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 *t*-test

Table 1: Comparison of cholesterol level between male and female.

Variable	Mean (SD)		Mean difference (95% CI)	*t*-statistic (df)	*P*-value[a]
Cholesterol (mmol/L)	Male *n* = 40	Female *n*= 40	-1.08 (-1.36, -0.79)	-7.45 (78)	< 0.001
	7.69 (0.644)	8.77 (0.646)			

[a]Independent *t*-test.

Paired *t*-test

Table 2: Comparison of cholesterol level before and after treatment.

Variable	Mean (SD) *n* = 30		Mean difference (95% CI)	*t*-statistic (df)	*P*-value[a]
Cholesterol (mmol/L)	Before	After	0.81 (0.58, 1.03)	7.421 (29)	< 0.001
	136.5 (9.72)	125.0 (7.64)			

[a]Paired *t*-test.

One-way ANOVA

Table 3: Comparison of cholesterol level between the three intervention groups.

Groups	*n*	Cholesterol (mmol/L) Mean (SD)	*F*-statistic (df1, df2)[a]	*P*-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 ($P < 0.001$).

Mann-Whitney U test

Table 4: Comparison of cholesterol level between male and female.

Variable	Median (IQR)		*z*-statistic	*P*-value[a]
Cholesterol (mmol/L)	Male *n* = 10	Female *n*= 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) *n* = 10		*z*-statistic	*P*-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	*n*	Cholesterol (mmol/L) Median (IQR)	χ^2-statistic (df)[a]	*P*-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)		
	[a]Kruskal-Wallis test, [b] Post-hoc multiple comparison with Bonferroni correction shows significant difference only between Grp 1-Grp3 pair ($P < 0.001$).				