

## SHORT ARTICLE

**Doctors on duty: the real-life heroes during pandemic: Your opinion matters!!!**Jarina Begum<sup>1</sup>, Syed Irfan Ali<sup>2</sup>, D Lakshmi Lalitha<sup>3</sup>, Manasee Panda<sup>4</sup>, Bhagyalakshmi Avinash<sup>5</sup>, Padmini Thalanjeri<sup>6</sup><sup>1</sup>Professor, Department of Community Medicine, Great Eastern Medical School and Hospital, Srikakulam, Andhra Pradesh;<sup>2</sup>Associate Professor, Department of Community Medicine, Great Eastern Medical School and Hospital, Srikakulam, Andhra Pradesh;<sup>3</sup>Professor & Dean, Department of Biochemistry, Great Eastern Medical School and Hospital, Srikakulam, Andhra Pradesh;<sup>4</sup>Professor and Head, Department of Community Medicine, Balangir Medical college, Orissa;<sup>5</sup>Reader, Department of Orthodontics & Dentofacial orthopedics, JSS Dental college & Hospital, Mysore;<sup>6</sup>Associate Professor, Department of Physiology, Yenepoya Medical college, Mangalore, Karnataka

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E Mail ID: [dr.jarina@gmail.com](mailto:dr.jarina@gmail.com)**Citation**Begum J, Ali SI, Lalitha DL, Panda M, Avinash B, Thalanjeri P. Doctors on duty: the real-life heroes during pandemic: Your opinion matters!!!. Indian J Comm Health. 2021;33(2):386-390. <https://doi.org/10.47203/IJCH.2021.v33i02.029>**Source of Funding:** Nil **Conflict of Interest:** None declared**Article Cycle****Received:** 21/05/2021; **Revision:** 16/06/2021; **Accepted:** 26/06/2021; **Published:** 31/06/2021This work is licensed under a [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by/4.0/).**Abstract**

**Background:** Data for front-line health-care workers, risk of disease is limited so as the resources available. Although inspiring stories on doctors fighting against COVID-19 were covered we are still unaware of the challenges at ground level. The present study throws light on it and provides way through towards resolving the issues. **Objectives:** 1. To assess the perceptions of the doctors towards the process of COVID-19 crisis management. 2. To identify the challenges and recommend solutions based on their views, suggestions. **Methods:** A cross sectional study on perception of doctors (94) involved in COVID-19 duty was conducted during July to September 2020, with the help of pre-validated semi-structured questionnaire through online google survey form. The questionnaire had demographic details, views on before, during and after the COVID-19 duty along with 4 open ended questions on their good and bad experiences, problems & suggestions. Descriptive statistics for quantitative & thematic analysis for qualitative data was used. **Results:** Nonresponse rate was 26%, mean age 27.55 year. Majority were from clinical departments (78%). 42% felt that training was proper, 60% adequate PPE kit, 52.6% were aware of management strategy, 86% stressed, 82% found difficulties in communication. 42% were provided proper quarantine facility yet, 58% faced discrimination. Few themes emerged under challenges like lack of resources & training, stress & burnout, for which patient sensitization, refresher training, psychological & administrative support was suggested. **Conclusion:** Although COVID-19 pandemic has impacted life of doctors in either way, the challenges could easily be tackled by the recommended simple solutions.

**Keywords**

COVID-19 Duty; PPE Kit; Training; Quarantine; Ethical Dilemma; Discrimination; Stress; Burnout; Themes; Pandemic

**Introduction**

Data for front-line health-care workers (HCWs), risk of disease are limited so as the resources available. Although inspiring stories on HCWs were covered we are still unaware of the challenges of doctors at ground level. The COVID-19 pandemic has created many challenges and dragged the health care system to the verge of collapse especially in developing countries. At the heart of crisis of COVID-19, HCWs face several challenges like emotional

exhaustion, which may lead to medical errors, lack of empathy in treating patients, lower productivity, and higher turnover rates. HCW are more likely to experience COVID-19-related stigma and bullying, often in the intersectional context of racism, violence and police involvement in community settings. Similarly, a report by Sharmila Devi pointed out hundreds of incidents of violence and harassment and mentioned it as the tip of the iceberg. (1,2,3)

The disruption due to COVID-19 pandemic may lead to substantial stress and burnout. (4) Similarly longer durations of quarantine were associated with an increased prevalence of post-traumatic stress disorder (PTSD) symptoms as found out in a study during SARS outbreak.(5)

The present study throws light doctor's view and opinion would definitely help us reconfiguring our health services, to protect HCWs mentally and physically being the leaders of health care team.

### Aims & Objectives

1. To assess the perceptions of the doctors towards the process of COVID-19 crisis management.
2. To identify the challenges and recommend solutions based on their views, suggestions.

### Material & Methods

A cross sectional study was carried out at GEMS and Hospital (COVID-19 Hospital) on perception and views of doctors (94) involved in COVID-19 duty from July to September 2020. Data was collected with a pre-validated semi-structured questionnaire through online google survey form. The questionnaire had 3 sections with Demographic details (6 MCQs), perception towards the process of COVID-19 crisis management (22 statements on a Likert scale, where 1= strongly disagree 2=Disagree 3=Don't know 4=Agree 5=Strongly agree) during COVID-19 duty, 4 open ended questions based on good and bad experiences, challenges & suggestions. The quantitative data was analyzed using descriptive (Percentage and proportions) and inferential statistics (Independent t Test) and the qualitative data was analyzed by thematic analysis.

### Results

Nonresponse rate was 26%, Mean age was 27.55 year, (57.3%) were males, Majority were from clinical departments (78%) either intern/postgraduate or senior residents up to 5 yr. of experience (62%). 48.6% were directly exposed to COVID-19 patients and rest engaged indirectly.

Out of all doctors posted in COVID-19 duty, only 42% perceived the training was appropriate, 60% said the personal protective equipment (PPE) kit were adequate. More than half were aware of the current management strategy yet scared of the exposure (55%). 86% experienced stress and anxiety. 69.7% were deprived of sleep. Only 47% agreed to take HCQ prophylaxis although it was made available and only miracle drug at that time for prevention of COVID-19. Similarly, 57.4% felt proud being altruistic as assigned to the duty.

During the COVID-19 duty, 37% felt there wasn't enough rest before resuming work, there was difficulty communicating with the patients with PPE kit on (82%). Majority (57%) faced ethical dilemma while dealing with COVID-19 patients. Around 70% were uncomfortable

while wearing PPE kits for continuous 8 hours.56% faced difficulty managing ground level staff and patients in the ward and ICU.67% witnessed the death due to COVID-19 and 90% expressed their guilt or helpless due to current health system. 12% noticed (HCQ) drug abuse by patients, also lack of standard protocols (59%), ignorance and bad temper of patients (64%).

During quarantine period at nearby hotels or available places at hostels, 42% were not satisfied with the quarantine facility, 73.6% were financially insecure. 58% faced discrimination, 68% felt they were overusing the internet and 74% experienced quarantine fatigue. [Table 1]

Further association between different factors with perceived stress and anxiety among doctors were analysed using independent t test. Higher age, female gender and more years of experience and direct involvement with COVID-19 patients were found to associated with stress and anxiety. Likewise female gender associated with difficulty in communication, & uncomfortable in PPE. Likewise, less year of experience was associated with trouble in managing ground staff and handling ethical issues. Younger age group were associated with financial insecurity and internet overuse. However, there was no significant association between fear of exposure, discrimination and quarantine fatigue with any of the sociodemographic factors. [Table 2]

The qualitative data collected through the open-ended questions were analysed by thematic analysis. The codes, categories and themes were identified by different coders and tallied. There were 3 main categories advantages of the process, challenges encountered and suggestions for improvement. [Figure 1]

The final themes emerged under advantages were feeling of altruism, opportunities for e-learning, online CME/workshop/training, practice of tele-medicine and future teleconsultation, leader of health care team, under challenges the themes emerged were difficulty in communication, discrimination, lack of resources and training, stress and burnout, financial insecurities. Likewise, under solutions suggested themes were provision of resources, refresher training, provision of a counsellor/therapist, establishment of a feedback system, administrative support, public support by sensitization of patient, lastly improved health care system with financial security to doctors and effective health care delivery for patients.

The sub themes under administrative support were practice of patient safety protocols, rationale medicine and dealing with ethical issues.

### Discussion

It was a known truth, during any pandemic/ epidemic/ outbreak situation HCWs are always under stress and pressure leading to long-term psychological

consequences. The same was experienced during the SARS and Ebola virus outbreak by the HCWs.

The present study noticed response rate of 74% and majority were males with mean age of 27.5 years. The doctors providing care to COVID-19 patients were scared of contracting the disease. Likewise, a study showed 3/4th of respondents felt at risk of contracting COVID-19 infection at work, also felt threatened if a colleague contracted COVID-19.(6)

The present study highlighted the issue of dissatisfaction on adequacy of training, availability and quality of PPE, experiencing stress, anxiety and sleep deprivation attributed to infodemic, working hours. Similarly, few studies observed anxiety and depression among HCWs and the shortage of personal protective equipment exposed doctors and nurses to the risk of getting infected by COVID-19 (4,7)

The current study observed that majority encountered ethical dilemma while dealing with COVID-19 patients and witnessing death due to COVID-19 made them feel guilty of helpless health system. Similarly, it was observed that many ethical dilemmas related to COVID-19 raised during the crisis, but the key issue has been the need to ration scarce critical care resources, so that clinicians do not have to face the difficult decision of which life to save.(8)

Higher age, female gender, more experience, direct involvement were found to be associated with stress and anxiety. Likewise female gender with difficulty in communication, less year of experience with handling ethical issues, younger age with financial insecurity etc. Similar results were found in a study at Pakistan with significant associations between gender, high workload with anxiety, also recommended immediate attention and protection for frontline practitioners.(9)

The qualitative data revealed 3 main categories as advantages, challenges and suggestions for improvement in the process of COVID-19 management which led various different themes to emerge under each category.

Another study retrieved common themes like being fully responsible for patients' wellbeing as their duty, challenges of working on COVID-19 wards, resilience amid challenges. Comprehensive and continuum of care and support at all phases should be provided to safeguard the wellbeing and regular intensive training to promote preparedness and efficacy in crisis management. (10)

## Conclusion

Although COVID-19 pandemic has impacted life of doctors in either way, few challenges like lack of resources, discrimination, stress & burnout, unawareness could easily be tackled by simple solutions like patient sensitization, refresher training, psychological support,

along with adequate feedback system which could help us managing crisis situations better.

## Recommendation

- Bottom-up approach of health system addressing the issues at ground level through strong policies for effective health care delivery and protection of HCWs.
- Continuous bidirectional flow of information as an effective feedback system
- Highlighting the real time challenges that the Frontline workers are facing on daily basis at ground level.
- Psychological support and counsellors for each doctor coping through stress and burnout during pandemic situations
- Availability of resources, training, awareness among general population along with administrative support in terms of standard protocols, ethical reflections, patient safety, and practice of rationale medicine.

## Limitation of the study

Online google forms used, non-response, small sample size & only doctors of single college involved

## Relevance of the study

As the healthcare system is overburdened during pandemic and doctors on duty overworked leading to burnout and pulling health system to verge of collapse. Reasons are being known but hidden, needed to be identified and addressed. The study was planned to explore the views & challenges faced by doctors at ground level for identifying and alleviating the risk during pandemics at present and in future.

## Authors Contribution

All authors contributed equally.

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**Tables**

**TABLE 1 PERCEPTION ON FACTORS BEFORE, DURING & AFTER THE PROCESS (COVID-19 DUTY) N=94**

SN	Perception on factors before, during & after the actual process (COVID-19 duty)	Strongly & agree	Neutral	Disagree and strongly disagree
1.	Proper training	42%	32%	26%
2.	Adequate PPE kits	60%	22%	18%
3.	Aware of current management strategy	52.6%	29%	18.4%
4.	Fear of exposure	55%	41%	4%
5.	Stress and anxiety	86%	8%	6%
6.	Sleep deprivation	69.7%	18%	12.3%
7.	HCC prophylaxis	47%	34%	19%
8.	Altruism	57.4%	12%	30.6%
9.	enough rest before resuming work	37%	29%	34%
10.	Difficulty in communication	82%	12%	6%
11.	Faced Ethical dilemma	57%	32%	11%
12.	Uncomfortable with wearing PPE Kit continuously for 8 Hr	70%	26%	4%
13.	Difficulty in managing ground staff	56%	14%	30%
14.	Guilty (Helpless) due to current health system	90%	6%	4%
15.	Drug abuse	12%	34%	54%
16.	lack of standard protocols	59%	27%	14%
17.	Ignorance and bad temper of patients	64%	28%	8%
18.	Quarantine Fatigue	74%	10%	16%
19.	Overuse of Internet	68%	32%	0%
20.	Discrimination	58%	37%	5%
21.	Financial Insecurity	73.6%	26.4%	0%
22.	Poor Quarantine Facility	42%	20%	38%

**TABLE 2 ASSOCIATION OF DIFFERENT STUDY VARIABLES WITH SOCIO DEMOGRAPHIC FACTORS**

Variable	Gender	Mean	SD	t value	P value
1. Stress & Anxiety	Female (40)	4.175	0.586835	2.3733	0.0197*
	Male (54)	3.703	1.148745		
2. Difficulty in communication	Female	4.25	0.53619	3.4341	0.0009**
	Male	3.53	1.227961		
3. Uncomfortable in PPE	Female	4.025	0.651441	3.6344	0.0005***
	Male	3.185	1.348168		
4. Fear of exposure	Female	3.325	0.905193	0.7512	0.4544
	Male	3.148	1.267944		
<b>Variable</b>	<b>contact with COVID-19 19 Patient</b>	<b>Mean</b>	<b>SD</b>	<b>t value</b>	<b>P value</b>
Stress & Anxiety	Direct	4.177	0.676228	2.0229	0.046*
	Indirect	3.795	1.087585		
<b>Variable</b>	<b>Experience</b>	<b>Mean</b>	<b>SD</b>	<b>t value</b>	<b>P value</b>
Stress & Anxiety	Up to 5 yr.	3.862	4.361	2.4389	0.0167*

		6 yr. or above	1.121087	0.630378		
7.	Trouble in managing staff	Up to 5 yr.	3.603	1.258621	2.7046	0.0081**
		6 yr. or above	2.916	1.089725		
8.	Difficulty in handling Ethical issues	Up to 5 yr.	3.75	1.178988	2.2088	0.0297*
		6 yr. or above	3.19	1.243191		
9.	<b>Variable</b>	<b>Age</b>	<b>Mean</b>	<b>SD</b>	<b>t value</b>	<b>P value</b>
	Stress & Anxiety	Up to 30 yr.	3.72	1.027082	3.3386	0.0012**
		>30 yr.	4.45	0.575845		
10.	Financial Insecurities	Up to 30 yr.	4.22	0.958741	6.658	0.0001***
		>30 yr.	2.54	1.353365		
11.	Internet Overuse	Up to 30 yr.	3.157	0.935578	4.983	0.0001***
		>30 yr.	2.041	0.978058		

**Figures**

**FIGURE 1 THEMATIC MAP (QUALITATIVE DATA ANALYSIS)**

