Reviewer's report

Title: Social adaptability and substance abuse: Predictors of depression among hemodialysis patients?

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Reviewer: Shervin Assari

Reviewer's report:

This study is reporting negative results on the association between Social Adaptability (measured by SAI) and depression among ESRD patients who are under HD. The study has used CESD to measure depressive symptoms and has used a logistic regression for data analysis.

Major Compulsory Revisions:

1- SAI is calculated based on five variables: 1) employment status, 2) education level, 3) marital status, 4) income, and 5) substance abuse. As the results are negative, we need to know more about the descriptive (distribution of these components). For instance, we need how SAI vary. Is it a highly skewed variable?

2- Substance abuse has been entered to the model twice. Once separately, and then as a part of ASI. This make cause statistical problem. Is there any coliniarity problem?

3- No reports on Cronbach's alpha of CESD and SAI are available in methods of the paper. Low reliability of SAI may be a cause for the negative results. Again, to realize why the association does not exist, we need more statistical information in the results of this paper.

3- What will be the results if instead of SAI, we enter its components to the model. This is very important. Thus, the associations between the five variables which make the SAI and the depressive symptoms should be included in the results.

Minor Essential Revisions

1- CESD > 24 has been defined as the main outcome. This is not depression by high depressive symptoms. This should be taken into account in the whole paper.

2- In discussion of this paper, author uses the idea of social support. SAI is a proxy of socioeconomic status and not social support.

3- Research shows that among ESRD patients, SAI is a predictor of mortality, receiving an organ, and morbidity. This literature needs to be addressed in this paper.
4- The study has not used the literature on SAI. Why this is correlated with mortality and many other outcomes in the literature? And why the link between it and depressive symptoms are not there in this study? The first question should be addressed in the introduction, and the second one should be explained in the discussion.

Discretionary Revisions

1- The authors have assumed that SAI should have a linear (gradual) effect on depression. They have thus tested one regression, by entering SAI as a continuous variable. They could test the effect of different cut points, to see if there is any non-linear effect of SAI on depressive symptoms or not.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

None