

Original Research Article

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Depression, anxiety, stress among ASHA workers, in selected primary health centres in Southern Bengaluru

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ABSTRACT

Background: The COVID-19 pandemic was caused by a novel corona virus first discovered in Wuhan, December 2019. The healthcare system in India was quickly overwhelmed as tens of thousands of people with flu-like symptoms swarmed the hospitals.

Methods: The present community based cross-sectional study was conducted among the accredited social health activist (ASHA) workers working under the selected primary health centres from August 2020 to November 2020. Primary health centres were selected by using simple random sampling technique. Three primary health centres were selected from the southern region of Bengaluru. The data was collected, compiled and entered into a Microsoft excel worksheet and analyzed using statistical package for social sciences (SPSS) software v.22.0. Descriptive statistics and suitable tests of significance like Chi-square test were applied as required.

Results: A total of 78 ASHA workers participated in the present study. Majority of them belonged to the age group of 33-44 years. The mean age of the participants was 34 (+1.390) years. The present study showed that, 56.5% of the study participants experienced depression, anxiety or stress during the time of COVID-19 pandemic. Around 65% of the ASHA and Anganwadi workers were aware of the personal prophylactic measures to be used to prevent COVID-19 disease according to the present study.

Conclusions: A significant proportion (56.5%) of the ASHA workers experienced depression, anxiety and stress during this pandemic. Measures should be undertaken to address the same.

Keywords: ASHA, COVID-19, Pandemic

INTRODUCTION

The COVID-19 pandemic was caused by a novel corona virus first discovered in Wuhan, December 2019.¹ The healthcare system in India was quickly overwhelmed as tens of thousands of people with flu-like symptoms swarmed the hospitals. Frontline healthcare workers (HCWs) and grass root level accredited social health activist (ASHA) workers have been under tremendous pressure and risk of contracting COVID-19 since the beginning of the pandemic.² Many have contracted COVID-19 and some have died either due to the disease or the stress caused by it. Over 9 lakh ASHA workers are

working on contract for state governments under the centre's.³

ASHA workers were responsible for various activities like, screening for COVID-19, diagnostic and treatment services, awareness creation among the public during the pandemic.⁴

However, there is a paucity of literature on the impact of COVID-19 pandemic on the mental health of the grass root level workers who are the backbone of the health care system in India. There are very few studies assessing the psychological symptoms of depression, anxiety and stress

among grass root level workers during this pandemic. Hence, this study was taken up to study the proportion of depression, anxiety, and stress among ASHA workers.

METHODS

The present community based cross-sectional study was conducted among the ASHA workers working under the selected primary health centers from August 2020 to November 2020. Primary health centers were selected by using simple random sampling technique. Three primary health centres were selected from the southern region of Bengaluru.

Study tools

Study tools used were: depression, anxiety and stress scale-21 (DASS-21); and a pretested, semi-structured questionnaire for factors determining depression, anxiety and stress.

Sample size

Complete enumeration of all the ASHA workers in the study area. The population covered by each primary health centre is 30,000 in urban areas. For each 1000 population there will be one ASHA worker.

Inclusion criteria

All the ASHA workers in the study area consenting to participate in the study.

Exclusion criteria

ASHA workers who were not available even after three attempts to contact them.

Method of data collection

The primary health centers coming under the southern region of Bengaluru, were listed. Three primary health centers were randomly selected using lottery method of randomization. All the ASHA workers working in the study area were included. A total of 78 participants consented to participate in the study. Written informed consent was obtained from all the study participants.

The study team consisted of two medico-social workers who were trained by the principal investigator. The study team obtained the contact numbers of all the ASHA workers from the study area. And the ASHA workers under each primary health centre were asked to assemble at the primary health centre for data collection.

Questionnaire was administered by interview method. Those who were not able to attend this, were contacted at their workplace.

Step 1: assessment of depression, anxiety and stress levels

DASS-21 scale was administered by the study team to assess depression, anxiety and stress levels among the study participants.

Questionnaire comprised of questions on depression, anxiety and stress experienced by the field workers during their contact tracing, house to house surveys done during COVID-19 pandemic.

Step 2: Assessment of awareness levels on COVID-19 and factors determining the same

Semi structured questionnaire developed by the investigators on "awareness on COVID-19" was administered in- person to the ASHA workers and they were asked to mark the answers in the questionnaires regarding COVID-19 disease, its preventive measures, and personal protective measures.

Step 3: Health education

Health education regarding COVID-19 and its management was given to all the ASHA workers at the end of the survey. Myths and queries with respect to COVID-19 were addressed and feasible solutions were provided for alleviation of the stressors. Information, education and communication materials were developed by the investigators, were utilized for giving health education.

Statistical analysis

The data was collected, compiled and entered into a Microsoft excel worksheet and analyzed using statistical package for social sciences (SPSS) software v.22.0. Descriptive statistics and suitable tests of Significance like Chi-square test were applied as required.

RESULTS

A total of 78 ASHA workers participated in the present study. Majority of them belonged to the age group of 33-44 years. The mean age of the participants was 34 (± 1.390) years.

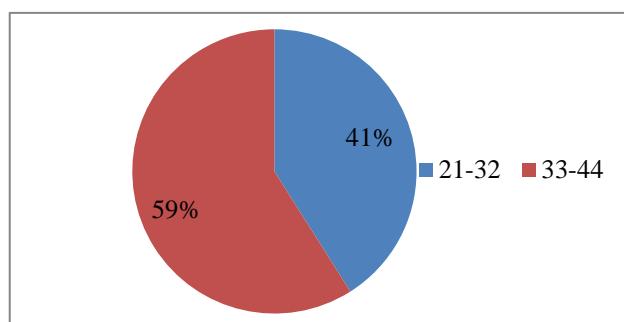


Figure 1: Age-wise distribution of ASHA's.

It was observed that, majority (59%) of the ASHA workers had about 1-5 years of work experience, 28% had 5 to 10 years of experience and 13% of them had 1 to 5 years of work experience in the field (Figure 2).

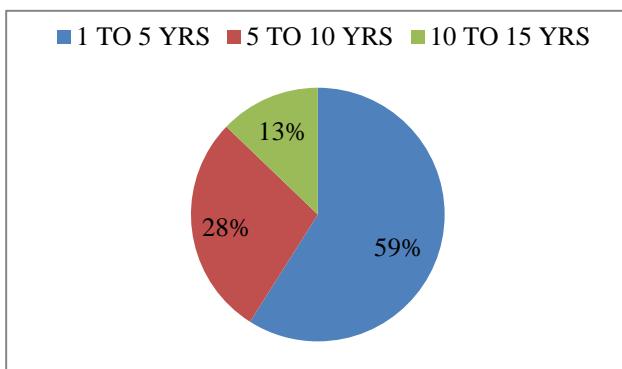


Figure 2: Work experience-wise distribution of ASHA workers.

The present study revealed that, almost 43.5% of the study participants never experienced depression, anxiety or stress during the period of their work.

However, a majority of them experienced it at least once. It was observed that, 34.8% experienced it sometimes, 13% often and 8.7% experienced it always (Figure 3).

It was observed that, age of the participant was not significantly associated with depression, anxiety or stress, according to the findings of the present study (Table 1).

It was revealed that, work experience (number of years of work), and was not significantly associated with depression, anxiety and stress (Table 2).

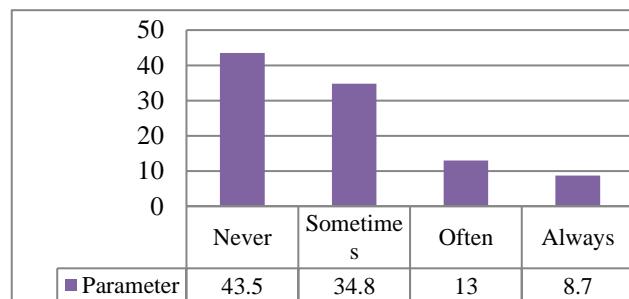


Figure 3: Overall DAS score.

Table 1: Association between age in years and DASS score among the study participants.

Parameters	21-32 years				Chi-square (df=6)	P value	33-44 years				Chi-square (df=6)	P value
	0	1	2	3			0	1	2	3		
Depression	17	3	8	4			22	2	11	11		
Anxiety	18	5	6	3	6.11	0.411	30	4	9	3	11.40	0.076
Stress	11	4	10	8			17	5	10	13		

Table 2: Association between work experience years and DAS score among the study participants.

Parameters	1 to 5 years				Chi-square (df=6)	P value	5 to 10 years				Chi-square (df=6)	P value	10 to 15 years				Chi-square (df=6)	P value
	0	1	2	3			0	1	2	3			0	1	2	3		
Depression	22	1	12	11			12	2	5	3			5	2	2	1		
Anxiety	30	2	9	5	9.69	0.138	13	4	3	2	4.88	0.560	5	2	2	0	2.86	0.827
Stress	17	1	12	15			7	5	6	4			3	3	2	2		

DISCUSSION

A total of 78 ASHA workers participated in the present study. The mean age of the study participants was 34 (± 1.390) years.

The present study showed that, 56.5% of the study participants experienced depression, anxiety or stress during the time of COVID-19 pandemic.

A study conducted by Shet et al revealed that most of the ASHA workers experienced stresses during the course of work either due to long distances traveled on foot or paperwork that had to be filled in later.⁵ The current study findings also differed from a study conducted by Aryal and D'millio where the mean prevalence of stress was 40.5%.⁶

Around 65% of the ASHA and Anganwadi workers were aware of the personal prophylactic measures to be used to prevent COVID-19 disease according to the present study.

CONCLUSION

A significant proportion (56.5%) of the ASHA workers experienced depression, anxiety and stress during this pandemic. Measures should be undertaken to address the same.

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Conflict of interest: None declared

Ethical approval: The study was approved by the Institutional Ethics Committee

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