PEER REVIEW HISTORY

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ARTICLE DETAILS

TITLE (PROVISIONAL)	Screening for those at risk for anxiety and depression warranting further clinical evaluation among patients presenting to breast services: a single-centre, cross-sectional study
AUTHORS	Husain, Sakina; Rao, Shilpa; Suresh, Sridhar; Jesudoss, Kevin; Krishna, Balamurali; Raj, Jeffrey

VERSION 1 – REVIEW

REVIEWER	Galiano-Castillo, Noelia Clin Univ San Cecilio Hosp
REVIEW RETURNED	06-Dec-2023

GENERAL COMMENTS	This manuscript is a descriptive cross-sectional study whose findings highlight that anxiety and depression are relevant burdens among patients who need breast services in Western India. Age, menopause status and place of residence are identified as significant predictors; that is why the establishment of management protocols for patients who are suffering lump, pain or nipple discharge is strongly recommended in breast services. I am not a native speaker; however, I consider that a general polish to improve English fluency should be done. Some statements are too long and there are also redundant sentences along manuscript (e.g. page 11 line 40). ABSTRACT Structured summary but Mesh terms should be revised; some of them are not clear. INTRODUCTION Overall, this section is explained in detail. However, authors stated that very few studies (India or wherever) had been conducted to study prevalence of mental health illnesses and potential predictors in non-cancer breast outpatients. I am missing the studies that motivate the hypothesis of this study. In other words, justify much better this gap of knowledge, above all, up-to-date citations/references (the majority of them are before 2019…). METHODS They are clearly described. However, authors must clarify why they chose p value <0.2 as request to be included in the multivariable analysis; has it been an arbitrary decision or due to any true reason? Please, clarify this point. Another issue, why didn't authors adjust for potential confounders (sociodemographics and clinical variables) their main analysis (multivariate logistic regression)?

	RESULTS Page 10, line 22. Revise n=208 because abstract is said 215 patients were screened. Page 10, line 43. Revise some typographical issues such as 29.7%. I have noticed more in other section: see page 12 line 51 (full-stop missing), page 14 line 9 (QOL abbreviation repeated)… Page 10 line 48. Table 2 has not been mentioned in the body of manuscript. Please revise it. In this sense, Table 2 could create readers a misunderstanding because of prevalence of anxiety seems to be underestimated if it considers 10 or more as cutoff. Score range from 11-15 to 16-21 comprise 36.5% but prevalence described included also 10. There is a clear confusion between 46.4% described by authors and 36.5% described in Table 2. Please fix table. DISCUSSION This paper represents a great work and is timely. The prevalence of anxiety and depression is high in breast patients suffering lump, pain or nipple discharge. Considering a tailored approach, clinicians and health care professionals should include mental health consultations in the treatment plan. Authors must revise this section because there is information described twice (page 11 lines 27 and 40) and it makes reading boring and full of numbers unnecessary (already described in results and tables). Please, rewrite this section and add more relevant information -contrast and compare your results from others- (cancer and non-cancer patients). Page 12-13 lines 53-27. Citation 21 cannot explain the whole information contains in this section. Please, discuss much better with most recent citations. I hope this revision will help to reinforce the paper.

REVIEWER	Subramanyam, Alka Bai Yamunabai Laxman Nair Charitable Hospital, Psychiatry
REVIEW RETURNED	28-Jan-2024

GENERAL COMMENTS	Good endeavour at addressing a much needed area Few suggestions: 1. The study is actually a screening attempt for Anxiety and depression. The final diagnosis has not been ratified by a psychiatrist. Hence I think the title needs to be modified to include 'Screening for anxiety and Depression' rather than Prevalence and predictors..... 2. Is a psychiatrist part of the hospital breast unit? Usually for ideal management of holistic oncological services, a multi-disciplinary team is desirable. This can be mentioned as a recommendation/implication based on the findings. 3. There was no longitudinal follow up done, hence the stability of the diagnosis over a period of time, and its association with the illness, could not be ascertained. This is more so as the largest sample fell in the mild- moderate group in both anxiety and depression. This too forms a limitation. 4. The possibility of treatment options for anxiety and depression, and its impact on the survival rates, makes a base for further studies in this area.

VERSION 1 – AUTHOR RESPONSE

Reviewer #1			
1	I am not a native speaker; however, I consider that a general polish to improve English fluency should be done. Some statements are too long and there are also redundant sentences along manuscript (e.g. page 11 line 40).	We regret the language errors. The entire document has now been vetted for language issues using the premium version of Grammarly software	Entire Manuscript
2	ABSTRACT Structured summary but Mesh terms should be revised; some of them are not clear.	The key words have now been added as per the suitable key words available in the BMJ submission portal	Page 4, Lines 6 - 7
3	INTRODUCTION Overall, this section is explained in detail. However, authors stated that very few studies (India or wherever) had been conducted to study prevalence of mental health illnesses and potential predictors in non-cancer breast outpatients. I am missing the studies that motivate the hypothesis of this study. In other words, justify much better this gap of knowledge, above all, up-to-date citations/references (the majority of them are before 2019…).	Data from an Indian study on benign breast diseases has now been added and the references giving epidemiological data have been updated to those published after 2019	Page 5, Lines 14 - 17
4	METHODS They are clearly described. However, authors must clarify why they chose p value <0.2 as request to be included in the multivariable analysis; has it been an arbitrary decision or due to any true reason? Please, clarify this point. Another issue, why didn't authors adjust for potential confounders (sociodemographics and clinical variables) their main analysis (multivariate logistic regression)?	This is a standard practice that many statisticians follow while including variables in the multivariate analysis based on univariate analysis. As the reviewer may agree, while adjusting for confounding effect, a variable that was statistically significant may become non-significant and vice versa. Thus, a more liberal p-value cut off is taken for the purpose of selecting the suitable variables that need to be added in the multivariate model based on the p-value obtained in univariate analysis. This would ensure that those variables that previously did not attain statistical significance due to confounding would have an opportunity to achieve significance in the	No Change

		multivariate analysis if the difference truly exists. There are multiple papers published with a similar methodology some of which are cited below. 1. Raj, J.P., Ramesh, N. Quality of sleep among patients diagnosed with tuberculosis—a cross-sectional study. Sleep Breath 25, 1369–1377 (2021). https://doi.org/10.1007/s11325-020-02242-7 2. Raj JP, Pinto RW, Tomy SK, Kulkarni SM. Diabetic Nephropathy and Proton Pump Inhibitors - Pilot Case-Control Study. Indian J Nephrol. 2022 Mar-Apr;32(2):127-131. doi: 10.4103/ijn.IJN_397_20. Epub 2022 Jan 5. PMID: 35603105; PMCID: PMC9121724. The Sociodemographic and clinical variable did not meet the criteria to be included in the multivariate analysis as outlined above.	
5	Page 10, line 22. Revise n=208 because abstract is said 215 patients were screened.	The abstract has now been revised as that was a typo error. Only 208 were screened	Page 3, Line 14
6	Page 10, line 43. Revise some typographical issues such as 29.7%. I have noticed more in other section: see page 12 line 51 (full-stop missing), page 14 line 9 (QOL abbreviation repeated)…	Language issues on the whole have been addressed as explained in the previous queries. We have now made corrections to the specific typos pointed out by the reviewer. We apologise for these errors	Entire Manuscript
7	Page 10 line 48. Table 2 has not been mentioned in the body of manuscript. Please revise it. In this sense, Table 2 could create readers a misunderstanding because of prevalence of anxiety seems to be underestimated if it considers 10 or more as cutoff. Score range from 11-15 to 16-21 comprise 36.5% but prevalence described included also 10. There is a clear confusion between 46.4% described by authors and 36.5% described in Table 2. Please fix table.	We thank the reviewer for bringing this to our notice. We have now corrected Table 2 as per the reference cut-offs and have also cited table 2 in text	Table – 2 Page 11, Line 4
8	DISCUSSION This paper represents a great	Thank you for the suggestion. We have now included this in our discussion	Page 14, Lines 12 -

	work and is timely. The prevalence of anxiety and depression is high in breast patients suffering lump, pain or nipple discharge. Considering a tailored approach, clinicians and health care professionals should include mental health consultations in the treatment plan.		13
9	Authors must revise this section because there is information described twice (page 11 lines 27 and 40) and it makes reading boring and full of numbers unnecessary (already described in results and tables). Please, rewrite this section and add more relevant information -contrast and compare your results from others-(cancer and non-cancer patients).	The first paragraph is the summary of our methods and key results which is in-line with the BMJ author's guidelines and STROBEs reporting checklist. We have now cute down the numbers. The subsequent paragraphs already compare and contrast our results with other studies.	Page 11, Lines 17 – 19 Page 12, lines 1-2
10	Page 12-13 lines 53-27. Citation 21 cannot explain the whole information contains in this section. Please, discuss much better with most recent citations.	We missed to provide intext citation to reference 22 which is much recent one (2018). This has now been added. The fact we wanted to highlight is that the factors are still present in 2018 what were identified in 2006. Hence both references are cited.	Page 13, lines 8 - 18
Reviewer #2			
1	The study is actually a screening attempt for Anxiety and depression. The final diagnosis has not been ratified by a psychiatrist. Hence I think the title needs to be modified to include 'Screening for anxiety and Depression' rather than Prevalence and predictors.....	The title has been amended as per the suggestions and editor's comment	Title
2	Is a psychiatrist part of the hospital breast unit? Usually for ideal management of holistic oncological services, a multi-disciplinary team is desirable. This can be mentioned as a recommendation/implication based on the findings.	No, the psychiatrist is not part of the breast unit. We have now included the composition of the breast unit. We have also now included this as a recommendation in the conclusion part	Page 6, Line 22 Page 7 Line 1 Page 14, Lines 14 - 15
3	There was no longitudinal follow up done, hence the stability of the diagnosis over a period of time, and its association with the illness, could not be ascertained.	We agree with the reviewer and this has been added as our limitation now.	Page 14, Lines 2-5

	This is more so as the largest sample fell in the mild- moderate group in both anxiety and depression. This too forms a limitation.		
4	The possibility of treatment options for anxiety and depression, and its impact on the survival rates, makes a base for further studies in this area.	We agree with the reviewer and this has been added in the limitations section as our recommendation for future research.	Page 14, Lines 6-7

VERSION 2 – REVIEW

REVIEWER	Galiano-Castillo, Noelia Clin Univ San Cecilio Hosp
REVIEW RETURNED	05-Mar-2024

GENERAL COMMENTS	All issues have been explained. Thanks.

REVIEWER	Subramanyam, Alka Bai Yamunabai Laxman Nair Charitable Hospital, Psychiatry
REVIEW RETURNED	08-Apr-2024

GENERAL COMMENTS	Appreciate the suggestions taken in a positive and constructive manner