

Methodological notes, should be considered in research on mizaj

Sir,

Regarding the manuscript entitled "Comparing Mizaj (temperament) in type 1 diabetes mellitus and healthy controls: A case-control study" (doi: 10.4103/jrms.JRMS_980_18) there are some pitfalls on methodology and analysis:

- The type of study is declared as case control. As the diagnosis of diabetes and also Mizaj are examined at the same time, none of them can be considered as a risk factor. It seems that this study is a cross sectional study; therefore, any relationship cannot be interpreted as causality
- The tests that two groups were compared with each other are not clear in the method. Also, analysis of variance (ANOVA) is not mentioned in the analysis method. It is a question if the assumptions for use of ANOVA are checked or not? Is each group sample drawn from a normally distributed population?
- It is noted in the text that "*The mean total heat scores were significantly higher in new cases than in chronic patients and healthy children (19.59 ± 1.7 vs. 16.6 ± 2.1 and 18.17 ± 1.9, P < 0.001).*" How did you find that one group differ from the other two groups, significantly? This significance should be checked by *post hoc* tests
- Given the values reported, 95% of the values should be within two standard error from the mean. Based on it, this interval in chronic cases group would be between 14.01 and 20.98 that is not correspond with the age range
- How was the sample size determined?
- Based on Figure 1, are there no cold tempered control and new T1DM groups? (What does "tempare" mean? It may mean moderate!^(1,2))
- In the sentence: "*According to the results the Extra heat (cut off >18.5) was found to be correlated with the new onset of T1DM (odds ratio [OR] = 3.61, 95% confidence interval [CI] = 1.51–0.63),*" it seems that the CI value is incorrectly mentioned. In addition, given the CI written for OR include 1, we cannot speak of a relationship. On the other hand if there was a significant CI, it could just show a RELATION or ASSOCIATION, not a CORRELATION!
- The cut-off point is set for the questionnaire used (MMQ). Is the validity and reliability of this questionnaire checked in the target group?
- It is mentioned in the discussion section: "*risk of new T1DM in healthy hot Mizaj children increased.*" How

does this study measure the risk? It seems that the Risk is confused with Odds

- It is concludes that "*our data indicated that MMQ was an appropriate instrument to measure the Mizaj of diabetic patients*" How have you achieved this conclusion!?

Ethical approval number

As it is just the comment on a published manuscript, it seems that it does not need ethical number.

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Conflicts of interest

There are no conflicts of interest.

Akram Moradi Farahani¹, Masomeh Rezapour¹, Hoda Shirafkan²

¹Department of Persian Medicine, School of Persian Medicine, Babol University of Medical Sciences, Babol, Iran, ²Social Determinants of Health (SDH) Research Centre, Research Institute for Health, Babol University of Medical Sciences, Babol, Iran

Address for correspondence: Dr. Hoda Shirafkan, Health Research Institute, Babol University of Medical Sciences, Babol, Iran.
E-mail: hodashirafkan@gmail.com

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REFERENCES

- Salmannejad H, Mojahedi M, Mozaffarpur S, Saghebi R. The review of indices of Mizaj-e-Damagh (temperament of brain) identification in Persian medicine. *J Babol Univ Med Sci* 2016;18:71-9.
- Mojahedi M, Alipour A, Saghebi R, Mozaffarpur SA. The relationship between Mizaj and its indices in Persian medicine. *Iran Red Crescent Med J* 2018;20:e57820.

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