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Iranian Journal of Psychiatry and Behavioral Sciences
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Peer Review Report for "Posttraumatic Stress Symptoms and General Mental Health Problems During the COVID-19 Pandemic in Iran: A Web-Based Cross-sectional Survey"

Author(s): Razieh Salehian, Atefeh Ghanbari Jolfaei, Morteza Naserbakht, Mahnaz Abdi

Review Timeline:

Submit Date: 8 Mar 2021
Revised Date: 3 Jul 2021
Accepted Date: 2 Sep 2021

Revision (0)

Here, you can see the **Reviewers**, **Associate Editors** and **EICs'** comments from the beginning to the end of the revision process.

REFEREE: Reviewer | **Revision** (0)

19 Apr 2021

Dear AE,
Thanks for sending this manuscript and performing current study. Importance of topic is clear. Whereas, there are some issues about the manuscript which are mentioned below:
For the original research, traditional sections are required including:
• Background
• Objectives
• Methods
• Results
• Discussion
• Conclusion
• References
- In this article, background and objectives have been merged.
- Findings should be described more in abstract. More specifically, main statistical findings like p-value should be added.
- Please use abbreviated name of the journals according to MEDLINE database. You also may find abbreviations on the Wikipedia website.

- For non-English references, translate the title to English, enclose the translation in square brackets, and add an abbreviated language designator.
- Based on the policy in this journal, references must have DOI. Please add DOI in the reference section.
- Please check references for completeness of journal name, Volume, Issue and page number.
Thanks

REFEREE: Reviewer | **Revision** (0) 11 May 2021

Dear AE,
Comments for the authors:
Abstract:
- Method: How was the sampling done?
- Result: Significancy such as P-value, OR, … should be mentioned.
- Background and objective:
- More detailed description about the need to measure PTSS.
Method:
- More explanation on how to access social networks in different provinces?
- Explain about sample size and Estimate the sample size?
- Explain how missing data were addressed?
Results:
- Report response rate
- Indicate the number of participants with missing data for each variable of interest
- P values should be mention in table 2
Discussion:
- Summarise key results with reference to study objectives
-The following statement should be further explained
“Comparing to other studies (8, 17), the prevalence of PTSS, anxiety, and depression in Iranians was higher than in other countries,”
- In which countries were the study conducted?
- What were the main outcome variables?
- What was the measurement tool?
-A deeper interpretation of the findings and comparison with other studies is needed
Thanks.

REFEREE: Reviewer | **Revision** (0) 24 May 2021

Dear AE,
The authors investigated posttraumatic stress symptoms (PTSS) and general mental health problems among the Iranian population during the COVID-19 pandemic. This study has many scientific merits. However, my comments and suggestions are as follows:
1. In the abstract, the authors should state the background as per mental health problems in relation to the COVID-19 pandemic.
2. The introduction needs to be enriched with more literature related to COVID-19 and mental health problems. What are the hypotheses of the study? Mention the study’s hypotheses based on previous literature. I would like to describe previous factors

associated with PTSS and other mental health problems (outcome variables of the study).
3. The authors can add socio-demographic data in the methods section collected during the survey.
4. Use ‘bivariate’ and ‘multivariable’ terms.
5. The authors used some cutoffs. Are these validated in Iran?
6. The authors should use only adjusted estimates in the conclusion.
Moreover, the English language and sentence structures can be improved in the next revision stage.
Thanks.

REFEREE: Associate Editor | **Revision (0)** 29 May 2021

Dear EIC,
The authors should revise the article according to reviewers` comments.
Thanks.

Mehran Zarghami: EIC | **Revision (0)** 6 Jun 2021

Dear Author,
Your paper has been evaluated by external peer reviewers. Please do your revisions according to the reviewers’ comments. I appreciate you doing the revisions as soon as possible by using the track changes mode in MS Word and using colored text.
After revision authors are obliged to upload reviewers’ comments word file in which they have replied to all comments one by one.
Besides, please pay attention to the word count limitation:
Word count limits are declared in this link: http://kowsarpub.com/en/index.php/services/for-authors/895-word-count
We look forward to receiving your revised manuscript. Thank you for sending your work to the Iranian Journal of Psychiatry and Behavioral Sciences.
Thanks.

OPEN PEER REVIEW

Revision (1)

Reply to Reviewers

Ideally, the reviewing process can significantly improve the submitted manuscripts by allowing the authors to take into account the advice of reviewers. Author(s) must reply to all reviewers' comments in a separate Word file, point by point. A "**Reply to Reviewers**" document is submitted along with revised manuscript during submission of revised files, summarizing the changes that the authors made in response to the reviewers' comments. The responses to reviewers' comments specifies how the authors addressed each comment the reviewers made.

You can read the authors' responses to the reviewers' comments in the next page.

Dear Reviewers,

Thank you for reviewing our manuscript carefully.

I responded to all the comments reviewers mentioned one by one as follow:

Reviewer 1:

Q1: In the abstract, the authors should state the background as per mental health problems in relation to the COVID-19 pandemic.

R1: Background: The COVID-19 pandemic as a stressor can have a negative effect on community mental health. Iran was one of the first countries to be severely affected by the coronavirus (COVID-19) since February 2020.

Q2: The introduction needs to be enriched with more literature related to COVID-19 and mental health problems. What are the hypotheses of the study? Mention the study's hypotheses based on previous literature. I would like to describe previous factors associated with PTSS and other mental health problems (outcome variables of the study).

R2: In the current pandemic, there are reasons to speculate that the psychological condition of the society may be affected during the infectious disease outbreak (5). Studies conducted during a COVID-19 pandemic in other countries, including China (6), Saudi Arabia (7), and Italy (8), have shown that the current pandemic has significant psychological effects (anxiety symptoms, depressive symptoms, and post-traumatic stress symptoms) on the general population, and these mental health problems were significant predictive factors of COVID-19–related PTSD (9). One systematic review that evaluated the rate of stress, anxiety, and depression among the general population during the COVID-19 pandemic between different continents (10), reported that the prevalence of anxiety and depression in Asia was higher than in Europe (32.9% and 35.3% versus 23.8% and 32.4%, respectively); but the prevalence of stress in Asia was lower than Europe (27.9% versus 31.9%). So, the COVID-19 pandemic represents a threatening and potentially traumatic event which can lead to mental health burden, and it seems that the nature and effects of COVID-19 on individuals may vary from country to country and various factors affect it. Because mental health burden as well as PTSS is a predictor of PTSD, continuous monitoring of the psychological consequences of COVID-19 outbreaks is essential to avoid long-term consequences. In Iran, few studies have been conducted to examine the psychological effects of the COVID-19 pandemic on the general population.

2. Objectives

This study was conducted to assess the COVID-19 related PTSS and general mental health burden and to explore the potential influencing factors in the Iranian population. It is hoped, the findings could provide data for the targeted interventions on the psychological health of the Iranian population during and after the COVID-19 pandemic.

Q3: The authors can add socio-demographic data in the methods section that collected during the survey.

R3: The first part of the questionnaire collected socio-demographic data. Demographic variables included age, gender, marital status, level of education, occupation, income, history of psychiatric disorder, history of COVID-19 in participants or their family members, history of staying at home as recommended during the pandemic, and history of other stressful events during the last year prior the pandemic.

Q4: Use 'bivariate' and 'multivariable' terms.

R4:

Line 129 was corrected: bivariate and multivariable

Line 131 was corrected: multivariable

Line 166 was corrected: multivariable

Q5: The authors used some cutoffs. Are these validated in Iran?

R5: These questionnaires are validated in Iran, and according to the references mentioned, these cutoff points has been used in other Iranian studies.

Q6: The authors should use only adjusted estimates in the conclusion.

R6: Conclusion**:** The study identified a major mental health burden among the public during the COVID-19 pandemic in Iran. Women, people with a history of psychopathology and/or positive history of other stressful events prior pandemic were at a high risk of displaying psychological issues. Since the mental health burden is a predictor of PTSS, in order to prevent long-term consequences such as PTSD, ongoing surveillance and monitoring of the psychological consequences for the outbreak of COVID-19 and early targeted mental health interventions are necessary. Further research is required to delineate the long-term effects of the COVID-19 pandemic on mental health.

Q7: Moreover, the English language and sentence structures can be improved in the next revision stage.

R7: Corrected as much as possible

Reviewer 2:

Q1: For the original research, traditional sections are required including:

● Background

● Objectives

● Methods

● Results

● Discussion

● Conclusion

● References

In this article, background and objectives have been merged.

R1: Corrected

Q2: Findings should be described more in abstract. More specifically, main statistical findings like p-value should be added.

R2: Results: Among 1,910 analyzed samples, the overall prevalence of COVID-19 related PTSS and general mental health burden was 62.4% and 43.6%, respectively. Regarding mental health, the burden in the social and anxiety dimensions was greater than the physical and depression dimensions. The prevalence of PTSS was higher in women, younger age groups, divorced/widowed individuals, people with a history of psychiatric disorders, and those who had experienced other stressful events in the last year (P-values < .05). Multivariable logistic regression showed that positive history of other stressful events and GHQ-28 score were the potential influencing factors associated with PTSS (AOR = 2.468 and 6.007, respectively; P-values < .001).

Q3: Please use abbreviated name of the journals according to MEDLINE database. You also may find abbreviations on the Wikipedia website.

R3: Done, (I tried to correct them and highlighted them in yellow in another file).

Q4: For non-English references, translate the title to English, enclose the translation in square brackets, and add an abbreviated language designator.

R4: 19. Panaghi L, Hakim shooshtari M, Atari Mogadam J. [Persian version validation in impact of event Scale-Revised] trans. Tehran Univ. Med. J. 2006;64:52-60.

Q5: Based on the policy in this journal, references must have DOI. Please add DOI in the reference section.

R5: It was done as follow and was highlighted in yellow in another file

Line 306-307 (reference 1) was corrected as follow:

1. Peeri NC, Shrestha N, Rahman MS, Zaki R, Tan Z, Bibi S, et al. The SARS, MERS and novel coronavirus (COVID-19) epidemics, the newest and biggest global health threats: what lessons have we learned? Int. J. Epidemiol. 2020;49(3):717-26. doi:10.1093/ije/dyaa033

Line 308-309 (reference 2) was corrected as follow:

2. Moghadami M, Hassanzadeh M, wa k, Hedayati A, Malekolkalami M. Modeling the Corona Virus Outbreak in IRAN. medRxiv. 2020:2020.03.24.20041095. doi:10.1101/2020.03.24.20041095

Line 312-313 (reference 4) was corrected as follow:

4. Saladino V, Algeri D, Auriemma V. The Psychological and Social Impact of Covid-19: New Perspectives of Well-Being. Front. Psychol. 2020;11(2550). doi:10.3389/fpsyg.2020.577684

Line 314-315 (reference 5) was corrected as follow:

5. Kumar A, Nayar KR. COVID 19 and its mental health consequences. J. Ment. Health. 2020:1-2. doi: 10.1080/09638237.2020.1757052

Line 316-318 (reference 6) was corrected as follow:

6. Huang Y, Zhao N. Generalized anxiety disorder, depressive symptoms and sleep quality during COVID-19 outbreak in China: a web-based cross-sectional survey. Psychiatry Res. 2020;288:112954-. doi: 10.1016/j.psychres.2020.112954

Line 319-321 (reference 7) was corrected as follow:

7. Alkhamees AA, Alrashed SA, Alzunaydi AA, Almohimeed AS, Aljohani MS. The psychological impact of COVID-19 pandemic on the general population of Saudi Arabia. Compr. Psychiatry. 2020;102:152192. https://doi.org/10.1016/j.comppsych.2020.152192

Line 322-324 (reference 8) was corrected as follow:

8. Rossi R, Socci V, Talevi D, Mensi S, Niolu C, Pacitti F, et al. COVID-19 Pandemic and Lockdown Measures Impact on Mental Health Among the General Population in Italy. Frontiers in Psychiatry. 2020;11(790). doi: 10.3389/fpsyt.2020.00790

Line 325-327 (reference 9) was corrected as follow:

9. Karatzias T, Shevlin M, Murphy J, McBride O, Ben-Ezra M, Bentall RP, et al. Posttraumatic Stress Symptoms and Associated Comorbidity During the COVID-19 Pandemic in Ireland: A Population-Based Study. J. Trauma. Stress. 2020;33(4):365-70. doi: 10.1002/jts.22565

Line 328-330 (reference 10) was corrected as follow:

10. Salari N, Hosseinian-Far A, Jalali R, Vaisi-Raygani A, Rasoulpoor S, Mohammadi M, et al. Prevalence of stress, anxiety, depression among the general population during the COVID-19 pandemic: a systematic review and meta-analysis. Glob. Health. 2020;16(1):57. doi: 10.1186/s12992-020-00589-w

Line 331-332 (reference 11) was corrected as follow:

11. Moghanibashi-Mansourieh A. Assessing the anxiety level of Iranian general population during COVID-19 outbreak. Asian J Psychiatr. 2020;51:102076. doi: 10.1016/j.ajp.2020.102076

Line 333-335 (reference 12) was corrected as follow:

12. Jiang Hj, Nan J, Lv Zy, Yang J. Psychological impacts of the COVID-19 epidemic on Chinese people: Exposure, post-traumatic stress symptom, and emotion regulation. Asian Pac. j. trop. 2020;13. doi: 10.4103/1995-7645.281614

Line 336-337 (reference 13) was corrected as follow:

13. Goldberg DP, Hillier VF. A scaled version of the General Health Questionnaire. Psychol. Med. 2009;9(1):139-45. doi: 10.1017/s0033291700021644

Line 338-339 (reference 14) was corrected as follow:

14. Sterling M. General health questionnaire–28 (GHQ-28). J. Physiother. 2011;57(4):259. doi: 10.1016/s1836-9553(11)70060-1

Line 340-342 (reference 15) was corrected as follow:

15. Baniasadi M, Divsalar P, Noorbala AA, Eslami Shahrbabaki M, Aflatoonian B, Ashrafi Asgarabad A. Bam Earthquake Survivors' Mental Health Status 12 Years after the Earthquake: A Population-Based Study. Arch Iran Med. 2019;22(2):59-64.

Line 343-344 (reference 16) was corrected as follow:

16. Taghavi SMR. VALIDITY AND RELIABILITY OF THE GENERAL HEALTH QUESTIONNAIRE (GHQ-28) IN COLLEGE STUDENTS OF SHIRAZ UNIVERSITY. J. Psychol. 2002;5(4 (20)).

Line 345-346 (reference 17) was corrected as follow:

17. Creamer M, Bell R, Failla S. Psychometric properties of the Impact of Event Scale—Revised. Behav. Res. Ther. 2003;41(12):1489-96. doi: 10.1016/j.brat.2003.07.010

Line 347-349 (reference 18) was corrected as follow:

18. Tan BYQ, Chew NWS, Lee GKH, Jing M, Goh Y, Yeo LLL, et al. Psychological Impact of the COVID-19 Pandemic on Health Care Workers in Singapore. Ann Intern Med. 2020;173(4):317-20. doi: 10.7326/m20-1083

Line 350-351 (reference 19) was corrected as follow:

19. Panaghi L, Hakim shooshtari M, Atari Mogadam J. [Persian version validation in impact of event Scale-Revised] trans. Tehran Univ. Med. J. 2006;64:52-60.

Line 352-353 (reference 20) was corrected as follow:

20. Noorbala AA, Faghihzadeh S, Kamali K, Bagheri Yazdi SA, Hajebi A, Mousavi MT, et al. Mental Health Survey of the Iranian Adult Population in 2015. Arch Iran Med. 2017;20(3):128-34.

Line 354-356 (reference 21) was corrected as follow:

21. Suliman S, Mkabile SG, Fincham DS, Ahmed R, Stein DJ, Seedat S. Cumulative effect of multiple trauma on symptoms of posttraumatic stress disorder, anxiety, and depression in adolescents. Compr. Psychiatry. 2009; 50(2):121-7. doi: 10.1016/j.comppsych.2008.06.006

Line 357-358 (reference 22) was corrected as follow:

22. Sareen J. Posttraumatic stress disorder in adults: impact, comorbidity, risk factors, and treatment. Can J Psychiatry. 2014;59(9):460-7. doi: 10.1177/070674371405900902

Line 359-360 (reference 23) was corrected as follow:

23. Liang L, Ren H, Cao R, Hu Y, Qin Z, Li C, et al. The effect of COVID-19 on youth mental health. Psychiatr. Q. 2020:1-12. doi: 10.1007/s11126-020-09744-3

Line 361-364 (reference 24) was corrected as follow:

24. Holingue C, Badillo-Goicoechea E, Riehm KE, Veldhuis CB, Thrul J, Johnson RM, et al. Mental distress during the COVID-19 pandemic among US adults without a pre-existing mental health condition: Findings from American trend panel survey. Prev. Med. 2020;139:106231. doi: 10.1016/j.ypmed.2020.106231

Line 365-367 (reference 25) was corrected as follow:

25. Pieh C, Budimir S, Probst T. The effect of age, gender, income, work, and physical activity on mental health during coronavirus disease (COVID-19) lockdown in Austria. J. Psychosom. Res. 2020;136:110186. doi: 10.1016/j.jpsychores.2020.110186

Line 368-369 (reference 26) was corrected as follow:

26. Almeida M, Shrestha AD, Stojanac D, Miller LJ. The impact of the COVID-19 pandemic on women's mental health. Arch Womens Ment Health. 2020;23(6):741-8. doi: 10.1007/s00737-020-01092-2

Line 370-372 (reference 27) was corrected as follow:

27. Liu X, Kakade M, Fuller CJ, Fan B, Fang Y, Kong J, et al. Depression after exposure to stressful events: lessons learned from the severe acute respiratory syndrome epidemic. Compr. Psychiatry. 2012;53(1):15-23. doi: 10.1016/j.comppsych.2011.02.003

Line 373-374 (reference 28) was corrected as follow:

28. Mak IWC, Chu CM, Pan PC, Yiu MGC, Chan VL. Long-term psychiatric morbidities among SARS survivors. Gen Hosp Psychiatry. 2009;31(4):318-26. doi: 10.1016/j.genhosppsych.2009.03.001

Line 375-378 (reference 29) was corrected as follow:

29. Hao F, Tan W, Jiang L, Zhang L, Zhao X, Zou Y, et al. Do psychiatric patients experience more psychiatric symptoms during COVID-19 pandemic and lockdown? A case-control study with service and research implications for immunopsychiatry. Brain Behav. Immun. 2020;87:100-6. doi: 10.1016/j.bbi.2020.04.069

Q6: Please check references for completeness of journal name, Volume, Issue and page number.

R6: Checked out.

Reviewer 3:

Abstract:

- **Q1: Method: How was the sampling done?**

R1: Through a web-based cross-sectional survey, based on social media, data were collected from self-selected volunteers using demographic information, General Health Questionnaire-28 (GHQ-28), and Impact of Event Scale-Revised (IES-R).

- **Q2: Result: Significancy such as P-value, OR, … should be mentioned.**

R2: Results: Among 1,910 analyzed samples, the overall prevalence of COVID-19 related PTSS and general mental health burden was 62.4% and 43.6%, respectively. Regarding mental health, the burden in the social and anxiety dimensions was greater than the physical and depression dimensions. The prevalence of PTSS was higher in women, younger age groups, divorced/widowed individuals, people with a history of psychiatric disorders, and those who had experienced other stressful events in the last year (P-values < .05). Multivariable logistic regression showed that positive history of other stressful events and GHQ-28 score were the potential influencing factors associated with PTSS (AOR = 2.468 and 6.007, respectively; P-values < .001).

- **Background and objective:**

- Q3: More detailed description about the need to measure PTSS.

R3: In the current pandemic, there are reasons to speculate that the psychological condition of the society may be affected during the infectious disease outbreak (5). Studies conducted during a COVID-19 pandemic in other countries, including China (6), Saudi Arabia (7), and Italy (8), have shown that the current pandemic has significant psychological effects (anxiety symptoms, depressive symptoms, and post-traumatic stress symptoms) on the general population, and these mental health problems were significant predictive factors of COVID-19–related PTSD (9). One systematic review that evaluated the rate of stress, anxiety, and depression among the general population during the COVID-19 pandemic between different continents (10), reported that the prevalence of anxiety and depression in Asia was higher than in Europe (32.9% and 35.3% versus 23.8% and 32.4%, respectively); but the prevalence of stress in Asia was lower

than Europe (27.9% versus 31.9%). So, the COVID-19 pandemic represents a threatening and potentially traumatic event which can lead to mental health burden, and it seems that the nature and effects of COVID-19 on individuals may vary from country to country and various factors affect it. Because mental health burden as well as PTSS is a predictor of PTSD, continuous monitoring of the psychological consequences of COVID-19 outbreaks is essential to avoid long-term consequences. In Iran, few studies have been conducted to examine the psychological effects of the COVID-19 pandemic on the general population.

2. Objectives

This study was conducted to assess the COVID-19 related PTSS and general mental health burden and to explore the potential influencing factors in the Iranian population. It is hoped, the findings could provide data for the targeted interventions on the psychological health of the Iranian population during and after the COVID-19 pandemic.

- **Method:**

-Q4: More explanation on how to access social networks in different provinces?

R4: Access to the social networks of the provinces was made possible by searching the social networks and managers of social networks in each province.

-Q5: Explain about sample size and Estimate the sample size?

R5: Based on similar articles and in consultation with a statistical expert, a sample size of at least 1706 people was considered for the study.

$$N = \frac{Z_{1-\frac{\alpha}{2}}^{2} * P * (1-P) * D}{E^2}$$

$$N = \frac{1.96^2 * 0.2 * 0.8 * 1}{0.02^2} = 1536$$

$$Attrition\ Rate = \frac{N}{1-q}$$

$$AR = \frac{1536}{1-0.10} = 1706$$

$$Z_{1-\frac{\alpha}{2}} = 1.96, P = 0.2\,\%, D(design\ Effect) = 1, E(error\ percent) = 2\,\%$$

- Q6: Explain how missing data were addressed?

R6: The study was designed so that answering the GHQ and ESR questionnaires was mandatory, so we did not have the missing information in these two questionnaires. Only 3 participants (% 0.2) did not answer the question about the history of psychiatric disorders and 13 participants (% 0.7) did not answer the question about the amount of income, which was not statistically significant.

- **Results:**

-Q7: Report response rate

R7: About 6,500 people had visited the questionnaire, but 1950 had completed it (response rate=30%). Finally, after applying the exclusion criteria, 40 questionnaires were removed and 1,910 cases (97.9%) were included in the study and they were from 31 provinces. The response rate according to the population of each province was calculated; and except in the capital (Tehran), which had a higher response rate, the response rate in other provinces was commensurate with the population of that province (About 18.9% of the total participants were from capital, while this province has 16.6% of the country's population, but the response rate in other provinces was proportional to the population ratio of that province). It is noteworthy that Tehran is a place where different ethnicities and races with different cultures live. Out of 1,950 answered questionnaires, 1,910 with the mean age of 35.54 years (SD = 9.03) were included in the analysis. Of these respondents, 942 (49.3%) were men, and 1185 (62%) were married. The socio-demographic characteristics of the participants are shown in Table 1.

- Q8: Indicate number of participants with missing data for each variable of interest

R8: We did not have missing data in the GHQ and ESR questionnaires because they had a mandatory answer. Only 3 participants (%.2) did not answer the question about the history of psychiatric disorders and 13 participants (%.7) did not answer the question about the amount of income, which was not statistically significant.

-Q9: P- values should be mention in table 2

R9: Table 2 is a descriptive table and is not statistically comparable because there is only one group and it is not possible to calculate P value.

- **Discussion:**

-Q10: Summarise key results with reference to study objectives

R10: Overall, it seems that COVID-19 pandemic has placed a significant general mental health burden on the Iranian population (43.6%), especially in the social and anxiety dimensions and leading to PTSS in a significant percentage of participants (62.4%); on the other hand general mental health burden (GHQ-28 ≥ 23) and other stressful events were the potential influencing

factors associated with COVID-19-related PTSS. It seems that the rate of mental health involvement during the pandemic in Iran is higher than the other countries considered in this study. These findings can be used by public health officials to more effectively identify individuals in the society who are at higher risk for developing mental health problems in response to the current pandemic. So, in addition to efforts at various levels to prevent the spread of the disease and other worrisome conditions, special attention should be paid to the mental health issues of the community. Moreover, it is important to have some programs for screening of psychiatric disorders including acute stress disorder or PTSS, anxiety, depression, sleep disorders, and other psychopathologies among general population, patients, and even caregivers in order to manage and treat the cases by employing psychiatrists, psychologists, and other relevant medical groups.

- **Q11: The following statement should be further explained**

“Comparing to other studies (8, 17), the prevalence of PTSS, anxiety, and depression in Iranians was higher than in other countries,”

In which countries was the study conducted?

What were the main outcome variables?

What was the measurement tool?

-A deeper interpretation of the findings and comparison with other studies is needed

R11: Comparing to other studies (6-8), the prevalence of PTSS, anxiety, and depression in Iranians was higher than in other countries, but due to differences between studies, this is not certain.

China was the first country to engage with COVID-19. Comparing to a web-based cross-sectional survey conducted on 603 Chinese participants with an age range of 6 to 80 years (6), the prevalence of anxiety and depression in the Iranian population was higher than the Chinese one (39.8% and 21.9% compared to 34.0% and 18.1%, respectively); but this is not conclusive because of the differences between the two studies such as measurement tools (GAD-7 and CES-D), time and duration of study, and number of participants.

Another study carried out about the impact of COVID-19 pandemic on mental health among 18,147 general population in Italy, showed that endorsement rates for PTSS, depression, and anxiety were 37%, 17.3%, and 20.8% by using GPS-PTSS, PHQ-9, and GAD-7, respectively (8). Again, the prevalence of PTSS, anxiety, and depression in Iranians was higher (62.4%, 39.8%, and 21.9% respectively), although the measuring tools were different.

In one study in Saudi Arabia that investigated the psychological impact of COVID-19 pandemic on 1,160 people in the general population, the average score of the participants on the IES-R questionnaire was 20.9 (SD = 15.7); meanwhile, 28.3% and 24.0% of the participants had depressive and anxiety symptoms, respectively (by using DASS-21) (7). According to our results, the Iranians had more PTSS (the mean score of IES-R was 29.32, SD = 17.41, and the

total prevalence of PTSS was 62.4%) than the Saudi Arabia population. Also, compared to the mentioned study, our findings revealed higher anxiety but lower depressive symptoms (21.9% and 39.8% of depressive and anxiety symptoms, respectively).

Comparing the results of the current study with the epidemiological survey conducted on 35,813 of the general population of Iran in 2017 (with an age range of 10 to over 70 years) by using GHQ-28 (20), shows an increase in mental health burden (43.6% versus 23.4%); regardless of the study method, this growth rate may be in favor of negative effects of the COVID-19 pandemic on the mental health of people.

Iran is one of the countries whose people have experienced many stressful events in recent years, such as floods, earthquakes, and economic sanctions. The higher rate of mental health problem in Iran compared to other countries and also it’s doubling in recent years in Iran may be due to negative cumulative effects of the stressful events on mental health (21, 22); as the current study showed, people who experienced other stressful events before the COVID-19 pandemic had a higher rate of PTSS and mental health problems.

I tried to correct the items you mentioned correctly and highlighted them in yellow in another file.

Sincerely,

Corresponding author

OPEN PEER REVIEW

Revision (1)

Here, you can see the **Reviewers**, **Associate Editors** and **EICs'** comments from the beginning to the end of the revision process.

REFEREE: Associate Editor | **Revision (1)** 8 Aug 2021

Dear EIC,
Thanks for revising the article according to the comments.
Thanks.

Mehran Zarghami: EIC | **Revision (1)** 2 Sep 2021

Dear authors,
We have completed our review of your manuscript and are pleased to inform you that it is considered for publication in the IJPBS. Note that the publication of your article will only be finalized upon your cooperation with the editorial processing.
Thank you for your fine contribution. On behalf of the Editors of IJPBS, we look forward to your continued contributions to the Journal.
Thanks.