risk assessment involves all
- A hazard is something that can cause harm if not controlled

Final exam ??:

- Wrong about error type II is equal to 1-alpha
- Wrong about alpha is the probability of correctly accepting the alternate hypothesis
- Not involved in the determination of n population mean
- In a sample (3, 4, 4, 5, 4, 9, 15), the best measure of central tendency the median (according to doctor)
- Measures the variation of values around the mean both the range and STDEV (a + c) (maybe)
- True about nominal qualitative variables can't be put in order
- Which statement is true about variables the answer is supposed to be (a+b+c+d) but d was wrong

For these 10 values 20, 25, 26, 28, 29, 34, 36, 37, 36, 44:

- Mean: 31.5
- Variance and standard deviation: 50.7, 7.12
- Median and range: 31.5, 24
- Mode and Coefficient of variance: 36 , 22.6%
- The critical value or Z score is used for Normal distribution.
- Significance test A&B (used in hypothesis testing, Used to determine if the difference is real or due to chance)
- When we accept the null hypothesis knowing that alpha < 0.05 means If the null hypothesis is true, we may wrongly reject it 5 times in every 100 times

For two samples of data, two populations, normally distributed

- The two hypotheses are: H0: M1 = M2 ; HA: M1<> M2 , two sided
- Finding the test statistic calculated and from table 2.04, 1.96 (the question seems to be wrong)
- The decision we make Reject the null hypothesis and consider the alternative to be true
- The p-value: .0414 (I think the question is wrong)
- Mean 160 pounds, standard deviation 36, the P (150 <= Z <= 180) = 0.3226
- Mean 160 pounds, standard deviation 36, the P (>210) = .0823 (close to this)
- For paired t test, if test static value is larger than critical value we reject the null hypothesis.
 For a probability distribution table:
- P (X< 3) = 0.88
- P (1<=X<=4)=0.51
- P (X >2) = 0.12
- In the Poisson distribution, lambda is 4, Probability for either 3 or 4 accident = 0.391
 25% with diabetes, 80% of them low BDI; 75% without diabetes, 20% of them low BDI
- Probability for low BDI: 35%
- After choosing a low BDI woman; probability of being diabetic: 57%
- degree of freedom when n = 20: 19
- In a binomial distribution, p = 0.8, n = ??, find the variance: =2*p*(1-p)
- Which is wrong about ordinal variables: cannot be put in order
- In a binomial distribution, p = 0.4, n = 15, what is P(x>4): 0.9095 (maybe)
- In practice, we use the t test in case of all of above (maybe)
- Chi square test is used for categorical data

- Wrong about subjective probability can be applied for an event that occurs more than one time
- Wrong about the rules of probability mutually exclusive events can happen at the same time In a screening test table
- The probability of having a person with the disease .075, marginal
- Sensitivity can't remember

Thanks to Mohammad Fathi Abu Alia