

Review of: "The Impact of physical exercise and alcohol conditions on self-reported health among cancer patients? An analysis of the Health Information National Trends Survey 2019"

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Potential competing interests: No potential competing interests to declare.

Overall, the impact of this study on public health and the technical contribution of the study is not impressive and marginal. The purpose of this study is to determine whether benefits of physical exercise can tradeoff disadvantages of alcohol conditions in the health change among the cancer patients. However, their conclusion did not answer this question and achieve their goal. It would be better if the author could address the following recommendations and do the necessary amendments to the manuscript.

- This retrospective study is mostly based on self-reported health, which may influence and cause bias in the accuracy of their results due to memory/recall bias.
- The author did not adjust potential confounders (e.g., BMI, socioeconomic factors) in their analysis (e.g., logistic regressions), which may influence and cause bias in the accuracy of their results.
- The author should clearly state the number of study population, and also modify Table1, which should include all basic characteristics of the population, as the author stated in text.
- In all the figures, the author did not state what the numbers at the bottom stand for. More detailed footnotes should be included for each figure.
- The author did not mention and provide detailed information for some variables, which may cause bias. Below information should be included in analysis.
 - A. Sleep. Besides sleep duration, sleep quality is also very important.
 - B. Exercise. The author should clarify "physically active". Duration and intensity of exercise should be considered.
 - C. Alcohol consumption. The author did not have detailed information for alcohol consumption, including frequency, former or current drinker, etc.
- The author need clearly state "helping sleep", and clarify Fig 10: "The association of sleep hour with helping sleep", which is confusing.
- When the author evaluated the associations of outcomes of sleep hours, physical exercise and alcohol conditions with poor health among cancer patient, they did not consider/analyze the interaction and joint effect of sleep, exercise and

alcohol.

- The overall organization of the manuscript should be enhanced, modified and reorganized. For example, the abstract of the manuscript is too long. Some part of the “mail variable” in method should be moved to results.
- The quality of English must be tremendously improved for better readability of the study. For example, some statements are misleading because of poor language. Some grammar mistakes need be fixed.