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Data Article

Data set on impact of COVID-19 on mental health of internal migrant workers in India: Corona Virus Anxiety Scale (CAS) approach

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A B S T R A C T

The article presents a unique dataset on mental health of internal Migrant workers in India. The dataset was constructed during the pandemic when the entire nation was the victim of stringent measures to curtail the spread of Corona Virus in the form of travel restrictions and lockdowns. We collected this data in our pursuit to submit a paper in response to call for paper in the Journal titled "Migration and health". Non-availability of authentic data about the internal migrant workers triggered this effort to compile the data. We have recorded 1350 responses out of a 6897 Sample through snowball sampling method. Every respondent is said to be a referee for further driving of sample. The responses were collected between June 2 and August 30, 2020 through the telephonic interviews. Also, the consent of the respondents has been duly obtained for publication of the data without revealing their identity. The interview schedule was adopted by using Corona virus Anxiety Scale (CAS) which uses four dimension model namely Cognitive, Emotional, Behavioral and Psychological. The Interview schedule was originally designed in English but was later translated into three different languages after consulting the language experts. This article provides descriptive statistics of study variables along with socio economic factors. This dataset provides a significant platform for further research related to CAS and in assessment of mental health of vulnerable groups.

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Specifications Table

| Subject | Social Science |
|---------|---------------|
| Specific Subject area | Socio economics, Psychology |
| Type of Data | Tables |
| | Sav file |
| | xlsx file |
| How data was acquired | Telephonic Interview |
| Data format | Raw |
| | Analysed |
| Parameters of data collection | Respondents were chosen based on snowball sampling exclusively it was collected from internal migrant workers across India irrespective of the fact whether the location was affected by the pandemic or not. |
| Description of data collection | The survey was administered to internal migrant workers between June and August 2020 through telephonic interview from 1350 responses. Interview schedule is provided in the supplementary file. |
| Data source Location | Researchers from Christ University, Bangalore, have collected data from across India. |
| Data accessibility | Data Identification number: https://doi.org/10.17632/fkgf3fwnpz.1 |
| | Direct URL to data: https://data.mendeley.com/datasets/fkgf3fwnpz/1 |

Value of the Data

• This data is useful for researchers in measuring the levels of anxiety amongst the vulnerable group like migrant workers during uncertain times like pandemic.
• Enables researchers to carry out comparative studies on level of anxiety in normal and unusual situations.
• Provides insights on mental health conditions to carry out research on migrant workers in other countries.
• The data is useful to the policy makers to draft suitable policy reforms for welfare of vulnerable groups like migrant workers.

1. Data Description

Migrant workers in India are considered as the most vulnerable group to the pandemic [2]. They are vulnerable in terms of job security and economic condition [1]. As such, they are exposed to experience multiple psychological disorders like anxiety and depression. The data set is aimed at enhancing the knowledge of the users of the data on the impact of pandemic on the mental health issues of the internal migrant workers. Our survey probes into the psychiatric issues that migrant workers face and trauma that they underwent during the pandemic using Corona Virus Anxiety Scale (CAS) which was originally developed by Lee in the beginning of the year 2020. The scale uses four dimensions namely Cognitive, emotional, Behavioral and Psychological. The data was constructed with the help of interview schedule which was developed by employing Corona Virus Anxiety Scale (CAS). We have collected this data out of 1350 valid responses elicited through the telephonic interview. The data was collected during June to August 2020 which is considered to be the peak pandemic period. This data would enable the researcher to understand the possible adverse impacts on the anxiety levels of the dispersed
population of migrant workers. The data set is provided in four tables. Table 1 gives the gist of questions that were asked during the telephonic interview and expected responses from the participants. Table 2 provides the details of descriptive statistics of Corona Virus Anxiety Scale (CAS) items with demographic factors. Mean value describes the mean score of particular type of respondents relating to the CAS items. For example from the Table 2, we can make out that the respondents whose age is up to 30 years registered mean score of 1.66 for the first CAS scale item. Thus, the mean is calculated with reference to each CAS scale item. Table 3 provides Migrants’ workers status on Corona Virus Anxiety scale items, Mean value describes that the average scores of the respondents to the CAS items. Table 4 provides Karl Pearson’s Correlations coefficient between CAS dimensions and Coronavirus infection status. Negative correlation states that the respondents who were tested positive have more anxiety levels at all CAS dimensions namely cognitive, behavioral, emotional and physiological. Similarly, it also depicts that there is a positive correlation amongst different CAS dimensions as well. The interview schedule used for the data collection is given as a supplementary file. The raw data with coding is available in Mendeley Database for prospective researchers’ access.

2. Experimental Design, Materials and Methods

To construct this data set, the survey was conducted between June 2 and August 30, 2020, when the third level complete lock-down was exercised due to COVID 19. We initially identified 6897 internal migrant workers through a snowball sample method. To collect data, Interview schedule with translation in the local language was employed. A total of 1387 responses were obtained, however 1350 responses were considered for further analysis due to the elimination of invalid responses in the observations. As a matter of ethical concern, the identity of the respondents is kept confidential. Collected data were analysed with the help of SPSS software. The relationship between COVID infection status and anxiety levels was examined using Correlation Analysis. The interview schedule was prepared cautiously based on the literature reviews, which focuses on the socioeconomic status (SES) of the respondents and mainly on their anxiety level due to the COVID 19. Variables in the first part of the interview schedule were demographic

| Questions                                      | Possible Answers                  |
|------------------------------------------------|----------------------------------|
| What is your Age category?                     | Up to 30 Years old              |
|                                                | 31-40 Years old                 |
|                                                | 41 & above                      |
| What is your Gender?                           | Male                             |
| What is your Martial Status?                   | Female                           |
| What is your level of Education?               | Partnered                       |
| What is your Average Monthly Income?           | Single                           |
|                                                | No formal Education             |
|                                                | School dropout                   |
|                                                | School completed                 |
|                                                | Rs. 15000                       |
|                                                | Rs. 15001-20000                 |
|                                                | above Rs. 20000                  |
| Were you tested positive for Covid-19?         | Yes, tested positive             |
|                                                | No, not tested positive          |
|                                                | Not at all                       |

Table 1
Interview Questions of the Telephonic Interview used for initial collection of information.
Table 2
Descriptive statistics of Demographic and Corona Virus Anxiety factors.

| Scale Item                        | Classification                  | N    | Mean  | Std. Deviation | Std. Error | Maximum | Lower Bound | Upper Bound | Minimum |
|-----------------------------------|---------------------------------|------|-------|----------------|------------|---------|-------------|-------------|---------|
| Dizziness                         | ≤ 30 Years old                  | 728  | 1.66  | 1.16           | .043       | 4       | 1.58        | 1.75        | 0       |
|                                  | 31-40                            | 345  | 1.60  | 1.11           | .060       | 4       | 1.48        | 1.71        | 0       |
|                                  | 41 and Above                     | 277  | 1.74  | 1.11           | .067       | 4       | 1.61        | 1.88        | 0       |
| Lack of Sleep                     | ≤ 30 Years old                  | 728  | 1.67  | 1.22           | .045       | 4       | 1.58        | 1.76        | 0       |
|                                  | 31-40                            | 345  | 1.75  | 1.12           | .060       | 4       | 1.63        | 1.87        | 0       |
|                                  | 41 and Above                     | 277  | 1.77  | 1.15           | .069       | 4       | 1.64        | 1.91        | 0       |
| Felt frozen                       | ≤ 30 Years old                  | 728  | 1.72  | 1.14           | .042       | 4       | 1.63        | 1.80        | 0       |
|                                  | 31-40                            | 345  | 1.81  | 1.11           | .060       | 4       | 1.69        | 1.93        | 0       |
|                                  | 41 and Above                     | 277  | 1.73  | 1.16           | .070       | 4       | 1.60        | 1.87        | 0       |
| Loss of Interest in routine activities | ≤ 30 Years old                | 728  | 1.67  | 1.24           | .046       | 4       | 1.58        | 1.76        | 0       |
|                                  | 31-40                            | 345  | 1.91  | 1.24           | .067       | 4       | 1.78        | 2.04        | 0       |
|                                  | 41 and Above                     | 277  | 1.82  | 1.19           | .072       | 4       | 1.68        | 1.96        | 0       |
| Faced physical issues            | ≤ 30 Years old                  | 728  | 1.61  | 1.18           | .044       | 4       | 1.52        | 1.69        | 0       |
|                                  | 31-40                            | 345  | 1.74  | 1.13           | .061       | 4       | 1.63        | 1.86        | 0       |
|                                  | 41 and Above                     | 277  | 1.65  | 1.10           | .066       | 4       | 1.52        | 1.78        | 0       |
| Total score of CAS               | ≤ 30 Years old                  | 728  | 8.33  | 4.40           | 0.16       | 18.00   | 8.01        | 8.65        | 0.00    |
|                                  | 31-40                            | 345  | 8.82  | 4.20           | 0.23       | 17.00   | 8.37        | 9.26        | 0.00    |
|                                  | 41 and Above                     | 277  | 8.71  | 4.04           | 0.24       | 17.00   | 8.24        | 9.20        | 0.00    |
| Dizziness                         | Male                             | 758  | 1.59  | 1.17           | .043       | 4       | 1.50        | 1.67        | 0       |
|                                  | Female                           | 592  | 1.76  | 1.09           | .045       | 4       | 1.67        | 1.85        | 0       |
| Lack of Sleep                     | Male                             | 758  | 1.60  | 1.22           | .044       | 4       | 1.52        | 1.69        | 0       |
|                                  | Female                           | 592  | 1.85  | 1.12           | .046       | 4       | 1.76        | 1.94        | 0       |
| Felt frozen                       | Male                             | 758  | 1.63  | 1.15           | .042       | 4       | 1.55        | 1.72        | 0       |
|                                  | Female                           | 592  | 1.89  | 1.10           | .045       | 4       | 1.80        | 1.97        | 0       |
| Loss of Interest in routine activities | Male                           | 758  | 1.70  | 1.25           | .045       | 4       | 1.61        | 1.79        | 0       |
|                                  | Female                           | 592  | 1.84  | 1.22           | .050       | 4       | 1.74        | 1.94        | 0       |
| Faced physical issues            | Male                             | 758  | 1.59  | 1.18           | .043       | 4       | 1.51        | 1.67        | 0       |
|                                  | Female                           | 592  | 1.73  | 1.12           | .046       | 4       | 1.64        | 1.82        | 0       |
| Total score of CAS               | Male                             | 758  | 8.11  | 4.54           | 0.16       | 18.00   | 7.79        | 8.44        | 0.00    |
|                                  | Female                           | 592  | 9.08  | 3.86           | 0.16       | 18.00   | 8.76        | 9.39        | 0.00    |

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Table 2 (continued)

| Scale Item                      | Classification | N   | Mean | Std. Deviation | Std. Error | Maximum | Lower Bound | Upper Bound | Minimum |
|---------------------------------|----------------|-----|------|----------------|------------|---------|-------------|-------------|---------|
| Dizziness                       | Married        | 823 | 1.77 | 1.11           | .039       | 4       | 1.70        | 1.85        | 0       |
|                                 | Unmarried      | 527 | 1.49 | 1.16           | .051       | 4       | 1.39        | 1.59        | 0       |
| Lack of Sleep                   | Married        | 823 | 1.83 | 1.17           | .041       | 4       | 1.75        | 1.91        | 0       |
|                                 | Unmarried      | 527 | 1.53 | 1.18           | .052       | 4       | 1.43        | 1.63        | 0       |
| Felt frozen                     | Married        | 823 | 1.85 | 1.16           | .040       | 4       | 1.77        | 1.93        | 0       |
|                                 | Unmarried      | 527 | 1.58 | 1.08           | .047       | 4       | 1.49        | 1.67        | 0       |
| Loss of Interest in routine activities | Married    | 823 | 1.89 | 1.24           | .043       | 4       | 1.80        | 1.97        | 0       |
|                                 | Unmarried      | 527 | 1.57 | 1.21           | .053       | 4       | 1.46        | 1.67        | 0       |
| Faced physical issues           | Married        | 823 | 1.77 | 1.13           | .039       | 4       | 1.69        | 1.84        | 0       |
|                                 | Unmarried      | 527 | 1.47 | 1.16           | .050       | 4       | 1.37        | 1.57        | 0       |
| Total score of CAS              | Married        | 823 | 9.11 | 4.22           | 0.15       | 18.00   | 8.82        | 9.39        | 0.00    |
|                                 | Unmarried      | 527 | 7.64 | 4.23           | 0.18       | 18.00   | 7.28        | 8.00        | 0.00    |
| Dizziness                       | Primary education | 786 | 1.66 | 1.12           | .040       | 4       | 1.58        | 1.74        | 0       |
|                                 | Secondary Education | 446 | 1.66 | 1.16           | .055       | 4       | 1.56        | 1.77        | 0       |
|                                 | No formal education | 118 | 1.69 | 1.16           | .107       | 4       | 1.47        | 1.90        | 0       |
| Lack of Sleep                   | Primary education | 786 | 1.74 | 1.17           | .042       | 4       | 1.66        | 1.82        | 0       |
|                                 | Secondary Education | 446 | 1.67 | 1.19           | .057       | 4       | 1.56        | 1.79        | 0       |
|                                 | No formal education | 118 | 1.69 | 1.25           | .115       | 4       | 1.46        | 1.91        | 0       |
| Felt frozen                     | Primary education | 786 | 1.75 | 1.13           | .040       | 4       | 1.67        | 1.82        | 0       |
|                                 | Secondary Education | 446 | 1.77 | 1.16           | .055       | 4       | 1.66        | 1.87        | 0       |
|                                 | No formal education | 118 | 1.65 | 1.11           | .102       | 4       | 1.45        | 1.86        | 0       |
| Loss of Interest in routine activities | Primary education | 786 | 1.75 | 1.22           | .044       | 4       | 1.66        | 1.83        | 0       |
|                                 | Secondary Education | 446 | 1.84 | 1.29           | .061       | 4       | 1.72        | 1.96        | 0       |
|                                 | No formal education | 118 | 1.55 | 1.09           | .100       | 4       | 1.35        | 1.75        | 0       |
| Faced physical issues           | Primary education | 786 | 1.64 | 1.16           | .041       | 4       | 1.56        | 1.72        | 0       |
|                                 | Secondary Education | 446 | 1.67 | 1.13           | .054       | 4       | 1.56        | 1.77        | 0       |
|                                 | No formal education | 118 | 1.65 | 1.18           | .109       | 4       | 1.44        | 1.87        | 0       |

(continued on next page)
Table 2 (continued)

| Scale Item                          | Classification                  | N     | Mean | Std. Deviation | Std. Error | Maximum | Lower Bound | Upper Bound | Minimum |
|-------------------------------------|----------------------------------|-------|------|----------------|------------|---------|-------------|-------------|---------|
| Total score of CAS                  |                                  |       |      |                |            |         |             |             |         |
|                                     | Primary education                | 786   | 8.53 | 4.23           | 0.15       | 18.00   | 8.24        | 8.83        | 0.00    |
|                                     | Secondary Education              | 446   | 8.61 | 4.36           | 0.21       | 18.00   | 8.20        | 9.02        | 0.00    |
|                                     | No formal education              | 118   | 8.23 | 4.35           | 0.40       | 17.00   | 7.44        | 9.02        | 0.00    |
| Dizziness                           |                                  |       |      |                |            |         |             |             |         |
|                                     | up to 15000                      | 415   | 1.46 | 1.18           | 0.058      | 4       | 1.35        | 1.58        | 0       |
|                                     | 15000-20000                      | 877   | 1.73 | 1.11           | 0.038      | 4       | 1.66        | 1.80        | 0       |
|                                     | > 20000                          | 58    | 2.09 | .99            | .131       | 4       | 1.82        | 2.35        | 0       |
| Lack of Sleep                       |                                  |       |      |                |            |         |             |             |         |
|                                     | up to 15000                      | 415   | 1.52 | 1.19           | 0.059      | 4       | 1.41        | 1.64        | 0       |
|                                     | 15000-20000                      | 877   | 1.77 | 1.18           | 0.040      | 4       | 1.70        | 1.85        | 0       |
|                                     | > 20000                          | 58    | 2.19 | .98            | .129       | 4       | 1.93        | 2.45        | 0       |
| Felt frozen                         |                                  |       |      |                |            |         |             |             |         |
|                                     | up to 15000                      | 415   | 1.52 | 1.09           | 0.053      | 4       | 1.42        | 1.63        | 0       |
|                                     | 15000-20000                      | 877   | 1.82 | 1.14           | 0.039      | 4       | 1.74        | 1.90        | 0       |
|                                     | > 20000                          | 58    | 2.19 | 1.10           | .144       | 4       | 1.90        | 2.48        | 0       |
| Loss of Interest in routine activities |                                |       |      |                |            |         |             |             |         |
|                                     | up to 15000                      | 415   | 1.48 | 1.18           | 0.058      | 4       | 1.37        | 1.59        | 0       |
|                                     | 15000-20000                      | 877   | 1.86 | 1.24           | 0.042      | 4       | 1.77        | 1.94        | 0       |
|                                     | > 20000                          | 58    | 2.36 | 1.12           | .147       | 4       | 2.07        | 2.66        | 0       |
| Faced physical issues               |                                  |       |      |                |            |         |             |             |         |
|                                     | up to 15000                      | 415   | 1.44 | 1.15           | 0.056      | 4       | 1.33        | 1.55        | 0       |
|                                     | 15000-20000                      | 877   | 1.72 | 1.14           | 0.038      | 4       | 1.65        | 1.80        | 0       |
|                                     | > 20000                          | 58    | 2.07 | 1.15           | .151       | 4       | 1.77        | 2.37        | 0       |
| Total score of CAS                  |                                  |       |      |                |            |         |             |             |         |
|                                     | up to 15000                      | 415   | 7.43 | 4.22           | .21        | 18.00   | 7.02        | 7.84        | 0.00    |
|                                     | 15000-20000                      | 877   | 8.90 | 4.24           | .14        | 18.00   | 8.62        | 9.18        | 0.00    |
|                                     | > 20000                          | 58    | 10.89| 3.45           | .45        | 16.00   | 9.99        | 11.80       | 0.00    |
Table 3
Migrants’ workers status on Corona Virus Anxiety scale items.

| Scale                           | N   | Range | Minimum | Maximum | Statistic | Std. Error | Std. Deviation |
|---------------------------------|-----|-------|---------|---------|-----------|------------|----------------|
| Dizziness                       | 1350| 4.00  | 0.00    | 4.00    | 1.66      | .031       | 1.14           |
| Lack of Sleep                   | 1350| 4.00  | 0.00    | 4.00    | 1.71      | .032       | 1.18           |
| Felt frozen                     | 1350| 4.00  | 0.00    | 4.00    | 1.74      | .031       | 1.14           |
| Loss of Interest in routine activities | 1350| 4.00  | 0.00    | 4.00    | 1.76      | .034       | 1.24           |
| Faced physical issues           | 1350| 4.00  | 0.00    | 4.00    | 1.65      | .031       | 1.15           |
| Total score of CAS              | 1350| 18.00 | 0.00    | 18.00   | 8.53      | .12        | 4.28           |

Table 4
Correlations between CAS dimension and Coronavirus infection status.

| COVID Infection | Cognitive | Behaviour | Emotional | Physiological | Total score of CAS |
|-----------------|-----------|-----------|-----------|---------------|--------------------|
| COVID Infection | 1         | 1         | 1         | 1             | 1                  |
| Cognitive       | −.386**   | 1         | 1         | 1             | 1                  |
| Behaviour       | −.448**   | .577**    | 1         | 1             | 1                  |
| Emotional       | −.345**   | .345**    | .489**    | 1             | 1                  |
| physiological   | −.425**   | .440**    | .548**    | .507**        | 1                  |
| Total Score of CAS | −.512** | .718** | .810** | .724** | .860** | 1 |

* Correlation is significant at the 0.01 level (2-tailed).

and SES information, which includes age, gender, marital status, education status, income status and finally status of COVID 19. Variables in the second part were specifically designed based on Coronavirus Anxiety Scale - CAS [3] to collect and test the anxiety levels of internal migrant workers. That is, we adopted all five statements of CAS from Lee S.A. et al [3], which includes 1) I felt dizzy, lightheaded, when I read or listened to news about the coronavirus; 2) I had trouble falling asleep because I was thinking about the coronavirus; 3) I felt paralyzed or frozen when I thought about or was exposed to information about the coronavirus; 4) I lost interest in eating when I thought about or was exposed to information about the coronavirus and 5). I felt nauseous or had stomach problems when I thought about or was exposed to information about the coronavirus. All these variables were measured using CAS 5-point scale (0: not at all, 1: rare less than a day, 2: several days, 3: more than a week, 4: nearly every day over the last two weeks). The obtained data on CAS 5 statements were classified into four dimensions namely cognitive, behavioural, emotional and physiological for further analysis. A total of CAS score ≥9 indicates that there is a possibility of dysfunctional coronavirus related anxiety. High score in any of the individual CAS scale item or high total score of CAS reveals that problematic symptom for the person that might warrant further assessment or treatment.

Ethics Statement

We, the authors, Naveen Kumara R, Suresh G and Jothi M, hereby declare that this dataset has not been previously published elsewhere nor this dataset is considered for publication elsewhere. Before collecting data from the respondents, the research objective was clearly explained to respondents. Consent of the respondents has been duly obtained for publication of the data without revealing their identity. We also obtained approval from the CHRIST (Deemed to be University), Bangalore, Research and Ethics Committee (REC). After reviewing the aim and methodology of the study, informed consent and interview schedule, the Committee has approved the data collection and has given ethics clearance vide number CU: RCEC/33/03/21. Besides, research data confidentiality was communicated to the them, and was used exclusively for academic purposes.
Declaration of Competing Interest

We as authors declare that we have no known competing financial interests or personal relationships, which have or could be perceived to have influenced our work reported in this article.

Acknowledgment

We are indebted to all the migrant workers who participated in this survey, as well as the language experts who helped us in translating the interview schedule into local languages.

Supplementary Materials

Supplementary material associated with this article can be found in the online version at doi: 10.1016/j.dib.2021.107052.

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