



Exploring Stress Levels of *Anganwadi* Workers during the COVID-19 Pandemic

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ABSTRACT

The study was conducted during January to July, 2022 under the Department of Extension Education and Communication Management, College of Community Science, CCSHAU, Hisar, Haryana, India to identify stress level of *Anganwadi* workers in performing their activities during COVID-19 pandemic and the probable reasons for stress. Two blocks in the state of Haryana's Hisar district were used for the study. Ten villages were covered in order to randomly chosen 100 *Anganwadi* workers. The villages were chosen by random sampling, and *Anganwadi* staff were reached by chain technique. Survey was used to measure stress levels, and in-depth interview was conducted in a variety of rural locations to obtain qualitative insights. The stress level of *Anganwadi* workers was assessed by using Cohen's Perceived stress scale and the "Ardell Wellness Stress Test" used for self-assessment by incorporated physical, mental, emotional, spiritual and social aspect of health. The study concluded that 58.00 per cent of *Anganwadi* workers felt moderate stress during COVID-19 pandemic. They were unable to handle personal problem like child care, household work, family related matters during COVID-19. Many unexpected things happened in their surroundings. They felt stress because they could not overcome the problems and unable to control the things of life. Probable reasons for stress were that more than half of respondents (55.73%) had less knowledge regarding personal hygiene practices and food hygiene.

KEYWORDS: *Anganwadi* workers, stress, anxiety, depression, COVID-19 pandemic

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Data Availability Statement: Legal restrictions are imposed on the public sharing of raw data. However, authors have full right to transfer or share the data in raw form upon request subject to either meeting the conditions of the original consents and the original research study. Further, access of data needs to meet whether the user complies with the ethical and legal obligations as data controllers to allow for secondary use of the data outside of the original study.

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1. INTRODUCTION

The COVID-19 pandemic had not only posed an unprecedented global health crisis but had also cast a spotlight on the resilience and dedication of frontline workers across various sectors. The stress among health professionals were anxiety and depression (Li et al., 2021; Weibelzahl et al., 2021). Among these, *Anganwadi* workers who serve as the cornerstone of community health and welfare in India, had faced unique challenges at the of pandemic (Spoorthy et al., 2020; Dasgupta and Kingra, 2022). As pillars of support for maternal and child health, nutrition, and community well-being, *Anganwadi* workers play an indispensable role in country's public health infrastructure (Preeti et al., 2025; Krishnaprasad, 2021). Perceived stress incorporated feelings about uncontrollability and unpredictability of one's life, how often one had to deal with irritating hassles, how much changes were occurring in one's life and confidence in one's ability to deal with problems (Chan et al., 2020; Skarpa et al., 2021). It was not measuring the types or frequencies of stressful events which had happened to a person, but rather how an individual had felt about the general stressfulness of their life and their ability to handle such stress (Song et al., 2020; Passavanti et al., 2021). Adults had suffered similar negative life events but appraised the impact or severity of these to different extents as a result of factors such as personality, coping resources, and support (Klaiber et al., 2021; Joshi et al., 2024). In this way, perceived stress had reflected interaction between individual and their social environment which they appraised (Shahzad et al., 2019; Kuang et al., 2020). *Anganwadi* workers, worked under incredible stress with constant monitoring to avoid getting infected. When stress had become excessive, they were developed various symptoms of stress that could hamper their job performance and health and even threaten their ability to cope with the environment (Temsah et al., 2020; Krishnaprasad, 2021; Khan, 2022). Fear of getting infected, long periods of quarantine, days of separation from family and loved ones, fear of accidentally infected their own family, and witnessing death of colleagues and several patients had added to their misery (Kakunje et al., 2020; Nanjundaswamy et al., 2020; Illesanmi et al., 2021). Worldwide, death of community health workers had been rising since the beginning of COVID-19 pandemic (Maciel, 2020). With increased exposure of workers to COVID-19, stigma against them had increased. They were subjected to social isolation, and rejection due to their increased contact with COVID cases with presumption that they might be infected (Khursheed et al., 2020). Several reasons were found to be responsible for stress and anxiety like patient care, worried about becoming infected or infecting family members, guilt for putting less time for family and child care, experiencing

burnout and fear of the unknown, concerned about the quality of patient care, providers' changing responsibilities, lack of personal protective equipment (PPEs) and difficulty in coping with co-workers illness and absence. Worried about unemployment and childcare responsibilities were also highlighted (Kim et al., 2021; Comfort et al., 2021; Gowda, 2021; Shrivastava, 2023). Providers attributed their stress, anxiety and depression to feeling overwhelmed, being unable to focus and lack of sleep (Zandifar et al., 2020; Luo et al., 2021). The study was employing a comprehensive approach, combining quantitative surveys to quantify stress levels and qualitative interviews to gain deeper understanding of underlying factors. The aim of this study was to assess "Exploring the Stress Levels of *Anganwadi* Workers during COVID-19 Pandemic and Investigating Potential Contributing Factors" with following objectives: To identify stress level of *Anganwadi* workers in performing their activities by using "Cohen's Perceived stress scale" and "Ardell Wellness Stress Test" during COVID-19 pandemic and to identify the probable reasons for stress perceived by *Anganwadi* workers during COVID-19 pandemic.

2. MATERIALS AND METHODS

The present study was conducted from January-July, 2022 in Haryana (125001) India. Hisar district, Haryana, India was purposively selected for the survey work due to easy accessibility of the researcher. From selected district two blocks were randomly selected and the total 100 *Anganwadi* workers selected. The block one was *Adampur Mandi* and second was *Hisar II*. From *Adampur Mandi* five villages were selected name *Siswal*, *Mhobatpur*, *Sadlpur*, *Bagla* and *Kabrel*. From the second block i.e. *Hisar II*, five villages were selected randomly, namely *Neoli Kalan*, *Dobhi*, *Balsamand*, *Kirtan* and *Arya Nagar*.

2.1. Variables and their measurements

Stress of *Anganwadi* workers were assessed by using Cohen's Perceived stress scale (1983) and the "Ardell Wellness Stress Test" used for self-Assessment (1977).

In Cohen's Perceived stress scale, 10 questions were made for perceived stress test. The rating scale to apply simply rated 0, 1, 2, 3, 4 for never, fairly never, sometime, fairly often and very often respectively. To find the Perceived Stress Scale (PSS) score first, reverse scores for questions 4, 5, 7, and 8. On these 4 questions, change the scores like this: 0=4, 1=3, 2=2, 3=1, 4=0. Then scores were added for each item to get a total. The PSS can range from 0 to 40 with higher scores indicating in three categories i.e. low stress, moderate stress and high stress.

The "Ardell Wellness Stress Test" used for incorporated physical, mental, emotional, spiritual and social aspect of

health and stressors. It offers a balanced assessment of varied stress sources. In this scale 25 questions for self-assessment test. Weighted mean of the respondents of 25 questions were calculated and categorized into two categories i.e. <1 (low stress) and 1 and above (high stress). According to rating scale to apply simply rate satisfaction in degree, positive or negative for each item were assigned in the following manners:

Categories	Score
Ecstatic	+3
Very happy	+2
Mildly happy	+1
Mildly disappointed	-1
Very disappointed	-2
Completely dismayed	-3
Indifferent	0

Scores of each respondent were calculated and on the basis of cumulative scores, were further divided into 7 (as mention in the scale) categories to study overall stress and scoring was done as under:

Categories	Score
Very good	+60 to +75
Doing well	+36 to +59
Average	+20 to +35
Try to reduce stress and increase pleasure	0 to +19
Stress of a daily nature	0 to -19
Too much stress	-20 to -37
Oh, my goodness	-38 to -75

Mean score of Ardell wellness stress test of self-assessment scale was also calculated and accordingly rank was assigned.

3. RESULTS AND DISCUSSION

3.1. Stress perceived by *Anganwadi* workers during COVID-19 by using cohen's perceived stress scale

The data in table emancipated that most of the respondent perceived that they were unable to handle personal problem (rank I) like child care, household work, family related matters during COVID-19. Unexpected things happened (rank II) in their surrounding like death of close one, increasing COVID-19 cases, COVID-19 patient at home, way of handling things perceived as stress by respondents. Rank III was reported to not things going to their way by most of the respondents. Felt nervous, could not overcome the problems, unable to control the things in life and felt on top perceived as stress and got rank IV, V, VI and VII respectively. They felt stress because they could not overcome the problems and had unable to control the things of life. Not cope-up with things, control irritation and angered got VIII, IX, X rank respectively. Thus, it can be concluded that most the respondents having stress due to poor handling of personal problems, things happened unexpected and things were not going by their own way. The stress levels observed in the study emphasize the mental health challenges faced by *Anganwadi* workers during the pandemic, suggesting the need for better support systems and stress management training for these essential workers. Further studies (Krishnaprasad,2021; Shrivastava, 2023) corroborate these results, indicated that workers in caregiving professions were particularly vulnerable to stress due to the emotional and logistical challenges they had faced.

3.2. Stress level perceived by *Anganwadi* workers during COVID-19

The stress of respondents was assessed through Cohen's Perceived Stress scale and found that more than half of the respondents felt moderate stress (58.00%) during

Table 1: Stress perceived by *Anganwadi* workers during COVID-19 by using Cohen's perceived stress scale

Sl. No.	Stress assessment	Total (n=100)					
		0N	1AN	2S	3FO	4VO	Mean Score
1.	Happened unexpected	11	11	31	38	9	2.23
2.	Unable to control the thing of life	14	16	39	23	8	1.95
3.	Felt nervous	10	21	37	21	11	2.02
4.	Handle personal problems	7	30	47	14	2	2.26
5.	Thing gone your way	9	20	32	25	14	2.13
6.	Not cope with things	14	34	29	21	2	1.63
7.	Control irritation	2	9	42	31	16	1.59
8.	Felt you were on top	7	20	33	22	17	1.73
9.	Angered	22	32	28	12	6	1.48
10.	Could not overcome the problems	12	31	32	19	6	1.76

COVID-19 pandemic. Thirty-two percent felt low stress and 10.00 per cent felt high stress. The respondents had high stress due to family problems, relative problems, personal life problems, financial problems and health problems. Thus, it can be concluded that more than half of the respondents had perceived moderate stress during COVID-19 period. This is consistent with findings by Ghosh et al. (2022), who showed that many frontline workers, including *Anganwadi* workers, experienced moderate levels of stress due to concerns about their health, family, and workload during the pandemic. Similarly, study by Behanan et al. (2023), family problems, financial difficulties, and uncertainty about the future were common sources of stress for *Anganwadi* workers, exacerbating the psychological strain they experienced.

Table 2: Stress level perceived by *Anganwadi* workers during COVID-19

Categories	Score	(%)
Low stress	0-13	32(32.00)
Moderate stress	14-26	58(58.00)
High stress	27-40	10(10.00)

3.3. Perceived stress during COVID-19 among *Anganwadi* workers by using Ardell Wellness stress test for self-assessment

Perceived stress was analysed by using Ardell wellness stress scale of self-assessment. It was found that the respondents felt high stress in accepting the reality of death (I rank), not felt better (II), not impact by knowing people (III), not able to balance the things of life (IV), in home life (V), self-worth (VI), financial situation (VII), life skill(VIII), in sex life (IX), self-respect and confidence (X), purpose of life(XI) and ability to fun(XII). They felt low stress in body look((XIII), job satisfaction (XIV), self-capacities (XV), network with friends (XVI), parenting style (XVII), potentials (XVIII), choice of profession (XIX), nutritional requirement (XX), marital status (XXI) and in primary relationship (XXII). Thus, it can be concluded that the respondents having high stress in accepting the reality of death, not feeling better and could not balance the things of life and perceive low stress in marital status and in primary relationship during COVID-19. These stressors are consistent with the results found by Sharma et al. (2020), who reported that caregivers faced immense emotional strain due to grief, loss, and an inability to cope with the overwhelming nature of their work during the pandemic. Furthermore, workers also experienced high stress related to financial and social situations, which aligns with the findings of research by Comfort et al. (2021), who noted that financial insecurity and disrupted family life were major sources of stress for *Anganwadi* workers during this period. This suggests that *Anganwadi* workers need psychological support to cope with the emotional and practical challenges

that the pandemic exacerbated.

3.4. Perceived stress level among *Anganwadi* workers during COVID-19

Twenty percent respondents were in level of good position, they were very good family relations, financial status, personal life, critical thinking, respectable in society and very good relation with children etc. They had positive factor in their life. Forty-two percent level in doing well in their daily life. They were well-tuned capacity to deal creatively and efficiently with problems. Sixteen percent had on average stage. These respondents felt know the value of personal responsibility, a supportive environment and the positive effects of little changes over time. Twenty percent respondents came under level of try to reduce stress and increase pleasure. They try to avoid problems and slowing steady progression towards of good living. Two percent of women had stress of daily nature. This stress diverse the mind of respondents in negative thoughts. Thus, it could be concluded by the self-assessment test that most of the respondents feel doing well. The similar findings from studies by Luo et al. (2021), who reported varying levels of perceived stress among frontline workers, with some workers managing stress through community support, while others struggled due to the compounded challenges they faced.

3.5. Probable reasons for stress perceived by *Anganwadi* workers during COVID-19

It was clearly evident from data in table that 76% and 74% respondents had identified less knowledge regarding personal hygiene practices and food hygiene respectively as probable reasons for stress among *Anganwadi* workers, sixty five percent respondents were in stress because people around them were not using sanitizers after touching any surface or things. Less qualified people in the community to understand COVID-19 guideline and inappropriate behaviour of young people towards social distance were probable reasons for stress and marked by 64.00% and 62.00% of respondents. Equal percentage of respondents (44.00%) reported not understanding the spread of COVID-19 via the local people and people were not taking COVID-19 precautions like wearing mask and maintaining social distance as reasons for stress. People were not disposing mask properly (68.00%) was also reason for stress among *Anganwadi* workers. Forty-five percent respondents identified that people were not avoiding public gathering in religious place and social functions which became reason for stress among *Anganwadi* workers. Stress was also due to reason that people hide the symptoms of COVID-19 in fear of quarantine and isolation i.e. 36.00%. Thus, it can be concluded that most of the respondents perceived psychological stress in lack of prevention support from government, hide the symptoms due to social evil and workload of other administrative paper works during

Table 3: Perceived stress during COVID-19 among *Anganwadi* workers by using Ardell wellness stress test for self-assessment

Sl. No.	Measurement scale	Total (n=100)								Rank
		(+3)	(+2)	(+1)	(0)	(-1)	(-2)	(-3)	WMS	
1.	Profession	18	43	28	3	3	4	1	1.54	XIX
2.	Job	6	37	40	2	10	4	1	1.11	XIV
3.	Marital status	25	44	15	4	3	3	6	1.63	XXI
4.	Primary relationship	25	47	20	1	4	3	0	1.82	XXII
5.	Ability to fun	8	30	43	3	6	9	1	1.00	XII
6.	Life was good	3	31	40	15	10	1	0	1.00	XII
7.	Financial situation	1	32	31	28	6	2	0	0.88	VII
8.	Self-respect and confidence	15	19	41	9	9	3	4	0.97	X
9.	Purpose of life	3	31	40	15	10	1	0	0.99	XI
10.	Self-worth	1	32	29	28	6	4	0	0.82	VI
11.	Impacted who know you	6	20	35	17	17	3	2	0.64	III
12.	Sex life	4	40	24	23	3	0	6	0.95	IX
13.	Body look	6	41	28	9	9	5	2	1.03	XIII
14.	Home life	5	20	40	15	17	3	0	0.72	V
15.	Life skill	4	24	48	9	15	0	0	0.93	VIII
16.	Capacities	5	43	33	2	14	2	1	1.13	XV
17.	Nutritional knowledge	10	47	36	2	5	0	0	1.55	XX
18.	Ability to recover	7	40	24	6	15	7	1	0.93	VIII
19.	Potentials	6	56	25	1	8	4	0	1.39	XVIII
20.	Interest and balance	7	23	36	14	11	5	4	0.70	IV
21.	Felt getting better	1	20	30	23	23	3	0	0.42	II
22.	Participation	2	30	33	13	19	3	0	0.70	IV
23.	Parenting and styles	5	47	36	5	6	1	0	1.37	XVII
24.	Network with friends	6	40	43	3	7	1	0	1.32	XVI
25.	Reality of death	3	13	10	33	19	15	7	-0.19	I

(<1- low stress), (>1 high stress)

COVID-19 period. These findings highlight the critical need for training and capacity-building among *Anganwadi* workers, as insufficient knowledge about COVID-19

Table 4: Perceived stress level of *Anganwadi* workers during COVID-19

Categories	Score	f (%)
Very good	+60 to +75	20(20.00)
Doing well	+36 to +59	42(42.00)
Average	+20 to +35	16(16.00)
Try to reduce stress and increase pleasure	0 to +19	20(20.00)
Stress of a daily nature	0 to -19	2(2.00)
Too much stress	-20 to -37	0(0.00)
Oh, my goodness	-38 to -75	0(0.00)

protocols could have contributed to the stress experienced by these workers. This finding aligns with the study by Comfort et al. (2021), which found that insufficient training and a lack of awareness about proper safety measures were major stressors for frontline workers. Additionally, the respondents' stress due to community members not adhering to COVID-19 guidelines, such as improper mask disposal and public gatherings, reflects the broader societal challenges in enforcing preventive measures. The finding was supported by the work of Murhekar et al. (2021), who noted that community resistance to COVID-19 protocols, such as social distancing and mask-wearing, led to heightened stress among *Anganwadi* workers who were on the front lines of public health efforts. Similar research by Perera et al. (2021) found that fear of infection, not using sanitizer, concern of infecting family members, low self-confidence, inadequate occupational safety, and a heavy workload were

Table 5: Probable reasons for psychological stress, total (n=100)

Sl. No.	Probable reasons for stress on duty	f (%)
1.	Less qualified people in the community to understand COVID-19 guidelines	64(64.00)
2.	Not understanding the spread of COVID-19 via the local people	44(44.00)
3.	Less knowledge regarding personal hygiene practices	76(76.00)
4.	Less knowledge regarding food hygiene practices	74(74.00)
5.	Inappropriate behaviour of young people towards the social distance	62(62.00)
6.	Lack of prevention support from government	46(46.00)
7.	People were not taking COVID-19 precautions like wearing mask and maintaining social distance	44(44.00)
8.	Hide the symptoms of COVID-19 in fear of quarantine and isolated	36(36.00)
9.	Not using sanitizers after touching any surface or things	65(65.00)
10.	Surfaces and objects are not regularly cleaned	34(34.00)
11.	Not disposing mask properly	68(68.00)
Overall percentage		55.73%

the main causes of distress among healthcare practitioners. The same results were also published by Panigrahi and Jena (2021), who discovered that *Anganwadi* workers experience psychological stress for a variety of reasons, including inadequate community knowledge of COVID-19 guidelines, ignorance of the local population's role in the spread of the virus, and poor hand hygiene while on the job.

3.6. Correlation of independent variable and stress of *Anganwadi* workers during COVID-19

The stress was positively correlated with age, family type and marital status. With increasing age, the stress is also increased during COVID-19 period. In joint family

there may be more work load and due to which stress was increased. With marriage the stress was significant at 5% level. With education the stress is negatively correlated, with increasing education the stress was decreased. Stress assessed by using self-assessment test show that with increasing age the stress decreases. The stress increased with economically weaker section *Anganwadi* worker that correlate with Pandey et al. (2016). The correlation analysis in the present study revealed that stress among *Anganwadi* workers during COVID-19 was significantly influenced by several demographic factors. A positive correlation was found between age and stress, suggesting that older workers experienced higher stress levels, potentially due to increased health concerns and difficulties adapting to rapidly changing protocols. This aligns with Ghosh et al. (2020), who observed that older frontline workers faced heightened stress during the pandemic.

4. CONCLUSION

This study highlighted the significant stress experienced by *Anganwadi* workers during COVID-19 pandemic, with personal and family-related issues, unexpected events, increased workload and a lack of control over life had contributed to their stress. Factors like age, marital status, and family structure influenced stress levels, with older workers and those in joint families reporting higher stress due to additional caregiving responsibilities. In contrast, higher education seemed to help reduce stress, possibly due to better coping skills or access to resources.

5. IMPLICATIONS AND RECOMMENDATIONS

The study highlighted the critical role that *Anganwadi* centers and workers play in child development and

**Significant at 0.05 level of significance; *Significant at 0.01 level of significance

community health. However, it also pointed to gaps in training, logistical challenges, and resource limitations that need to be addressed. Enhancing training programs, particularly for emotional development activities and anthropological measurements, could improve service quality. Regular updates and refresher courses should be provided, especially for older and more experienced workers.

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