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Potential competing interests: No potential competing interests to declare.

The purpose of the study is to explore if physical exercise offset the disadvantages of alcohol conditions in the cancer patients. The cross-sectional data from the Health Information National Trends Survey (HINTS) are used in the analysis and by the means of logistic regression model the author examine the associations of socioeconomic variables with disadvantages of alcohol conditions and benefits of physical activity, respectively. Overall, this is very well written paper with detail description of the study, the methods and a detail discussion of the results. My suggestions to the author are the following:

1. Causal interpretation of the results should be avoided in the text since this is a cross-sectionals study. This concerns also the title of the paper.

2. In the limitations of the study the author should mention that there is no control covariate for the stage of the cancer. Together with treatment, this may have an effect on the dependent variables (physical activity helping sleep, reducing anxiety, and reducing pain).

3. The effect of physical activity may change with the progression of disease (no duration data about the progression of disease). This should be mentioned also in the limitations of the study.

4. The author states that "The medical treatment system prioritized the cancer patients with higher education, high income, and non-Hispanic white race." Does it refer to limited access to healthcare of disadvantages social groups? This statement remains unclear and need to be explained in more detail.