Assessing Level of Anxiety Related to Survey during COVID-19 among ASHA Worker

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Authors’ contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

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ABSTRACT

Background: Research is aimed at assessing ASHA worker's anxiety levels during the COVID-19 epidemic. Worldwide, over 7.5 million people were infected by COVID-19. The number of cases in India grew rapidly in three months, from 470 in March to four millions. The epidemic of COVID-19 has grown intolerant and in many cases overpowered, medical systems and health personnel. The WHO emphasised the particularly high burden on health professionals and requested action to address the immediate requirements and activities needed to save lives and to avoid serious consequences for the physical or emotional wellness of health-care professionals (WHO, 2020). Previous viral outbreaks demonstrated an elevated risk of infection and other poor physical consequences for frontline and non-frontline health workers.

Methods: For this study, a non-experimental descriptive research technique was chosen. The research was carried out at the Wardha district's community area. The population of the study was Asha worker of Wardha district. 100 workers were selected by purposive sampling.

Results: According to the findings of the current study, 3% of ASHA workers experienced light anxiety, 24% experienced moderate anxiety, 64% experienced severe anxiety, and 9%
experienced extreme anxiety. The lowest anxiety level was 10 and the highest anxiety score was 46. The average anxiety score was 31.098.03, while the average percentage of anxiety score was 38.8610.03.

**Conclusion:** To assess Anxiety related to the COVID-19 pandemic, we conducted a survey with a representative sample of the Wardha district. Our findings indicate the pandemic's influence on ASHA workers' anxiety levels, which may be compounded by key concerns about infection risks, healthcare safety, and access.

**Keywords:** COVID-19; assess; anxiety; ASHA worker.

1. INTRODUCTION

COVID-19 is a recently found corona-virus infectious illness. In December 2019, before the outbreak in Wuhan, China, this new virus was not identified [1].

This virus is get easily transmitted through droplet of infected person [1]. This virus is get easily transmitted through droplet of infected person. If the infected person comes in close contact with normal person infection can be transmitted through respiratory system (coughing, sneezing) [1]. Transmission can also occur through fomites in the immediate environment of infected person. So transmission can occur when you come direct contact with infected person and indirectly when you will touch the object after touching of infected person [2].

Globally, 47,932,397 confirmed COVID-19 cases were reported to WHO on 5 November 2020, including 1,221,781 fatalities [3]. Pandemics always come up with various life threatening issues. Nowadays all over the world COVID-19 outbreak came along with the issues with certain other problems which involve public, administrative socio-economic issues, unemployment and hunger, transport issue, economic and mental collapse and various adverse effects in the human living and environment and healthcare sector concerns. The disease which started from Wuhan, China has now affected almost every country in the world with crucial manner [4].

Research is aimed at assessing ASHA worker's anxiety levels during the COVID -19 epidemic. Worldwide, over 7.5 million people were infected by COVID-19. The number of cases in India grew rapidly in three months, from 470 in March to four milllions. The epidemic of Covid-19 has grown intolerant and in many cases overpowered, medical systems and health personnel [5]. Previous viral outbreaks demonstrated an elevated risk of infection and other poor physical consequences for frontline and non-frontline health workers [6]. In addition, health professionals reported mental health issues, including symptoms of post-traumatic, burnout, depression and anxiety, in a hypothesized manner, with the employment of health workers over and up following epidemics. Throughout the present global health crisis, mental impact reports on health professionals surfaced persistently [7].

ASHA is one of the key factor in community health care sector. In rural life ASHA is symbolic as a hope. Firstly, because of increased jobs and longer routes, their work has been strengthened [8]. Secondly, their pay was low and inconsistent and their profits also have been lost since their customary incentive-based payments have been suspended. Third, their health has been jeopardized by insufficient safety equipment and training. They have no social security benefits, although they have a vital function in providing primary health services, and were not formally recognised as health professionals. According to observations and from the information collection, the prejudice based on caste and sex is known in village performance of Covid-19. Finally, ASHAs suffered great economic anguish because of the loss of the jobs and incomes of their families. They also enhance the strain of Collar's household labour with a higher work burden. Workers at ASHA play a key role in rural awareness, data collecting and monitoring. In reality, around 30-50 families are required per ASHA worker to raise awareness of coronavirus and collect health data every day. In addition, regular health department advice should also be transmitted solely by ASHA to each home in villages. Overall health systems are seriously strained by the COVID-19 epidemic [9].
2. OBJECTIVE

1. To assess the level of anxiety among ASHA worker.
2. To associate the anxiety level with selected variables (for example, dependent, independent, demographic variables).

3. METHODOLOGY

This chapter discusses the methods used to assess the level of anxiety related to survey of COVID-19 among ASHA workers. This includes the evaluation of the research method, survey method, identification of the target population and its attainable people, the study environment, samples and sampling methods, formation of the tools for the collection of data, ethical consideration of the tools and tool reliability.

An evaluative (descriptive – Quantitative) research approach used in the study attempted to assess the level of anxiety among ASHA workers while doing survey of COVID-19. In order to accomplish the objectives of the study. The non-experimental descriptive research design was chosen for this analysis because it is a benefit of a circumstance that occurs naturally. The descriptive style was chosen because it helped in collecting first-hand information and made it easier to obtain reliable and timely information. Data that is useful. This research is conducted out at the community district Wardha. The population in this study are ASHA workers in the community areas of Wardha district. Non-probability convenient sampling technique is applied for this study. The sample in this study is ASHA workers in the Wardha district. In this study sample size are 100 samples. In the present study there are three variables.

The dependent variable in this study is ASHA worker. The independent variable refers to Level of anxiety while doing survey of COVID-19. In the present study socio-demographic variables refers to Age, religion, caste, nationality, educational level, marital status, place of residence, income, number of children, support from family, experience of works, constant self health condition, BMI, conscience weight, and oneself activity in the previous month.

A standardized modified anxiety scale (MAS) selected based on the study goals, since it was regarded the most suitable tool for obtaining participants’ answers. A structured questionnaire was prepared to assess the level of anxiety among ASHA worker while doing survey of COVID-19.

The tool was developed based on contact and conversation with topic specialists after studying the associated literature. Based on investigator experience and, Informal conversation with the ASHA worker.

The collected data was coded, tabulated and analyzed by using descriptive statistics (means, mean percentage, standard deviation) to determine the relationship between demographics features and anxiety levels. The data is the form of Tables and graphs. The standardized questionnaire and modified anxiety scale was devised for data collection. The tool was tested for reliability and validity. The data were analyzed by using descriptive and inferential statistics.

4. RESULTS

Section A:

Table 1. Percentage wise distribution of ASHA workers according to their demographic characteristics (n=100)

| Demographic Variables | No. of ASHA Workers | Percentage (%) |
|-----------------------|---------------------|----------------|
| Age in years          |                     |                |
| 25-30 yrs             | 34                   | 34             |
| 31-35 yrs             | 42                   | 42             |
| 36-40 yrs             | 13                   | 13             |
| ≥41 yrs               | 11                   | 11             |
| Marital Status        |                     |                |
| Married               | 68                   | 68             |
Demographic Variables | No. of ASHA Workers | Percentage (%)
--- | --- | ---
Widowed | 27 | 27
Divorced | 5 | 5
Separated | 0 | 0
**Number of children** |  |  |
No child | 22 | 22
1 child | 46 | 46
2 child | 30 | 30
More than 2 children | 2 | 2
**Education** |  |  |
Secondary | 51 | 51
Higher Secondary | 28 | 28
Graduation | 18 | 18
Post-Graduation | 3 | 3
**Years of working experience** |  |  |
1-5 yrs | 29 | 29
6-10 yrs | 47 | 47
11-15 yrs | 24 | 24
≥16 yrs | 0 | 0
**History of basic illness** |  |  |
Diabetes Mellitus | 5 | 5
Hypertension | 6 | 6
Asthma | 5 | 5
No Any | 84 | 84
**Working Hours** |  |  |
5 hrs | 33 | 33
6 hrs | 33 | 33
8 hrs | 17 | 17
>8 hrs | 17 | 17
**COVID-19 knowledge and protection training** |  |  |
Yes | 72 | 72
No | 28 | 28

**Section B:**

**Assessment of level of anxiety related to survey during covid-19 among ASHA worker**

This section deals with the assessment of level of anxiety among ASHA workers while doing survey of COVID-19. The level of anxiety is divided in the headings of low anxiety, moderate anxiety and high anxiety.

**Table 2. Assessment with level of anxiety (n=100)**

| Level of Anxiety | Score Range | Level of Anxiety | No of ASHA workers | Percentage |
|---|---|---|---|---|
| No Anxiety | 0 | 0 | 0 |
| Mild Anxiety | 0-13 | 3 | 3 |
| Moderate Anxiety | 14-26 | 24 | 24 |
| Severe Anxiety | 27-40 | 64 | 64 |
| Extreme Anxiety | >40 | 9 | 9 |
| Minimum score | 10 |  |  |
| Maximum score | 46 |  |  |
| Mean anxiety score | $31.09 \pm 8.03$ |  |  |
| Mean % anxiety score | $38.86 \pm 10.03$ |  |  |
According to the Table above, 3% of ASHA employees experienced mild anxiety, 24% had moderate anxiety, 64% had severe anxiety, and 9% of ASHA employees had extreme anxiety. The lowest anxiety level was ten, and the highest anxiety score was forty-six. The average anxiety score was 31.09±8.03 and the average anxiety percentage was 38.86±10.03.

Section C:

Association of level of anxiety related to survey during covid-19 among asha worker in relation to demographic variables:

Table 3. Association of level of anxiety among ASHA worker in relation to age in years (n=100)

| Age in years | No. of ASHA workers | Mean anxiety score and SD | F-value | p-value |
|--------------|---------------------|---------------------------|---------|---------|
| 25-30 yrs    | 34                  | 35.52±5.57                | 9.44    | 0.0001  |
| 31-35 yrs    | 42                  | 39.76±4.75                |         |         |
| 36-40 yrs    | 13                  | 40.46±4.11                |         |         |
| ≥41 yrs      | 11                  | 44.18±6.36                |         |         |

This table depicts the relationship between anxiety score and ASHA employees' age in years. The estimated 'F,' i.e. 9.44 at a 5% level of significance, was substantially smaller than the tabulated 'F,' which was 2.68(df=3,96). Furthermore, the computed 'p'=0.0001 was much lower than the accepted threshold of significance, i.e. 'p'=0.05. As a result, it is assumed that ASHA employees' age in years is statistically related to their anxiety score.

Table 4. Association of level of anxiety among ASHA workers in relation to year of experience (n=100)

| Years of experience | No. of ASHA workers | Mean anxiety score and SD | F-value | p-value |
|---------------------|---------------------|---------------------------|---------|---------|
| 1-5 yrs             | 28                  | 43.03±4.91                | 15.18   | 0.0001  |
| 6-10 yrs            | 47                  | 38.25±5.10                |         |         |
| 11-15 yrs           | 25                  | 35.84±5.29                |         |         |
| ≥16 yrs             | 0                   | 0±0                       |         |         |

This chart depicts the relationship between anxiety score and ASHA employees' years of experience. The computed 'F,' i.e. 15.18 at a 5% level of significance, was substantially smaller than the tabulated 'F,' which was 3.07(df=2,97). Furthermore, the computed 'p'=0.0001 was much lower than the accepted threshold of significance, i.e. 'p'=0.05. As a result, it's assumed that ASHA employees' years of experience are statistically linked to their anxiety scores.

Table 5. Association of level of anxiety among ASHA workers in relation to history of basic illness (n=100)

| H/O basic illness | No. of ASHA workers | Mean anxiety score and SD | F-value | p-value |
|-------------------|---------------------|---------------------------|---------|---------|
| Diabetes Mellitus | 5                   | 27±1.73                   | 14.01   | 0.0001  |
| Hypertension      | 6                   | 33.16±4.16                |         |         |
| Asthma            | 5                   | 41±4.63                   |         |         |
| Others            | 84                  | 39.89±5.05                |         |         |

This table depicts the relationship between anxiety score and ASHA employees' history of basic sickness. The computed 'F,' i.e. 14.01 at a 5% level of significance, was substantially lower than the tabulated 'F,' which was 2.68(df=3,96). Furthermore, the computed 'p'=0.0001 was much lower than the accepted threshold of significance, i.e. 'p'=0.05. As a result, it's assumed that ASHA employees' history of fundamental disease is statistically linked to their anxiety score.
5. DISCUSSION

A current study consisted cross sectional study carried out in community area of wardha district. Among 100 participants were include in the study. The purpose of this study was to determine the level of anxiety among ASHA worker. It is necessary to know about COVID-19 and its prevention because now a day's it is major problem affected by many people and pandemic in world. Health worker aware about the COVID-19 disease. The researcher had selected this study keeping in mind the necessity to address this situation therefore the purpose of the study is to assess the level of anxiety related to survey during COVID-19 among ASHA worker. The researcher wants to assess and aware about COVID-19 and its prevention so that they can prevent themselves and there family from COVID-19 disease.

Studies carried out by Spoorthy Sagar et al. in Bangalore in the public health sector, amongst which Lady Health Visitor and Auxiliary Nurses Midwives, Health Assistants, ASHA workers, and AWWs were among those with mild stress, with moderate stress of 37.1% (52), and 52.1% (73), with severe stress of 10.7% (15).

In the Khosravi et al. study, there was a substantial link between job experience and burnout frequency, and the frequency of burnout overall was greater for individuals with more work experience. Possible explanations might be occupational condition and the difficulties of advancing a career, the high workloads and stress of rural living and the problems of schooling for the children if primary healthcare professionals have greater expertise.

Validated questionnaire and interviewing techniques were utilized to data as a basis for this investigation [10] As a cross-section survey, our capacity to establish causal connections between job anxiety, fear and workload can be reduced.

To avoid the reification of the health care worker-patient connection, a timely diagnosis of this emotional decrease is necessary. Burnout should be treated early as an occupational illness of a healthcare practitioner. Anxiety reducing physical activity like a anxiety-controlled exercise with a conscientious procedure, improving skills by regular training and performance through regular evaluation, working on enhancing mental health with reduced interpersonal and interorganizational changes are extremely essential to decrease stress and burnout in health workers.

6. NURSING IMPLICATIONS OF THE STUDY

The results of the study involve care, nursing practice, and nursing research. The content of anxiety assessment will enable nursing staff in all fields such as hospitals and communities and clinics teach COVID-19 and its prevention to ASHA employees. The results will allow nurses to measure the efficacy of anxiety assessment. The content of the anxiety assessment during the COVID-19 study will allow nursing staff to learn much more about various risk factors and causes, clinical manifestations and therapy and various kinds of preventative action. This helps to explain healthcare personnel during health education [10].

In order to support them in delivering and prevent education to COVID-19, nursing educators can target health care providers and multi-purpose employees in community sectors for continued nursing education programmers and training for trainers. It may be used as an education module for people [11].

Further research on the assessment of anxiety levels connected to the survey in Cov 19 among ASHA staff can be carried out on the basis of this study. Patient research will assist to know the function of the nurse in increasing people's awareness and developing the behavior and prevention of COVID-19. Researchers to sensitive and prevent COVID-19. Researchers must be conducted [12-15].

7. CONCLUSION

We performed a survey with a representative sample of the Wardha region to investigate general views, knowledge, and behaviours relevant to the COVID-19 epidemic. Our findings suggest that the pandemic has had an impact on ASHA employees' anxiety levels, which may be exacerbated by significant concerns about infection risks, healthcare safety, and access.

8. LIMITATION

The study was conducted only for ASHA worker of Wardha district. The study was limited by a small sample of health workers, which could
restrict the generalizability of the findings of the research.

**CONSENT**

As per international standard or university standard, respondents’ written consent has been collected and preserved by the author(s).

**ETHICAL APPROVAL**

The study was authorised by the ethics committee of the university (IEC). The study was done in compliance with the ethical guidelines set out by the central ethics committee on wardha (ECR/440/Inst/MH/2013/RR-2019), and it was registered as ECR/440/Inst/MH/2013/RR-2019.

**COMPETING INTERESTS**

Authors have declared that no competing interests exist.

**REFERENCES**

1. Modes of transmission of virus causing COVID-19: implications for IPC precaution recommendations [Internet]. [Cited 2021 Dec 3]. Available:https://www.who.int/news-room/commentaries/detail/modes-of-transmission-of-virus-causing-covid-19-implications-for-ipc-precaution-recommendations
2. Transmission of SARS-CoV-2: Implications for infection prevention precautions [Internet]. [Cited 2021 Dec 3]. Available:https://www.who.int/news-room/commentaries/detail/transmission-of-sars-cov-2-implications-for-infection-prevention-precautions
3. Dabhokar YG, Sagane BA, Dabhokar TY, Divity S. COVID19 Infection in Health Care Professionals: Risks, Work-Safety and Psychological Issues. Indian J Otolaryngol Head Neck Surg. 2020;72(4): 468–73.
4. COVID-19: Protecting people and societies [Internet]. OECD. [Cited 2021 Dec 3]. Available:https://www.oecd.org/coronavirus/policy-responses/covid-19-protecting-people-and-societies-e5c9de1a/
5. Attacks on health care in the context of COVID-19 [Internet]. [Cited 2021 Dec 3]. Available:https://www.who.int/news-room/feature-stories/detail/attacks-on-health-care-in-the-context-of-covid-19
6. Bansal S, Sriniva K, Ekstrand M. Perceptions of Asha Workers in the Hope Collaborative Care Mental Health Intervention in Rural South India: A Qualitative Analysis; 2020.
7. Bhushan NL, Krupp K, Jaykrishna P, Ravi K, Khan A, Shidhaye R, et al. The association between social support through contacts with Accredited Social Health Activists (ASHAs) and antenatal anxiety among women in Mysore, India: A cross-sectional study. Soc Psychiatry Psychiatr Epidemiol. 2020;55(10):1323–33.
8. RAS | Impact of the Pandemic on Accredited Social Health Activists (ASHA) in India [Internet]. [Cited 2021 Dec 3]. Available:http://ras.org.in/impact_of_the_pandemic_on_accredited_social_health_activists_(asha)_in_india
9. Chowdhury P, Baidya S, Paul D, Debbarma P, Kalita B, Karmakar S. Assessment of knowledge, attitude and practices among Accredited Social Health Activists (ASHAs) towards COVID-19: A descriptive cross-sectional study in Tripura, India [Internet]. 2021 [Cited 2021 Dec 4] p. 2021.02.17.21251725v1 Available:https://www.medrxiv.org/content/10.1101/2021.02.17.21251725v1
10. Wang X, Cheng Z. Cross-Sectional Studies: Strengths, Weaknesses, and Recommendations. Chest. 2020;158(1):S65–71.
11. Fawaz M, Anshahi H, Samaha A. Nurses at the Front Line of COVID-19: Roles, Responsibilities, Risks, and Rights. Am J Trop Med Hyg. 2020;103(4):1341–2.
12. Hall VJ, Foulkes S, Saeli A, Andrews N, Oguti B, Charlett A, et al. COVID-19 vaccine coverage in health-care workers in England and effectiveness of BNT162b2 mRNA vaccine against infection (SIREN): A prospective, multicentre, cohort study. The Lancet. 2021;397(10286):1725–35.
13. Librarians R. Research Guides: Organizing Academic Research Papers: 6. The Methodology [Internet]. [Cited 2021 Dec 4].
14. Labrague LJ, De Los Santos JAA. COVID-19 anxiety among front-line nurses: Predictive role of organizational support, personal resilience and social support. J NursManag. 2020;28(7):1653–61.

15. Salari N, Khazaie H, Hosseinian-Far A, Khaledi-Paveh B, Kazeminia M, Mohammadi M, et al. The prevalence of stress, anxiety and depression within front-line healthcare workers caring for COVID-19 patients: A systematic review and meta-regression. Hum Resour Health. 2020;18(1):100.

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