

August 11, 2020

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To the Editors of Scientific Reports:

We are writing in reference to "Dishonesty is more affected by BMI status than by short-term changes in glucose" by Eugenia Polizzi di Sorrentino, published online in Scientific Reports on July 22, 2020. We are requesting that this article be retracted for three reasons:

- 1. Serious analytical errors invalidate the conclusions.
- 2. The study design does not support assertion of a causal relationship between body mass index (BMI) and dishonesty.
- 3. Promotion of weight stigma, which causes great harm to people living with obesity.

The most important analytical error is the reliance on within-group comparisons for findings of statistical significance. This well-documented issue is known as DINS (differences in nominal significance) error. A close examination of the data in this paper (supplementary Table S4) reveals that none of the between-group comparisons were statistically significant. In addition, we note that PubPeer comments (https://pubpeer.com/publications/341C41AED4E29DBD67D9D3EFE36F66#3) have identified discrepancies in the raw dataset

Causal inference made in the title of the paper ("Dishonesty is affected by BMI status") is inappropriate because the random assignment of the intervention groups was to fed versus fasted states. The experimental aspect of the study was not designed to test obesity (or BMI) status. The BMI analysis was a subgroup analysis. Thus, it is not possible to say that BMI status affected (caused) the observed behaviors.² Rather, the authors found a correlation in a secondary analysis. In their discussion, the authors note the "correlational nature of our study," so the causal inference is clearly inappropriate.

Weight stigma is a serious issue for people living with obesity.³ It is a widely prevalent problem that, in some cases, causes more harm than obesity itself. One of the ways in which people with obesity encounter weight stigma is from providers who falsely accuse them of dishonesty in their clinical interactions and thus provide inadequate care. The language in the discussion section of the paper (e.g., "obese people lie") raises serious issues of bias. By promoting weight stigma, this paper presents a serious ethical issue that must be corrected.

We are writing to you in accordance with our understanding of your retraction and correction policy. We would be pleased to submit a "Matters Arising" article to elaborate on these important issues if you believe this would be appropriate. However, the retraction of this flawed paper is most important. Please advise us of any questions you may have.

Thank you for your attention to this matter.

Sincerely,

Joseph Nadglowski, Jr. OAC President and CEO Theodore Kyle, RPh, MBA

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- 3. Rubino F, Puhl RM, Cummings DE, Eckel RH, Ryan DH, Mechanick JI, Nadglowski J, Salas XR, Schauer PR, Twenefour D, Apovian CM. Joint international consensus statement for ending stigma of obesity. *Nature Medicine*. 2020 Mar 4:1-3.