

Presenting statistical results

Reference: Arifin WN, Sarimah A, Norsa'adah B, Majdi YN, Siti-Azrin AH, Imran MK, Aniza AA, Naing L. Reporting statistical results in medical journals. The Malaysian Journal of Medical Sciences: MJMS. 2016 Sep;23(5):1.

Statistical tests	Table form					
Independent <i>t</i>-test	Table 1: Comparison of cholesterol level between male and female.					
	Variable	Mean (SD)		Mean difference (95% CI)	<i>t</i> -statistic (df)	<i>P</i> -value ^a
	Cholesterol (mmol/L)	Male <i>n</i> = 40	Female <i>n</i> = 40	-1.08 (-1.36, -0.79)	-7.45 (78)	< 0.001
		7.69 (0.644)	8.77 (0.646)			
	^a Independent <i>t</i> -test.					
Paired <i>t</i>-test	Table 2: Comparison of cholesterol level before and after treatment.					
	Variable	Mean (SD) <i>n</i> = 30		Mean difference (95% CI)	<i>t</i> -statistic (df)	<i>P</i> -value ^a
	Cholesterol (mmol/L)	Before	After	0.81 (0.58, 1.03)	7.421 (29)	< 0.001
		8.25 (0.328)	7.44 (0.681)			
	^a Paired <i>t</i> -test.					
One-way ANOVA	Table 3: Comparison of cholesterol level between the three intervention groups.					
	Groups	<i>n</i>	Cholesterol (mmol/L) Mean (SD)	<i>F</i> -statistic (df1, df2) ^a	<i>P</i> -value ^a	
	Grp A	25	7.26 (0.343)	173.64 (2, 72)	< 0.001 ^b	
	Grp B	25	7.94 (0.319)			
	Grp C	25	8.95 (0.306)			
	^a One-way ANOVA, ^b Post-hoc multiple comparison with Sidak correction shows significant difference between all intervention groups (<i>P</i> < 0.001).					
Mann-Whitney U test	Table 4: Comparison of cholesterol level between male and female.					
	Variable	Median (IQR)		<i>z</i> -statistic	<i>P</i> -value ^a	
	Cholesterol (mmol/L)	Male <i>n</i> = 10	Female <i>n</i> = 10	-3.79	< 0.001	
		7.3 (0.6)	8.8 (0.8)			
	^a Mann-Whitney U test.					
Wilcoxon Signed-Rank test	Table 5: Comparison of cholesterol level before and after treatment.					
	Variable	Median (IQR) <i>n</i> = 10		<i>z</i> -statistic	<i>P</i> -value ^a	
	Cholesterol (mmol/L)	Before	After	-2.60	0.009	
		8.30 (0.40)	7.55 (1.10)			
	^a Wilcoxon Signed-Rank test.					

Statistical tests**Table form****Kruskal-Wallis test**

Table 6: Comparison of cholesterol level between the three intervention groups.

Groups	<i>n</i>	Cholesterol (mmol/L) Median (IQR)	χ^2 -statistic (df) ^a	<i>P</i> -value ^a
Grp A	10	7.35 (0.80)	15.29 (2)	< 0.001 ^b
Grp B	10	7.80 (1.40)		
Grp C	10	9.00 (1.10)		

^aKruskal-Wallis test, ^b Post-hoc multiple comparison with Bonferroni correction shows significant difference only between Grp A-Grp C pair ($P < 0.001$).