Conclusion Remains the Same after Application of Statistical Tests

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Sir,

We would like to acknowledge B Norsa'adah (Letter to Editor in this issue) for highlighting the statistical tests. After ensuring the list was in an orderly manner (matched pair), we proceeded and carried out paired t test for quantitative variables and McNemar's analysis for qualitative variables.

The results remained the same as previously performed by the previous tests. It showed that pregnancy induced hypertension was significantly associated with obesity (P<0.05; Table I) and being a housewife (P<0.05; Table II). And as shown using the previous tests, the current tests failed to associate income, family history of diseases, lifestyle habits and dietary pattern with pregnancy induced hypertension (P>0.05; Table I, II, III).

Therefore the conclusion stated in the original article remains valid. We stand by the same conclusion that obesity acts as a risk factor in the development of pregnancy induced hypertension as similarly shown by other studies[1,2].

Table I: Comparison of characteristics via quantitative analysis (paired t-test) amongst matched case (pregnancy induced hypertension) and control (non pregnancy induced hypertension)

Independent Variables	Case Mean (SD)	Control Mean (SD)	Mean difference (SD)	Paired t test	P value
Demographic / Socio-economic variables					
Income (Ringgit Malaysia)	802.38 (510.01)	1080.92 (626.39)	-278.57 (773.55)	-1.65	0.115
Monthly grocery bills (Ringgit Malaysia)	367.82 (168.79)	334.34 (143.64)	33.47 (148.15)	1.08	0.290
Physiological findings					
Weight (in kg)	71.09 (16.70)	60.13 (16.32)	10.96 (23.80)	2.52	0.017 **
Height (in cm)	1.54 (0.05)	1.53 (0.06)	0.01 (0.08)	0.27	0.789
Body mass index (kg/meter^2)	29.86 (6.68)	25.34 (6.50)	4.51 (9.85)	2.50	0.018**
Haemoglobin level (g/dL)	10.99 (1.43)	11.38 (1.05)	-0.38 (1.64)	-1.29	0.207
Lifestyle					
Exercise sessions per week	0.71 (1.62)	0.80 (1.34)	-0.08 (2.05)	-0.22	0.826
Number of cigarettes smoked by husband per day	6.13 (7.47)	5.23 (8.09)	0.90 (9.15)	0.53	0.594

Significance level set at 0.05.

Table II: McNemar analysis of factors amongst matched case (pregnancy induced hypertension) and control (non pregnancy induced hypertension)

Independent Variables	Reported by neither case nor control	Reported only by control	Reported only by case	Reported by both case and control	McNemar Odds Ratio	McNemar Chi Square	P value
Housewife	0	2	12	16	6.00	5.79	0.013**
Primary education and below	14	4	8	4	2.00	0.75	0.388
Familial relationship with husband (cousin)	21	3	6	0	2.00	*	0.508
Type of housing: Village house	9	7	4	10	0.57	1.45	0.549
Type of housing: Terrace	13	7	5	5	0.71	0.75	0.774
Nuclear family	4	4	9	13	2.25	1.23	0.267
Family history of cardiovascular disease	15	3	11	1	3.67	3.50	0.057
Family history of diabetes	18	3	6	3	2.00	*	0.508
Use of cooking oil							
Palm oil	2	3	4	21	1.33	*	1.000
Coconut oil	25	2	3	0	1.50	*	1.000
Corn oil	26	3	0	1	0.00	*	0.250
Exercise							
Lack of any form of exercise	3	3	6	18	2.00	*	0.508

Significance level set at 0.05.
* Exact test for correlated proportions used as number of discordant pairs < 10

Table III: Comparison of dietary pattern amongst matched case (pregnancy induced hypertension) and control (non pregnancy induced hypertension)

Independent Variables	Case Mean (SD)	Control Mean (SD)	Mean difference (SD)	Paired t test	P value
Dietary pattern (24 hour recall)					
Rice (plates)	2.05 (0.33)	2.00 (0.26)	0.05 (0.42)	0.64	0.522
Fish (pieces)	1.76 (0.67)	1.46 (0.97)	0.30 (1.36)	1.20	0.240
Vegetable (tablespoon)	4.03 (2.51)	4.16 (2.18)	-0.13 (3.19)	-0.22	0.821
Tea (glass)	0.50 (0.82)	0.63 (0.85)	-0.13 (1.04)	-0.70	0.489
Fried rice (plates)	0.13 (0.34)	0.20 (0.40)	-0.06 (0.58)	-0.62	0.536
Fried mee (plates)	0.13 (0.34)	0.20 (0.40)	-0.06 (0.58)	-0.62	0.536
Bread (pieces)	1.43 (1.43)	1.20 (1.58)	0.23 (2.07)	0.61	0.544
Cow's meat (pieces)	0.03 (0.18)	0.26 (0.73)	-0.23 (0.77)	-1.65	0.109
Chicken's meat (pieces)	0.03 (0.18)	0.16 (0.53)	-0.13 (0.57)	-1.27	0.211
Cake (pieces)	0.40 (1.35)	0.33 (0.88)	0.06 (1.55)	0.235	0.816
Milo (glass)	0.86 (1.03)	0.53 (0.77)	0.33 (1.44)	1.26	0.217
Milk (glass)	0.56 (0.89)	0.66 (0.92)	-0.10 (0.95)	-0.57	0.571

Dietary pattern **(1 week recall – number of servings)**					
Cow's meat	0.50 (0.62)	0.80 (0.84)	-0.30 (1.14)	-1.43	0.163
Chicken's meat	1.23 (0.67)	1.63 (1.40)	-0.40 (1.58)	-1.37	0.178
Egg	2.43 (1.97)	2.46 (1.63)	-0.03 (2.38)	-0.07	0.940
Salted fish	0.53 (1.40)	0.93 (1.79)	-0.40 (2.26)	-0.96	0.342
Margarine	1.63 (2.09)	1.76 (1.450	-0.13 (2.12)	-0.34	0.734
Fish	5.76 (2.16)	4.66 (2.49)	1.10 (3.56)	1.69	0.102
Ajinomoto	3.10 (2.99)	2.13 (3.24)	0.96 (3.72)	1.42	0.166
Instant mee	0.50 (0.77)	0.40 (1.32)	0.10 (1.60)	0.34	0.735
Style of servings **(Number of servings in a week)**					
Steamed	0.70 (1.46)	0.90 (1.37)	-0.20 (2.05)	-0.35	0.599
Boiled	2.56 (2.20)	1.86 (1.79)	0.70 (2.97)	1.29	0.207
Roasted	1.16 (1.26)	1.13 (1.25)	0.03 (0.34)	0.09	0.923
Fried	5.73 (2.61)	5.16 (2.05)	0.56 (0.57)	0.989	0.331

Significance level set at 0.05.

References

1. Kumari AS. Pregnancy outcome in women with morbid obesity. Int J Gynaecol Obstet 2001; 73(2): 101-7.

2. Tomoda S, Tamura T, Sudo Y, Ogita S. Effects of obesity on pregnant women: maternal hemodynamic change. Am J Perinatol 1996; 13(2): 73-8.