



قائمة الاسئلة

الإحصاء الحيوي (1) المستوى الأول - ماجستير (تقويم الأسنان، طب الأسنان التجميلي والترميمي، العلوم الأساسية، طب أسنان الأطفال، التعويضات السنية)

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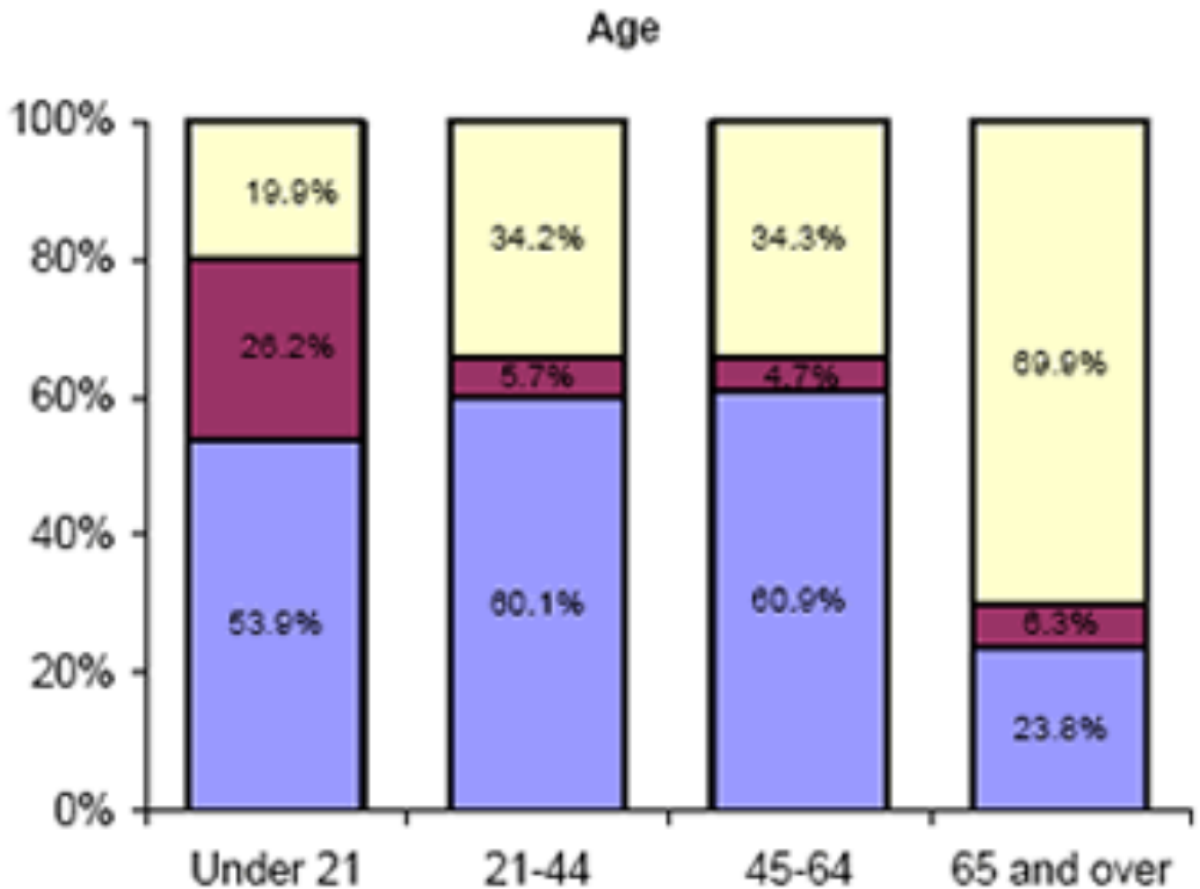
- 1) We used the biostatistics for:
  - 1) - To test whether the difference between two populations or more are real or by chance occurrence
  - 2) - To study the correlation between attributes or variables in the same population.
  - 3)  All of the above.
- 2) The methods of presenting the data are:
  - 1) - Tabulation.
  - 2) - Graphic representation (Charts and diagrams).
  - 3)  All of the above.
- 3) The selection of the sample either by:
  - 1)  Purposive or Randomize selection.
  - 2) - Randomize selection
  - 3) - According to inclusion and exclusion criteria
- 4) Vertical dimension may vary from patient to patient. This difference is small and occurs by chance and is within certain accepted biological limits, this is an example for:
  - 1)  Biological variability
  - 2) - Real variability
  - 3) - Experimental variability
- 5) The best way to record data for the Saliva flow rate, when doing research, is:
  - 1) - The nominal measurement scale
  - 2)  The ratio measurement scale
  - 3) - Ordinal measurement scale
- 6) All about Instrumental error correct except:
  - 1) - This is due to defects in the measuring instrument,
  - 2)  Both the observer error and the instrument error are called (sampling error).
  - 3) - Type of Experimental variability.
- 7) The Range for the following grades (98, 89, 95, 75, 87, 80, 79) is:
  - 1)  23
  - 2) - 32
  - 3) - 19
- 8) From the advantages of the median:
  - 1) - It is not affected by extreme observations.
  - 2) - It is the best measure for qualitative data.
  - 3)  All the above
- 9) Measures of dispersion, used to:
  - 1) - Determine the reliability of an average.
  - 2) - Facilitate further statistical analysis.
  - 3)  All of the above
- 10) All the following are not correct about the inter Quartile Range (IQR) except:
  - 1)  Provides information about how much distance is covered by middle 50% of the distribution.
  - 2) - It is the square root of the variance of a set of scores.
  - 3) - Used to describe variability when the mean is used to describe the central tendency.
- 11) The best way to record a data for the patient's pain severity, when doing research, as:
  - 1)  Ordinal variable
  - 2) - Nominal variable
  - 3) - Numerical variable





- 12) All the following are correct about The Standard Deviation (SD) except:
- 1) - Most important and widely used measure of studying dispersion.
  - 2)  A relative measure of dispersion.
  - 3) - It is the square root of the variance of a set of scores.
- 13) Type of dentition or dental caries classes considered as:
- 1)  Nominal variable
  - 2) - Ordinal variable
  - 3) - Quantitative Data
- 14) Odds ratio are always used in:
- 1) - Clinical R.T.
  - 2)  Case-control studies where the disease prevalence is unknown.
  - 3) - Cohort study
- 15) which table from the followings tables contains all the data obtained from a survey:
- 1) - Simple table
  - 2) - Frequency distribution table
  - 3)  Master table
- 16) In a study by master's student in Dentistry college - Sana'a University, observed the prevalence of Dental Caries by answer (Yes/No) the type of this data is:
- 1) - Nominal categorial data
  - 2) - Ordinal categorial data
  - 3)  Dichotomous categorial data
- 17) Most frequently occurring observation in a data is called:
- 1)  Mode
  - 2) - Median
  - 3) - Mean
- 18) In which type of bar chart, the individual bar is divided into 2 or more parts, as show in figure:





- 1) - Simple bar chart
  - 2) - Multiple bar chart
  - 3)  Component /Proportional bar chart
- 19) Sources of statistical data:
- 1) - Experiments and records
  - 2)  Experiments, surveys, and records
  - 3) - Surveys
- 20) Data obtained by the researcher himself:
- 1)  Primary data
  - 2) - Secondary data
  - 3) - All of the above
- 21) Data has already recorded (e.g., the most common type of patients attended the clinics):
- 1) - Primary data
  - 2)  Secondary data
  - 3) - None of the above
- 22) When a researcher presented their continuous data (e.g., Heart pulses), by a graph, he/she used:
- 1) - Bar charts, or Pie charts
  - 2)  Histogram, or Line charts
  - 3) - All of the above
- 23) A group of (20) patients were being screened for a clinical trial to evaluate the force losses in (Ng) of Elastic Power Chain during retraction of Canines teeth by fixed Orthodontic appliances. The results as show in the Table, the Mode is:





Sample No.	Amount of force loss	Sample No.	Amount of force loss	Sample No.	Amount of force loss	Sample No.	Amount of force loss
1	24	6	22	11	23	16	24
2	26	7	25	12	26	17	21
3	27	8	21	13	24	18	22
4	24	9	24	14	21	19	23
5	21	10	24	15	21	20	21

- 1) - 24 or 21
  - 2) - 22.5 (6 times)
  - 3) + 24 and 21 (6 times)
- 24) A group of (20) patients was screened for a clinical trial to evaluate the force losses in (Ng) of the Elastic Power Chain during the retraction of canine teeth by fixed Orthodontic appliances. The results as show in the Table, the Median is:

Sample No.	Amount of force loss	Sample No.	Amount of force loss	Sample No.	Amount of force loss	Sample No.	Amount of force loss
1	24	6	22	11	23	16	24
2	26	7	25	12	26	17	21
3	27	8	21	13	24	18	22
4	24	9	24	14	21	19	23
5	21	10	24	15	21	20	21

- 1) - 24
  - 2) + 23.5
  - 3) - 10.5
- 25) A group of (20) patients were being screened for a clinical trial to evaluate the force losses in (Ng) of Elastic Power Chain during retraction of Canines teeth by fixed Orthodontic appliances. The results as show in the Table, the Arthmatic Meam is:





Sample No.	Amount of force loss	Sample No.	Amount of force loss	Sample No.	Amount of force loss	Sample No.	Amount of force loss
1	24	6	22	11	23	16	24
2	26	7	25	12	26	17	21
3	27	8	21	13	24	18	22
4	24	9	24	14	21	19	23
5	21	10	24	15	21	20	21

- 1) + 23.2
  - 2) - 464
  - 3) - 22.2
- 26) In a study achieved in Sana'a city, Yemen 2024. Showed that Periodontitis among the Diabetes Mellitus patients (cases) and non-Diabetic Individuals (controls) groups of the studied populations, the results as show in the Table, The Odd ratio (OR) for male group is:

<i>Periodontitis</i>		Cases (No.=104)		controls (No.=104)		(OR)
		No.	%	No.	%	
Total	Male	64	61.5	32	30.7	?
	Female	32	30.7	8	7.4	?

- 1) - 4
  - 2) - 3
  - 3) + 2
- 27) In a study achieved in Sana'a city, Yemen 2024. Showed that Periodontitis among the Diabetes Mellitus patients (cases) and non-Diabetic Individuals (controls) groups of the studied populations, the results as show in the Table, The Odd ratio (OR) for female group is:





<i>Periodontitis</i>		Cases (No.=104)		controls (No.=104)		(OR)
		No.	%	No.	%	
<b>Total</b>	<b>Male</b>	64	61.5	32	30.7	?
	<b>Female</b>	32	30.7	8	7.4	?

- 1) - 2
- 2) + 4
- 3) - 6

28) In a study achieved in Sana'a city, Yemen 2024. Showed that Periodontitis among the Diabetes Mellitus patients (cases) and non-Diabetic Individuals (controls) groups of the studied populations, the results as show in the Table, What is the indication for the odd ratio (OR) in male group:

<i>Periodontitis</i>		Cases (No.=104)		controls (No.=104)		(OR)
		No.	%	No.	%	
<b>Total</b>	<b>Male</b>	64	61.5	32	30.7	?
	<b>Female</b>	32	30.7	8	7.4	?

- 1) - The periodontitis is lowest in cases group than control group
- 2) - The periodontitis is highest in cases group than control group
- 3) + The periodontitis is double in cases group than control group

29) In a study achieved in Sana'a city, Yemen 2024. Showed that Periodontitis among the Diabetes Mellitus patients (cases) and non-Diabetic Individuals (controls) groups of the studied populations, the results as show in the Table, What is the indication for the odd ratio (OR) in female group:

<i>Periodontitis</i>		Cases (No.=104)		controls (No.=104)		(OR)
		No.	%	No.	%	
<b>Total</b>	<b>Male</b>	64	61.5	32	30.7	?
	<b>Female</b>	32	30.7	8	7.4	?



- 1)  + The periodontitis is highest in cases group than control group  
2)  - The periodontitis is lowest in cases group than control group  
3)  - There are no differences between two groups
- 30) The range is particularly suitable for ( ) when you don't have enough data to calculate the other measures reliably, and the likelihood of obtaining an outlier is also lower:  
1)  - Large samples  
2)  + Small samples  
3)  - Both samples (small and large)
- 31) When you have a skewed distribution of data, the better measure of central tendency is:  
1)  - Mode  
2)  + Median  
3)  - Mean
- 32) In Sana'a University, Dentistry College (Orthodontic Department), a study aimed to determine the average of maxillary inter-canine widths in 19 patients with anterior crowding (class I malocclusion), the results were as follows:  
(20, 19, 21, 17, 22, 24, 21, 16, 20, 23, 18, 19, 21, 20, 23, 22, 21, 17, 18), The value in the first Quartile (Q1) is:  
1)  - 22  
2)  - 5  
3)  + 18
- 33) In Sana'a University, Dentistry College (Orthodontic Department), a study aimed to determine the average of maxillary inter-canine widths in 19 patients with anterior crowding (class I malocclusion), the results were as follows:  
(20, 19, 21, 17, 22, 24, 21, 16, 20, 23, 18, 19, 21, 20, 23, 22, 21, 17, 18), The value in the third Quartile (Q3) is:  
1)  + 22  
2)  - 18  
3)  - 15
- 34) In Sana'a University, Dentistry College (Orthodontic Department), a study aimed to determine the average of maxillary inter-canine widths in 19 patients with anterior crowding (class I malocclusion), the results were as follows:  
(20, 19, 21, 17, 22, 24, 21, 16, 20, 23, 18, 19, 21, 20, 23, 22, 21, 17, 18), The range is:  
1)  - 6  
2)  - 7  
3)  + 8
- 35) In Sana'a University, Dentistry College (Orthodontic Department), a study aimed to determine the average of maxillary inter-canine widths in 19 patients with anterior crowding (class I malocclusion), the results were as follows:  
(20, 19, 21, 17, 22, 24, 21, 16, 20, 23, 18, 19, 21, 20, 23, 22, 21, 17, 18), The Quartile Deviation (QD) is:  
1)  + 2  
2)  - 5  
3)  - 4
- 36) To obtain the Quartile Deviation (QD) we depend on:  
1)  - Mode of Q1 and Q3  
2)  + Negative Mean of Q1 and Q3  
3)  - None of the above
- 37) A study observed that the uses of Stainless-Steel Crowns as a restoration for destructive deciduous teeth (per year) in some dental clinics, in Sana'a City, Yemen; were: (25, 21, 18, 16, 15, 14, 10, 9), The sum of Mean Deviation (MD) is:  
1)  - -1





- 2) - 1  
3) + 0
- 38) A study observed that the uses of Stainless-Steel Crowns as a restoration for destructive deciduous teeth (per year) in some dental clinics, in Sana'a City, Yemen; were: (25, 21, 18, 16, 15, 14, 10, 9), The Variance (S<sup>2</sup>):
- 1) - 200  
2) + 25  
3) - 5
- 39) A study observed that the uses of Stainless-Steel Crowns as a restoration for destructive deciduous teeth (per year) in some dental clinics, in Sana'a City, Yemen; were: (25, 21, 18, 16, 15, 14, 10, 9), The Standard Deviation (SD):
- 1) - 25  
2) - 3  
3) + 5
- 40) A study observed that the uses of Stainless-Steel Crowns as a restoration for destructive deciduous teeth (per year) in some dental clinics, in Sana'a City, Yemen; were: (25, 21, 18, 16, 15, 14, 10, 9), Coefficient of Variation (CV):
- 1) + 31.25%  
2) - 62.50%  
3) - 31
- 41) An experimental study to determine the relation between the amount of force applied on the teeth and attrition in 5 patients (50N/3nm, 48N/3nm, 62N/4nm, 75N/6nm, and 65N/4nm) what is the Coefficient of Variation (CV):
- 1) - 27.25%  
2) - 16.61%  
3) + 21.93%

