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program. — Bs (DT)

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paper — Research methodology

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Q No 7)

Ans:=

50, 79, 70, 48, 90, 68, 89, 92, 70,

(1) Mean = $\frac{\text{Sum of values}}{\text{number of values.}}$

$$\text{mean} = \frac{50+79+70+48+90+68+39+70}{9}$$

$$= \frac{656}{9}$$

$$= \boxed{72.88} \text{ mean}$$

(2) Medium: = 48, 50, 68, 70, 70, 79, 89, 90, 92,

$\boxed{70}$ is medium.

→ Medium is middle value.

(3) Mode: 48, 50, 68, 70, 70, 79, 89, 90, 92,

Mode is $\boxed{70}$

→ mode is the most frequently values.

(2)

Q No (2)

Ans:-

Presentation of Reserch Data:-

Data once ~~present~~ collect should be presented in a such way as to be easily understood. the style of presentation depends of course. on type of Data.

Data can be Represent in a frequency table charts eq greps etc.

Frequency Table:-

In a frequency data table is present in a tubular form, it gives the frequency with which (or the number of Time a particular values eppeeurs in the Data.

systolic blood pressure of patrent coming to a tertiary care hospital opd.

Distraction	frequency	Relative	Cumulative Relt.
below 100	6	0.10	0.10
100-120	9	0.15	0.25
121-140	24	0.40	0.65
141-160	15	0.25	0.90
	6	0.10	1.00

Graphs:→

Another way to summarize & display data through the cause of graph or pictorial representation of numerical data.

Pie Chart:

Pie chart can also be used to display nominal or ordinal data.

(4)

Q No (3)

Diffirend between Relative Risk & odd Ratio?

Relative Risk	odd Ratio.
→ it can be only used for data from studies with a randomly selected Sample.	→ it can be used to summize datas from most studies.
→ it can be used to calculate the attributable risk	→ give an estimate of risk when the prevelence of out com is not known.
→ usually in prospective Cross sectional & clinical trail studies.	→ usually in Retrospective studies & in cross sectional.
→ it needs incidence of the disease.	→ it does not need incidence for calculation.
→ it demonstrate temprarily	→ it has good estemate for RR incase of low frequency disease

Relitive Risk

Example.

You Could have two groups of wommen one group has a mother sister or doughter who has had brest Cancer.

odd Risk.

example.

if you are normally one call 2 out of 7 days in a weak then the odds of you being on call on a certain day of the weak is $[(2/7)/(5/7)] = 0.40$.

Q No (4)

Ans

Prevelence:⇒

Prevlence is the number of of a disease cases/ present in a particular population at a given time as known as prevelence.

The formula for calculating the prevelence p= number of existing cases of a disease/ total population (at a given point in Time).

Point prevlence:⇒

prevlence can be thought of as the status of a disease in a population at a point in Time as such is also reffered to as a point prevlence.

the point can refer to a specific point in a calander Time or to fixed point in the case of event that varies in real Times from person to person.

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* Period Prevalence.

it Refers to the proporton of cases that exist with in the populaton at any point dung a spacified period of Time.

→ the numerater thus the Indivi cases that we present at the start of the period plus new cases that they developed durng this Time.

(e.g) Freqwency of patien recivng dental RX ~~recvg~~ b/w may. 30 - June. 2009.

(8)

Q No(5)

Ans:⇒

Hypothesis:⇒

A hypothesis is an assumption. an idea. that is propose for the sake of argument so that it can be tested to see if it might be true. In the scientific method, the hypothesis is an constructed before any aplicable researh has been done, apart from a basicle background Review. as known as hypothesis.

* Steps in testing of hypothesis:

Step 1: Specify the null hypothesis:⇒

the null hypothesis is the (H0) statement of no effect relation. ship, or difference between two or more groups or factor.

example there is no d/f in intubation rate across age

0 to 5 year.

Step (2)

Specify the alternative hypothesis

The alternative hypothesis (H_1) is the statement that their is an effect or difference this is usually the hypothesis the research is intresting. In proving the alternative hypothesis can be one side only provied one direction. e.g lower. or two-sided.

Example.

→ their is an association b/w injury type & whether or not the patient received an IV in the prehospital seeting (Two Side.

Step 3(3)

Set the Significant level (α)

the Significent level (denote by the greek letter alpha-α) is generally set at 0.05 this means that their is a 50% chance that we will

accept our alternative hypothesis when we null hypothesis is actually True. the smaller significant level the greter the burdern of proff needed to reject the null hypothesis.

Step iv :⇒

Calculate the Test Statistic & Corresponding p-Value.

In another Section we present some basic test statistic to evalvate a hypothesis hypothesis Testing is generally used a test statistic that Compares group or examines association b/w the variables.

Example- p-value. = 0.01 this will happen. 1 in 100 Times by pure chance if your null hypothesis is True. Not likely to happen Strikely by chance.

Step (v) Drawing Conclusion.

(1) p-value ≤ - significance level we Reject your null hypothesis in a

fewer of your alternative hypothesis
~~Our~~ Our result is is
essentially significant.

(2) p-value > significance level(α) ⇒ fail to Reject your null hypothesis. your result is not statistically significant..