Reviewer's report

Title: Emotional Suppression and Depressive Symptoms in Women Newly Diagnosed with Early Breast Cancer

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Reviewer: Jingwei Wu

Reviewer's report:

This paper investigated the incidence of depressive symptoms in the women newly diagnosed with early breast cancer in mainland China and also examined the relationships of emotional suppression and depressive symptoms in the patients. The descriptive and regression analyses concluded that emotional suppression was related with depressive symptoms in women newly diagnosed with breast cancer; anger suppression played an important role among the others.

Major Compulsory Revisions:

1. Method: Although authors spend two paragraphs to describe CECS (The Chinese version of Courtauld Emotional Control Scale), it is still unclear how items are rated. Is this also a X-point Likert scale instrument? If so, how the score range is ranging from?

2. Result: Page 11, line 13, the authors mentioned ‘no depression’, ‘clinical depression’, and ‘major depression’, those terms are not defined previously. Are they classified based on ‘CESD<16’, ‘16<=CESD<27’ and ‘CESD>=27’? To me, if you use cut-point of 16, you should get similar incidence of depressive symptom (36.4% v.s. 34.8%) between two groups. In other words, the distinct of depressive symptoms happened only for the severe (or major depression)? A 3x2 table may be useful for us to understand the distribution of CESD (classified by levels) and two groups.

3. Did the authors check the distribution of each variable? To me, years of schooling must be highly skewed, so the Pearson correlation may not be an appropriate method, maybe need to report Spearmen’s Coefficient instead.

4. Page 12, line 16, ‘type of sample’, what did it mean? Group (patients/healthy women)? Please clarify, this term also appeared in the abstract, please make sure the readers can understand its definition at the beginning.

5. In table 2, last variable ‘Total emotional suppression’ is displayed, but in the paper, it is not defined. I am assuming it is the sum of the three subscales, please clarify. Also, is there any missingness of your data? If patients had missing data in one of the subscale, it is not appropriate to sum them up (you will have to use mean imputation method to calculation the total score instead). Please provide missingness of your study data.

6. My big concern is the collinearity issues in your multiple regression model. In
table 3, authors had already demonstrated strong correlation among three subscale of suppression, in step 3 of regression model, those three highly correlated items were put into the model altogether, there must be a severe collinearity problem. Also, anxiety symptoms are also highly correlated with anxiety suppression. Can authors provide us diagnosis statistics for multi-collinearity?

7. Discussion: Related to #6 comment, it may not be surprised to only see anger suppression is significant associated with depressive symptom due to the collinearity problem, but you may potentially lost the important information that anxiety/depression suppression are also very relevant variables in relation to depressive symptom (again, take a look at Table 3, those correlation coefficients are high).

Minor Essential Revisions:
1. On page 7, line 8, authors mentioned ‘Of 255 women who met the first three inclusion criteria,…’, but I only saw two inclusion criteria in line 1-2. Please justify.
2. In Table 1, I'd rather out statistics and p-values for these categorical variables in the line with each variable. For example, put ‘1.021, 0.796’ in the line of ‘Educational Level (%)’ etc.
3. Some grammar correction: for example, page 3, line 7, change to ‘China presented…’; also page 4, line 9, need to change to ‘by calculation..’
4. I think author need to change keyword ‘emotion suppression’ to ‘emotional suppression’ since this is the terms used throughout the whole article.

Discretionary Revisions:
1. The authors always used ‘the mean of a variable is A+/- B…’. I’d rather to change to ‘the mean (+/- SD) of a variable is A (+/- B)…’
2. Page 4 line 5 should change to ‘20% to 30%’

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Needs some language corrections before being published

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

Declaration of competing interests:
I declare that I have no competing interests