

Review of: "Correlation Between HbA1c and Body Mass Index Among Patients with High Lipid Profile Attending Johns Hopkins Aramco Healthcare Hospital in Saudi Arabia"

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Potential competing interests: No potential competing interests to declare.

The authors included multivariate analysis, but still the study has some problems:

1. The study population was not described properly. (The time periods of the data are absent, as well as whether medical tests were performed at the same time; if not, what is the time interval between tests?)
2. The section "Data Extraction and Statistical Analysis" is not described properly: variables are not described properly; for example, medication?, and blood pressure (BP)? What's BP: systolic? Diastolic? It must be pointed out if both of them are used. Other variables must be described too. Testing of normality (and its results) is not pointed out in the section. The description of multivariate analysis is not pointed out in the section.
3. Tables 1 and 2. The titles of the tables are not correct. Different variables are denoted by the same name (age as a quantitative variable and age in categorical form. The same for BMI). It would be helpful if the min and max of continuous variables were described in the tables.
4. Multivariate analysis (Table 5). What are **BPs** (systolic? Diastolic?) and **nationality (how is it denoted)**, Age – in quantitative or in categorical form? The same for BMI. In the table, standardized regression coefficients (beta) must be included. Only they have epidemiological and clinical sense and are able to compare the effect of different variables in regression. The possible interactions are not tested. Possibly there exist interactions of BMI (and others) with age and sex. Goodness of fit of the model (Adjusted R^2) must be pointed out.
5. The typing mistakes are in the draft.

In order to improve the manuscript, I strongly recommend involving a statistician and epidemiologist in the project.

In my opinion, this manuscript must be rejected.