



## Original Article

# Assessing Mental Health of Women Working as Front-Line Health Workers in Self-Help Groups in Odisha during COVID-19 Outbreak

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## ARTICLE INFO

## Article history

Receive: 2022-05-19

Received in revised: 2022-07-27

Accepted: 2022-09-10

Manuscript ID: JMCS-2207-1587

Checked for Plagiarism: Yes

Language Editor:

Dr. Fatimah Ramezani

Editor who approved publication:

Dr. Ali Delpisheh

DOI:10.26655/JMCS-2023.3.7

## KEYWORDS

Mental Health

SHGs Women Workers

COVID-19 Pandemic

Anxiety

Stress

Depression

## ABSTRACT

COVID-19 pandemic has taken a toll on the mental condition of the people globally and the more affected are women as compared to men. Women engaged in self-help groups also suffering from mental health disorders during COVID-19 pandemic. The current study aimed to understand how mental health has affected the SHGs women during COVID-19 and violence of women in the domestic field due to the impact of COVID-19. The current study designed a questionnaire by using the Patient Health Questionnaire (PHQ-9) and the General Anxiety Disorder (GAD-7) and data was collected from 218 respondents and descriptive analysis was conducted by using SPSS-20. The findings revealed that the maximum number of women in self-help groups suffered with mild anxiety and 15% suffered with severe anxiety disorder. The maximum number of women follows meditation followed by indoor games and yoga to cope up with anxiety. Hence, women working in self-help groups need to take preventive actions like yoga and other therapies to avoid anxiety and stress which help them to engage and be productive in their professional job during COVID-19 pandemic.

## GRAPHICAL ABSTRACT



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## Introduction

In December 2019, Wuhan, China, was determined to be the source of the COVID-19 epidemic, which was caused by the SARS-CoV-2. The new coronavirus has spread all around the globe within a month of its discovery. The apex body, world health organization (WHO) declared COVID-19 as a global pandemic on 11<sup>th</sup> March, 2020. By the end of May, the virus had infected over 5 million people in 215 countries or territories, resulting in over 300,000 fatalities worldwide. The implications of COVID-19 affect not just physical health and well-being, but also mental health, potentially wreaking havoc on the healthcare system. People's mental health is negatively impacted by their dread of developing the disease.

Running errands regularly has changed. For the sake of their health and that of others, people should continue to stay in their houses. As humans, we develop our response mechanisms following the work at hand, but when ambiguity arises, it usually causes worry. For the time being, many are remaining at home, working from home, or not working at all since they are unsure what will happen next. This has contributed to an increase in anxiety and stress levels. Changes are difficult to accept and people frequently experience adjustment issues as their result. For the time being, people are unable to cope with the quick changes. The situation is significantly worse for those who are suffering from mental illnesses. The issue is considerably worse for those taking medicine for mental health people. Many of them are being denied psychiatric drugs, putting them at the relapse risk. Fear of catching the disease has resulted in an upsurge in mental health disorders such as anxiety and melancholy all across the world. In numerous domains especially in the health and social services sectors as well as at home, where lockdown and quarantine measures have turned the social life stressful, the pandemic had a humongous impact on females than on males. Women account for around 70% of the global health workforce and they are usually frontline health professionals. Similarly, they make up the majority of healthcare facility support employees [1].

Improper domestic and emotional care leads to adverse females' mental health. Majority of house makers are further prone to anxiety and post-traumatic stress disorder (PTSD) [2, 3].

Unemployment rates are rising, which leads to an increase in mental health issues. The implications of COVID-19 affect not just physical health and well-being, but also mental health, potentially wreaking havoc on the healthcare system [4], resulting in increased suffering and deaths [5]. Unemployed people are more likely to commit suicide [6, 7]. During such circumstances, people having mental health issues used to suffer as compared with others [8]. Half or more of those who have lost their people as the result of the COVID-19 pandemic have suffered mental health issues [9]. Moreover, individuals with behavioural health issues are more likely to get infections and die than those who do not [10].

### *Background of the study*

#### *Mental health (MH)*

Mental health is mentioned to have an impact on individual's capacity to function and take advantage of available opportunities, as well as fully connect with family, career, community, and co-workers. MH can be described as the "absence of mental illness or as a state of being that incorporates biological, psychological, and social elements that influence a person's mental state and capacity to operate in their environment" [11]. It is characterized by "how individuals think and feel about themselves and their lives, and how it influences how an individual copes and manages in times of adversity," according to the mental health foundation (MHF) [12, 13]. According to World Health Organization (WHO) "mental health is a state of wellbeing in which an individual realizes his or her abilities, can cope with the normal stresses of life, can work productively and fruitfully and can make a contribution to his or her community" [14].

#### *COVID-19 and mental health (MH)*

The current pandemic has not only posed a serious threat to individuals' lives and physical health around the world, but it has also become a widespread cause of psychological issues such as

sadness, anxiety, and panic disorders [15]. Reduced the social contacts with family, friends and other social support networks creates loneliness, which increases mental difficulties including depression and anxiety, according to the COVID-19 preventive measures [16]. During COVID-19, several psychological elements such as anxiety, loneliness, negative emotional spirals, desperation, panic, and dread were identified as contributing causes to mental illness [17]. Similarly, abruptly imposed social seclusion has significantly altered children's typical patterns. This suddenly enforced social isolation has significantly damaged the global society, particularly among young people. Moving away from physical mode of educational programs has caused a massive disruption in the lives of students and their families, posing a risk to mental health of children [18].

#### *COVID-19 and mental health of frontline health workers*

Frontline workforces like physicians, nurses, community health workers, sanitation workers, police officers, and other volunteers are forced to make hard decisions and operate under extreme pressure during the COVID-19 epidemic. Working in stressful conditions with few resources harms their personal and family lives, as well as places them in a position of moral damage, which can lead to mental health problems. These signs and symptoms can lead to the mental health issues such as depression, post-traumatic stress disorder, and even suicide ideation [19-21]. Researchers in Cyprus [22] discovered that MH of a substantial section of the country's workforce is deteriorating, and they offered the advice to businesses looking to shield their frontline healthcare professionals from the COVID-19 pandemic's harmful impacts. Gender, age groups, profession specialty, the kind of conducted engagement, closeness to patience suffered with COVID-19, the direct engagement in the pandemic emergency response, preventive treatments, resilience, and social support all influenced the severity of mental health symptoms, according to [23]. Tella and other research scholars looked into the psychological

effects of the current epidemic on healthcare workers of Italy and discovered that, according to regression models, gender and marital status, as well as gender and age, were all significant predictors of the depressive symptoms and post-traumatic stress syndrome (PTSS) in COVID-19 patients [24]. During the current pandemic, determinants such as fear of self-infecting or family members and safety concerns and, social and self-isolation precautions, strict infection control measures, lack of protective measures, exhaustion due to increased working hours, and seeing patients die, or colleagues infected, according to a study conducted in Qatar, can offered to the development of mental health issues in health-care professionals [25].

Therefore, mental health disorders of women engaged in self-help groups (SHGs) should be detected and addressed in a more practical manner so that the appropriate remedies are suggested. As a result, the aim of this research was to evaluate the mental health condition of women working as forefront health workers in SHGs in rural Odisha during the pandemic. In line with this, research set two prime research objectives as to understand how mental health has affected the SHGs women during COVID-19 and to analyse the mental health and females' violence in the domestic field due to the COVID-19 impact.

#### *Research methodology*

This adopted positivist approach and cross sectional in nature. The respondents' primary data was collected by using a field survey approach. The data was collected from the 22<sup>nd</sup> November 2021 and 21<sup>st</sup> December 2021. A written consent was attached with the questionnaire and the respondents needed to agree on the consent before filling the questionnaire and the consent clearly communicate that, the participants' involvement in the survey is voluntary and the data collected from the respondents would be used for the academic research and not shared or accessed by any third party. A systematic questionnaire was created to collect the required information on the mental health of women working in self-help

groups as health care providers. Whereas, the secondary data were referred from sources like websites, research papers, research reports, etc. The sample for the study is all women employed in a self-help group during the month before the COVID lockdown started. A convenient sampling technique was employed to draw a useful sample

of 218 units. The questionnaire was classified into two different sections. Section-A included items related to socio-demographic profiles and some items related to COVID-19. Section-B, on the other hand, contains statements from the patient health questionnaire (PHQ-9) [26] and the general anxiety disorder (GAD-7) scales [27].

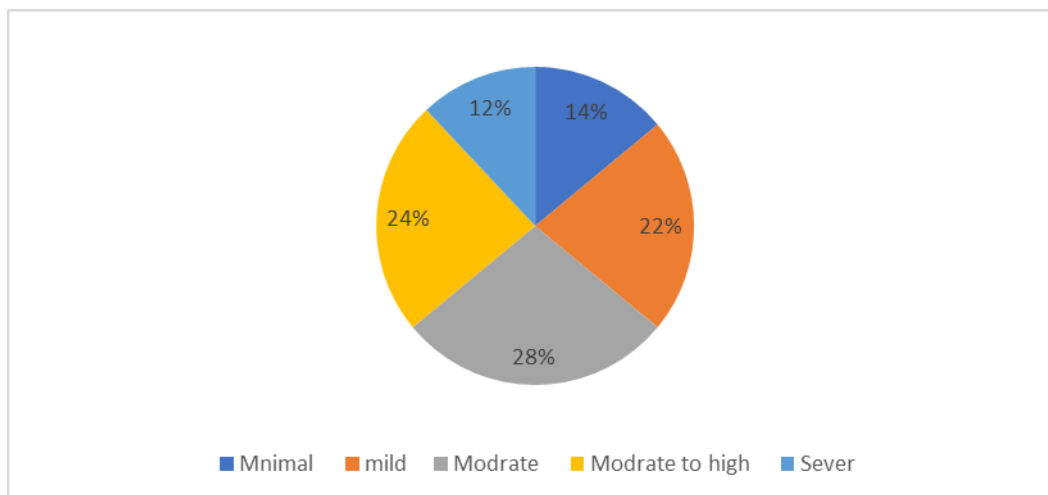
**Table 1:** Socio-demographic profile

Variable	Frequency	Percentage
Age		
18-29	52	23.85
30-49	112	51.38
≥50	218	2477
Total	218	100.00
Marital status		
Single	27	12.39
Married	191	87.61
Total	218	100.00
Having children		
Yes	158	72.48
No	60	27.52
Total	218	100.00
Number of children		
0-2	143	90.51
3-5	15	9.49
Total	158	100.00
Level of education		
Secondary	99	45.41
Higher secondary	75	34.40
Under-graduate	35	16.06
Post-graduate	9	4.13
Total	218	100.00
Working during pandemic		
Yes	189	86.70
No	29	13.30
Total	218	100.00
Workplace		
Work from home	136	62.39
Going to workplace	53	24.31
Total	189	100.00
Living status		
Living alone	29	13.30
Living with family	189	86.70
Total	218	100.00
Currently faced any financial issues		
Yes	147	67.43
No	71	32.57
Total	218	100.00

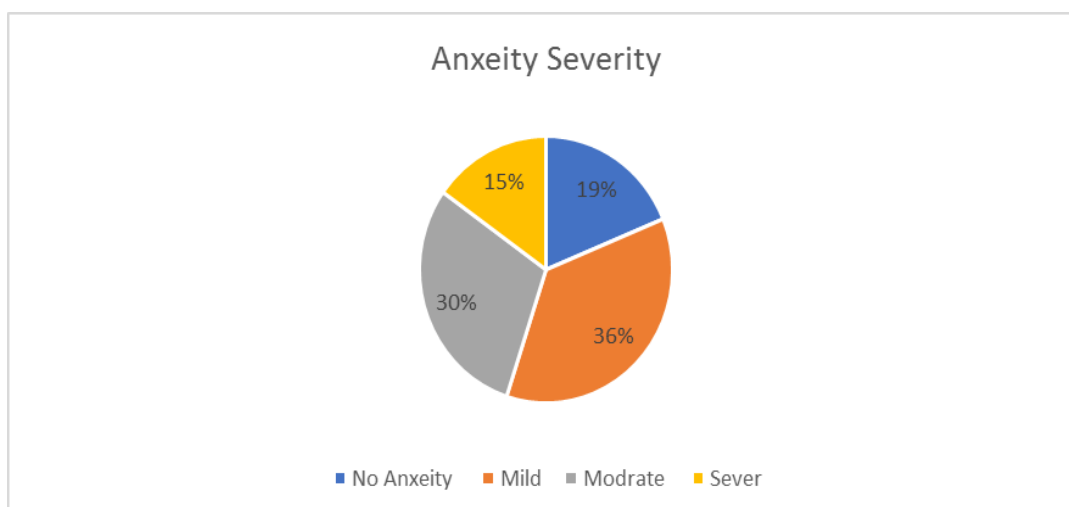
Source: Primary data

**Table 2:** Severity of depression

Levels	Frequency	Percent
Minimal	31	14.22
Mild	47	21.56
Moderate	62	28.44
Moderately severe	53	24.31
Severe	25	11.47



**Figure 1:** Severity of depression among females' self-help group



**Figure 2:** Anxiety severity among the SHGs members

The [Table 1](#) presents the questionnaire that was used to collect data. A PHQ-9 scale is a reliable tool for assessing the degree of depression in people. PHQ-9 scores of 5, 10, 15, and 20 indicated milds, moderately severe, and severe depression, respectively. Similar to the PHQ-9, the general anxiety disorder (GAD-7) scale evaluates the intensity of anxiety, and cut-off points of 5, 10, and 15 might be interpreted as signifying mild, moderate, and severe levels of

anxiety on the GAD-7. IBM SPSS 20.0 was used to do descriptive analysis on data collection. The data were presented in frequency distribution tables and charts and graphs.

#### Data analysis

Out of 250 received responses, 218 responses were found to be completed and useful for data analysis, giving a response rate of 87%. The data about section-A of the questionnaire were

presented in the form of frequency distribution tables including descriptive statistics like frequency counts and percentages.

**Results and Discussion**

Table 2 and Figure 1 indicates that the maximum numbers of women, who are the part of the SHGs, are suffering with moderate depression whereas the severe depression percentage is 12%. Moreover, the data analysis on anxiety severity reveals that women working in SHGs are suffering from the moderate level of anxiety (Table 3 and Figure 2). Overall, during pandemic, women working in the SHGs are suffering from the moderate level of anxiety and depression. Likewise, the results refers that women in SHGs are suffering from the mild to severe anxiety and depression level.

Various measures incorporated by these women SHG members during the global COVID-19

pandemic are listed in Table 4. As per the previous studies rates of psychological stress, depression, anxiety, and insomnia will be high for health workers during this pandemic. It can be viewed from the above table that the majority of respondents i.e. 23.85% reported indoor games were preferred to be the most effective remedy to mitigate the adverse effect of mental illness. Women of rural Odisha play indoor games like cards, ludo, cowrie (shell), etc. in their leisure time. These games are played in groups which facilitates spending time together/socializing. Whereas, 21.56% of respondents claimed to listen to music was the second most effective remedy to reduce the mental illness during the COVID-19 pandemic. Others, i.e.15.14% of respondents, found meditation to be another helpful remedy to deal with mental illness during the COVID-19 pandemic.

**Table 3:** Anxiety severity

Levels	Frequency	Percent
No-anxiety (0-4)	41	18.81
Mild (5-9)	79	36.24
Moderate (10-14)	65	29.82
Severe (15-21)	33	15.14

Source: Primary data

**Table 4:** Measures taken for coping with mental health issues during the pandemic

Measures	Frequency	Percent
Meditation	33	15.14
Exercise	21	9.63
Music	47	21.56
Reading	22	10.09
Prayer	31	14.22
Yoga	8	3.67
Indoor Play	52	23.85
Others	4	1.83
Total	218	100

Source: Primary data

The self-help strategies of the participants are consistent with findings from studies showing that activities help change physical, emotional, and cognitive states [28] and that meaningful activity and lifestyle changes are factors influencing recovery [29] in the early stages of mental health distress [29]. However, the

government's role in avoiding mental illness among these health professionals during the COVID-19 outbreak, in addition to these self-help efforts, is crucial. It is worth mentioning that, despite its great expense, the government has paid little attention to mental health. An enabling work environment with a good supportive

system, enough PPE supply effective COVID-19 management training for health professionals, and a focus on rewards that enhance their work morale should all be in place. It is critical to give the educational interventions and sufficient logistical assistance to relieve healthcare personnel's worries about COVID-19. Finally, for those people who have previously been medicated for mental health difficulties, personal and family support may be necessary. Finally, a psychological intervention aimed at health personnel should be included in preparedness to reduce the impact on their well-being and the healthcare system as a whole.

This study has significantly contributed to the body of knowledge by accessing the mental health of SHGs in the COVID-19 context. The current study bridge the knowledge gap on mental health of women of SHGs which are considered as the crucial workforce for healthcare sector during COVID-19. This study may help government or policy-makers to understand the mental health status of women working in SHGs and may take preventive actions to reduce the stress level.

## Conclusion

The women SHGs group members who worked as health professionals in rural Odisha during the pandemic had a significant frequency of anxiety, depression, and insomnia, according to this study. More than half of health workers reported feeling stigmatized at work, with only self-help strategies being mentioned as a preventive measure. The most popular therapies for mental health difficulties were indoor sports, music, and meditation, whereas preventative measures were connected to an increased risk of anxiety and depression symptoms. Stigma reduction, protective measures for health professionals, and personal and family assistance for individuals with a history of mental health issues are all suggested approaches to improve the mental wellness of health workers. Few limitations are noted in this study. This study was conducted in the one regional area, of India and result of this study may vary in different geographical contexts. The sample size is limited and this study

was descriptive in nature so explanatory aspects of the mental health were not addressed here in this study. The future study could address the factors influencing the anxiety and depression level of women in SHGs.

## Acknowledgments

We are sincerely thankful to all the respondents who participated in the survey for completing the present study.

## Funding

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

## Authors' contributions

All authors contributed to data analysis, drafting, and revising of the paper and agreed to be responsible for all the aspects of this work.

## Conflict of Interest

There are no conflicts of interest in this study.

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#### HOW TO CITE THIS ARTICLE

Pratyuesha Behera, Ipseeta Satpathy, B. Chandra Mohan Patnaik. Assessing mental health of women working as front-line health workers in self-help groups in Odisha during COVID-19 outbreak. *J. Med. Chem. Sci.*, 2023, 6(3) 506-514

<https://doi.org/10.26655/JMCHMSCI.2023.3.7>

URL: [http://www.jmchemsci.com/article\\_157478.html](http://www.jmchemsci.com/article_157478.html)