# PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form (http://bmjopen.bmj.com/site/about/resources/checklist.pdf) and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below.

### **ARTICLE DETAILS**

| TITLE (PROVISIONAL) | The magnitude of internalized stigma and associated factors    |  |
|---------------------|--|--|
|                     | among people with bipolar disorder at Amanuel Mental           |  |
|                     | Specialized hospital, Addis Ababa, Ethiopia: A cross-sectional |  |
|                     | study  |  |
| AUTHORS             | Alemnew, Nigus; W/Michele, Bethlehem; Angaw, Dessie; Ergete,   |  |
|                     | Temesgen; shumet, shegaye                                      |  |

# **VERSION 1 – REVIEW**

| VERGION I - REVIEW |  |  |
|--------------------|--|--|
|                    |  |  |
| REVIEWER           | Manfei XU  |  |
|                    | Shanghai Mental Health Center, Shanghai Jiaotong University,         |  |
|                    | Medical College, Shanghai, China                                     |  |
| REVIEW RETURNED    | 22-Oct-2020  |  |
|                    |  |  |
| GENERAL COMMENTS   | The article discussed the magnitude of internalized stigma and       |  |
|                    | associated factors among people with bipolar disorder, but there     |  |
|                    | were several questions on the method part:                           |  |
|                    | 1. In the part of Data sources and measurement, the questionnaire    |  |
|                    | was designed in English and was translated to Amharic. How           |  |
|                    | about the reliability and validity for the translated questionnaire? |  |
|                    | 2. In addition, during the interview, how many evaluators did the    |  |
|                    | interview? If you have two or more, did you test their consistency   |  |
|                    | and reliability? What about kappa values?                            |  |
|                    |  |  |
| REVIEWER           | Arghya Pal   |  |
|                    | Assistant Professor  |  |
|                    | Department of Psychiatry   |  |
|                    | All India Institute of Medical Sciences                              |  |
|                    | Raebareli  |  |
|                    | Uttar Pradesh  |  |
|                    | India  |  |
| REVIEW RETURNED    | 28-Dec-2020  |  |
|                    |  |  |
| GENERAL COMMENTS   | This is a very relevant and important topic of research. But, there  |  |
|                    | are some clarifications that I would want the authors to address.    |  |
|                    |  |  |
|                    | Major comments:  |  |
|                    | 1. In the sample size calculation, the authors have taken the        |  |
|                    | prevalence of internalized stigma to be 50%. But, the quoted         |  |
|                    | studies in the manuscript state otherwise. I would suggest the       |  |
|                    | authors to review the sample size calculation.                       |  |
|                    | 2. The method of randomisation is unclear. Please provide further    |  |
|                    | details regarding this.  |  |
|                    | 3. A motor issue with this study is the fitness to undergo the       |  |
|                    |  |  |

interview. How do the authors ensure that the patients were not symptomatic? Also how did the authors ensure that illiterate

patients understood the questions of the tool and responded appropriately?

4. The authors have nit used the data of the sub scales of ISMI. That would have been a very important aspect of this research.

#### Minor comments:

- 5. Avoid use of pejorative terms like 'schizophrenic'
- 6. In table 1, if we add the number of persons working, it sums up to 277, whereas, the number of working people shown is 264 (page 7, Line 23). Please clarify.
- 7. Table 3 has been written as table 1.
- 8. In table 3, under number of episodes, the unit used is years. Please clarify.

### **VERSION 1 – AUTHOR RESPONSE**

Reviewer: 1

Comments to the Author:

The article discussed the magnitude of internalized stigma and associated factors among people with bipolar disorder, but there were several questions on the method part:

 In the part of data sources and measurement, the questionnaire was designed in English and was translated to Amharic. How about the reliability and validity for the translated questionnaire?

Response: Thank you for the comments

We did not validate the instrument but we have checked the reliability of the translated questionnaire (cronbach  $\alpha$  =0.93) and this is mentioned in the data sources and measurement section (under internalized stigma sub heading) of the manuscript. But regarding validity due to time constraint and other factors we did not check the validity of the translated questionnaire. However, before collecting the actual data pre test was done and some amendments were performed. So, for the validity, now, we have put it as a limitation which is highlighted with red color in the limitation section for other studies might use this lmitation as an input for the future in their study.

2. In addition, during the interview, how many evaluators did the interview? If you have two or more, did you test their consistency and reliability? What about kappa values?

Response: Thank you.

The data were collected by six mental health professionals. This mental health professional s have previous experience in collecting data. But before the actual data collection time we had given training for these mental health professionals about the objective the study. To tell you frankly, we did not take it into account for the variation among data collectors if the number is many. But we have given training for the data collectors about the instrument, interview technique and the ethical issue. Because of previous experience of data collectors in data collection, professional similarity among data collectors and took training, I do not think that there was a consistency and reliability problem for the interviews among the evaluators. As the result showed the overall kappa value=0.93 was good though this is not a guarantee to show the inter rater variation among evaluators. Thank you very much dear reviewer! for such constructive, educative comment and I learn a lot from this critical question.

Reviewer: 2

#### Comments to the Author:

This is a very relevant and important topic of research. But, there are some clarifications that I would want the authors to address.

#### Major comments:

1. In the sample size calculation, the authors have taken the prevalence of internalized stigma to be 50%. But, the quoted studies in the manuscript state otherwise. I would suggest the authors to review the sample size calculation.

Response: thank you for the comments!! We tried to calculate the sample size using two options. 1. Using associated factors odds ratio, confidence interval and proportion by Epi info. But this sample size estimation was smaller than sample calculation using the outcome variable. 2. Using previous similar study resultsfor the outcome variable. Here we tried to search similar study findings on internalized stigma among bipolar patients and we could not get. So, we assume half of the patients(50%) might have internalized stigma. Based on these two calculation results, we compared the two sample sizes and sample size calculation using 50% prevalence was greater than using factors. That is why we prefer to use 50% prevalence for our sample size calculation. Here below is what we did before during proposal development.

sample size calculation by associated factors using EPI-INFO

| Variables         | Assumptions                         | Sample size of associated |
|-------------------|-------------------------------------|---------------------------|
|                   |                                     | factors                   |
| Family history of | OR=1.85,P=31.5%, Power=80, CI=95%   | 421                       |
| mental illness    |                                     |                           |
| Social support    | OR=4.501, P=16.9%, Power=80,        | 91                        |
|                   | CI=95%                              |                           |
|                   |                                     |                           |
| Employment        | OR=2.18, P=28.4%, Power =80, CI=95% | 273                       |
| status            |                                     |                           |

- 2. The method of randomization is unclear. Please provide further details regarding this. Response: thank you for your concerns. We were using systematic random sampling method to select study participants in every 2 interval. To begin the interview from whom we begin? Is that from the 1<sup>st</sup> patient that visited the outpatient or from the second patients? So, after getting from whom the patient we started,in aevery two interval will be continued. From two patients visiting the outpatient we have to give equal chances to begin for the interview to prevent selection biases and lottery method was used to select the participant. Then every 2 interval was continued until the estimated sample will attain. Now, we modified and highlighted with red color under sample size determination.
  - 3. A motor issue with this study is the fitness to undergo the interview. How do the authors ensure that the patients were not symptomatic?

Response: Thank you for your important comments.

The interview was conducted after the patients were seen by their physician. There were close communication between the clinician and the data collectors. Accordingly, if the physician had written any pertinent symptom on the patients chart during the follow up, then the data collectors would have exclude those who had any positive bipolar symptoms which were written on the chart.

4. Also how did the authors ensure that illiterate patients understood the questions of the tool and responded appropriately?

Response: we did translation of the instrument to the local language (Amharic) to easily understandable by every study participant and training was given for interviewers on each item of the questionnaire and how to ask the patients in a clear and informative way. We did not face any challenge regarding the understandability of the items of the questionnaire.

5. The authors have nit used the data of the sub scales of ISMI. That would have been a very important aspect of this research.

Response: Regarding the subscales of ISMI, 151 (36.1%), 71 (17.0%), 154 (36.8%), and 109 (26.1%) respondents had a high internalized stigma score in alienation, stereotype endorsement, discrimination experience, and social withdrawal, respectively

#### Minor comments:

6. Avoid use of pejorative terms like 'schizophrenic

Response: ok, thank you!!

7. In table 1, if we add the number of persons working, it sums up to 277, whereas, the number of working people shown is 264 (page 7, Line 23). Please clarify.

Response: sorry for our mistake. We have made a correction on table 1.

8. Table 3 has been written as table 1.

Response: ok, now, corrected

9. In table 3, under number of episodes, the unit used is years. Please clarify. Response: ok, thank you for this comment. Here we used "year "for the duration of the illness and number of the episode with in this duration of illness. Now corrected!!

#### **VERSION 2 - REVIEW**

| REVIEWER        | Dr. Arghya Pal<br>Assistant Professor              |
|-----------------|--|
|                 | Department of Psychiatry                           |
|                 | All India Institute of Medical Sciences, Raebareli |
|                 | India  |
| REVIEW RETURNED | 12-Feb-2021  |

| GENERAL COMMENTS | The quality of the manuscript has improved in terms of incorporating the suggestions made by the reviewers. But, the quality of English language used in the paper is not up to the mark.   |
|------------------|---|
|                  | Specific suggestion: 1. Please do not use the word 'Bipolar patient'. It is considered pejorative and is unacceptable in a manuscript on stigma. Currently it is there at many places including the abstract.   |
|                  | 2. The method of randomisation has been added, but it is very difficult to follow due to poor language. I suggest the authors use professional help to improve the quality of language. In the process, the authors can also look to make the paper more concise. For example, the authors have talked about ISMI at least twice in the methodology section. Things have been repeated. It is easier for the readers if things are arranged at one place with a reduction in word-count |

# **VERSION 2 – AUTHOR RESPONSE**

## Reviewer: 2

### Comments to the Author:

The quality of the manuscript has improved in terms of incorporating the suggestions made by the reviewers. But, the quality of English language used in the paper is not up to the mark. Response: Thank you for the concerns and now we tried to edit the language with help of English language editor. We mention the name of the editor in the acknowledgment section of the manuscript.

## Specific suggestion:

- 1. Please do not use the word 'Bipolar patient'. It is considered pejorative and is unacceptable in a manuscript on stigma. Currently it is there at many places including the abstract.

  Response: Thank you for these professional and educative comments. We tried to correct throughout the manuscript.
- 2. The method of randomisation has been added, but it is very difficult to follow due to poor language. I suggest the authors use professional help to improve the quality of language. In the process, the authors can also look to make the paper more concise. For example, the authors have talked about ISMI at least twice in the methodology section. Things have been repeated. It is easier for the readers if things are arranged at one place with a reduction in word-count

Response: Now we tried to make clear the explanation about randomization with the help of English language editor. Regarding ISMI description we tried to concise the concepts in one area but we mention its description in two areas because the manuscript guide line obliged me to mention in two areas i.e study variable and measurement section of the method section. Now we tried to merge similar ideas in one area. All amendments were highlighted in study variable, and data sources and measurement section of the manuscript.