



THE CHALLENGES FACED BY DOCTORS AT WORK PLACE DURING COVID-19 PANDEMIC IN A CITY- A CROSS SECTIONAL STUDY.

Community Medicine

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ABSTRACT

Background: The world health organization formally declared new Coronavirus a pandemic on march 12, 2020. Pandemic is a word that, if misused, can cause unreasonable fear, or unjustified acceptance that the fight is over, leading to unnecessary suffering and death, said at a new briefing by WHO Director General, Dr. Tedros Adhanom Ghebreyesus. It has strained health systems worldwide. We have never before seen a pandemic sparked by corona virus. The Covid-19 pandemic brought unprecedented challenges to everyone including the medical workforce. Doctors and health care workers are responding to global health crisis trying to protect individuals, families & communities. Even in adverse situations with stretched resources & shortage of PPE & other equipment, doctors found themselves as unexpected targets in the fight against covid-19, with increasing number of assaults & deaths after contracting covid-19. Hence the aim of this web-based cross-sectional survey is to assess the challenges faced by doctors at workplace during Covid-19 pandemic. **Methods:** This is a cross-sectional conducted during Covid-19 pandemic among doctors during their covid duties in a city in Andhra Pradesh during the year 2021. A pre evaluated pre tested self-administered questionnaire was used for collecting the data. The data will be analysed using Statistical software SPSS (version-21) and performed using Chi-square test. A value of $p \leq 0.05$ was considered as statistically significant. **Results & Discussion:** This cross-sectional study highlighted Therefore this study mainly the socio-demographic profile, area of work place, significant reason for work stress, shortage of PPE, vaccination status and provision of quality services for doctors at their work place. It reported a significant impact on health of the doctors during covid duties, thus showing the role of burden with unpreparedness, long working hours, fear of contraction, with poor provision of protective equipment and covid incentives. The limitation of this study was, Inclusion and exclusion criteria was not clearly mentioned in materials and methods, sample size was not adequate due to lack of response from the study participants, sources of error were not discussed and limited number of references were taken for this study.

KEYWORDS

Covid-19, pandemic, challenges

INTRODUCTION:

The world health organization formally declared new Coronavirus a pandemic on march 12, 2020. Pandemic is a word that, if misused, can cause unreasonable fear, or unjustified acceptance that the fight is over, leading to unnecessary suffering and death, said at a new briefing by WHO Director General. It has strained health systems worldwide. We have never before seen a pandemic sparked by corona virus. The Covid-19 pandemic brought unprecedented challenges to everyone including the medical workforce. Even in adverse situations with stretched resources, shortage of PPE & other equipment, doctors found themselves as unexpected targets in the fight against covid-19, with increasing number of assaults & deaths after contracting covid-19.⁽¹⁾

Doctors are amongst the people most at risk of getting the disease. It is causing undue stress and restlessness when colleagues are sick or on ventilator in ICU due to coming in contact with Covid-19. Most of the doctors have no one else to take care of their children or families during times of self-isolation or quarantine. As every time a doctor falls ill the already strained health system gets a blow. The biggest concern is bringing the virus home to their families. There is also a fear that if they fall ill they will be betraying the health system and their patients as they will not be able to contribute. Doctors and health care workers are responding to global health crisis trying to protect individuals, families & communities.^(2,3)

Hence the aim of this web-based cross-sectional survey is to assess the challenges faced by doctors at workplace during Covid-19 pandemic.

MATERIALS AND METHODS:

This is a cross-sectional study to assess the challenges faced by doctors at workplace during Covid-19 pandemic. A total of 100 doctors were approached through a web-based survey out of which only 60 responded. Doctors who have done covid duties during 2nd wave of the pandemic from May 10th 2021 to June 10th 2021 were included in this study. The sample size was 60 and convenience sampling was used as a sampling technique. A Pre-designed and pre-tested self-administered questionnaire was used. Collected data was entered in Microsoft excel 2019 and Statistical analysis was done by Statistical Package for Social Sciences (SPSS) software version 22. Categorical variables were represented as frequencies and percentages. Statistical significance was calculated by Chi square test. A probability level (p value) of less than 0.05 was considered with level of significance at 95% confidence interval.

RESULTS:

Based on the data obtained in this study, according to the age distribution of doctors participated in this study, a total of 60 participated of which majority of them belong to 31-40 years (57%) and around 43% belong to 21-30 years, the mean age was 30 years.

Table no.1: Age Distribution Of Doctors (n=60)

Age (in years)	Frequency	Percentage
21 - 30	26	43%
31 - 40	34	57%
41 - 50	0	0%
Total	60	100

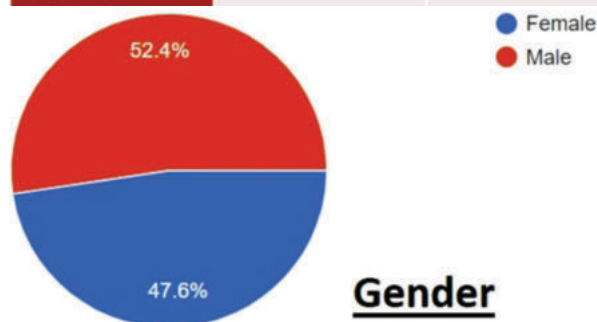


Fig no.1: Gender Distribution Of Doctors

On comparing the gender distribution among the study participants, majority of them are males (52.4%) and 47.6% female.

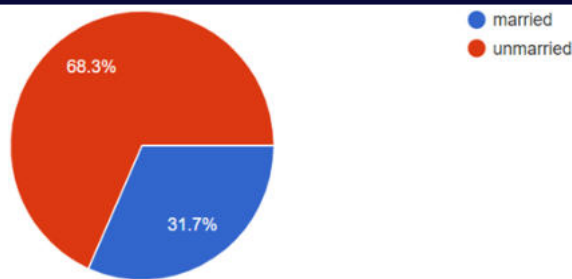


Fig no.2: Distribution of marital status of doctors (n=60)

The results obtained on distribution of marital status are 68.3% unmarried and 31.7% married.

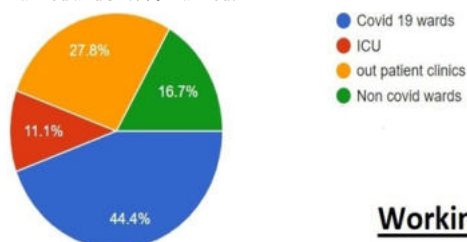


Fig no. 3: Area of workplace

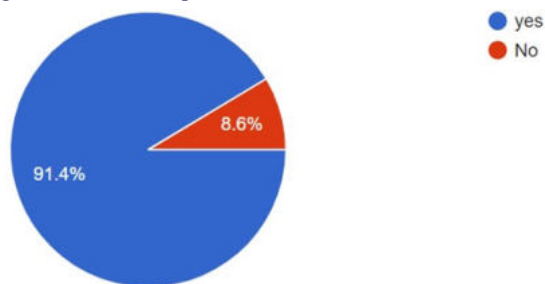


Fig no.4: Distribution of work stress among doctors during duties (n=60)

According to the results obtained on distribution of work stress among doctors during duties, majority (91.4%) reported work stress during Covid-19 pandemic.

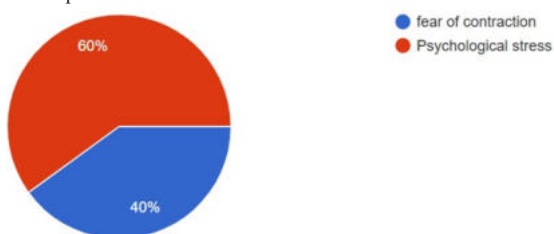


Fig no.5: Significant stress factor during covid duties

Regarding the most faced stress factor among doctors, 60% of them reported psychological stress and 40% reported fear of contraction.

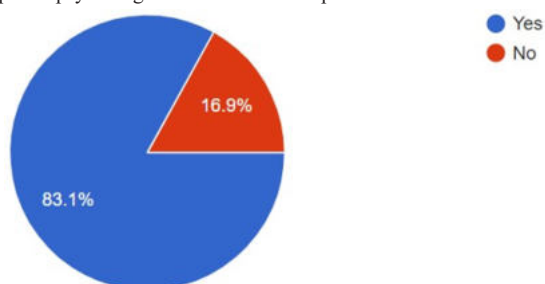


Fig no.6: Distribution related to shortage of PPE (n=60)

The results obtained for the most important challenge faced by doctors i.e., Shortage of PPE was around 83.1%, it shows that majority of the doctors are facing this crisis.

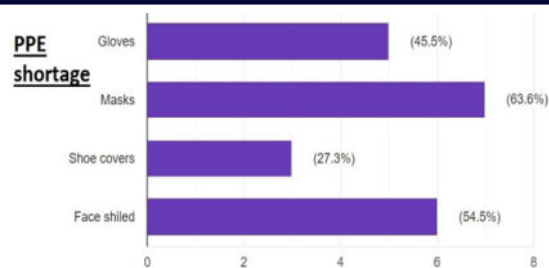


Fig no.7: Shortage of PPE at workplace

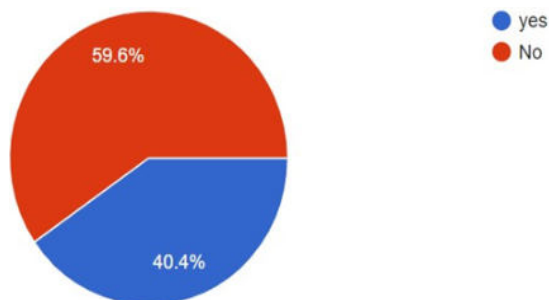


Fig no.8: Vaccination status of doctors during duties

Regarding vaccination status the results observed were, many of the doctors are not vaccinated when they were posted in covid duties. And only around 40.4% of them were vaccinated, that too only the first dose of vaccine.

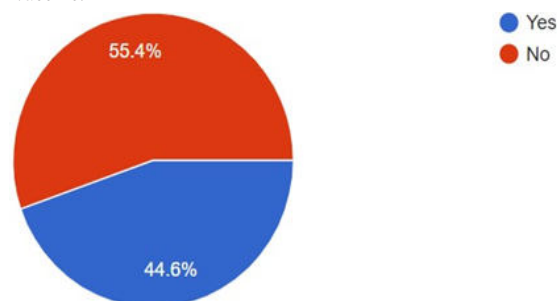


Fig no.9: Provision of incentives

Majority of the doctors are not provided covid incentives (55.4%) And about 44.6% were provided the same.

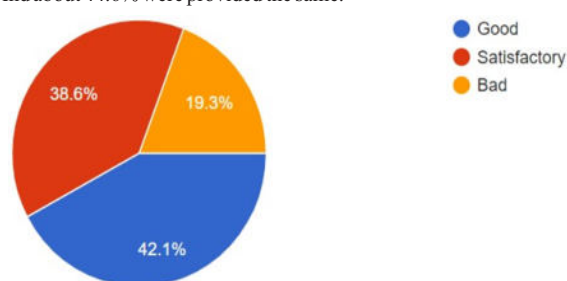


Fig no.10: Quality of services provided to doctors at workplace

Majority of doctors reported good quality of services (42.1%)

DISCUSSION:

According to Socio-demographic profile, in the present study the number of study participants are only few, n=60. Majority of the study participants are male doctors (52.4%) and 47.6% are female doctors. The mean age of the participants was 30 years. In this study, most of them were senior resident doctors, followed by junior residents. All doctors who were included in this study are the one's who were doing covid duties during pandemic. On comparison with a study conducted by UzmaUrooj, et.al, the study involved up to 150 participants. The reason that it could not collect enough data as many of them were involved in their duties, and only these doctors could spare their time for the questionnaire provided. In many other studies also the majority

of the participants were males (70%).⁽⁵⁾ Regarding marital status many of the doctors are unmarried and reside alone, thus more prone to stress, insomnia and fear of contraction than those compared to married one's. The work place differs for many doctors as they were posted in various categories. In this study many of them are working in covid-19 wards (44.4%), followed by out-patient departments (27.8%), followed by non-covid wards (16.7%) and the remaining (11.1%) in ICU's. In few other similar studies also, many were placed in covid wards so as to tackle the emergency situation of this pandemic. The results observed regarding work stress was, about 91.4 % of the doctors reported work stress during their duties followed by 8.6% who did not report any kind of stress, hence many reported stress during their working hours, which was similar to other studies. ⁽⁶⁾The significant reasons for stress in this study reported were Psychological and fear of contraction. 60% reported psychological stress followed by 40% as fear of contraction, which is more among females (36%, $p < 0.0005$). The reason behind stress was only fear of contraction in few similar studies. In this study majority reported infecting family members and rapid spread of disease. In a similar study, the results observed were due fears of doctors included, infecting family members (79.7%), rapid spread of disease (63%), complications of disease (60.3%), becoming a carrier (28.8%) and (27.9%) feared missing the diagnosis. ^(5,6)The results observed pertaining to the shortage of PPE were, about 83.1% of the doctors had shortage of PPE at their work place while only a few, 16.9 % did not face this problem. Majority of the doctors, especially those working in government hospitals are not provided full coverage and adequate PPE, which was often a pathetic situation for many of the doctors. They reported shortage of masks (63.6%), face shields (54.5%), gloves (45.5%) and shoe covers (27.3%). This was due to lack of provision by various institutions and governments, quality PPE, which was the most effective barrier in order to decrease the spread of infection. The results also reveal the unvaccinated doctors (59.6%) were involved in duties rather than those who were vaccinated, and many received only their first jab. Regarding the provision of covid incentives, the results found that majority of the doctors (55.4%) were not provided and about 44.6% were provided the same. This differed in government and private hospitals as many of the them who received incentives were working under government facility, but the doctors from the private sectors, though working for long hours, were not provided. This proved to be due to administrative issues which was similar to other studies. Among the results observed on the basis of quality of services provided, many reported good quality services (42.1%), satisfactory (38.6%) and only a few (19.3%) reported bad quality services. ^(7,8) Therefore this study highlighted mainly the socio-demographic profile, area of work place, significant reason for work stress, shortage of PPE, vaccination status and provision of quality services for doctors at their work place.

CONCLUSION:

The Covid-19 pandemic has disrupted the health of the people and health care resources. It reported a significant impact on health of the doctors during covid duties, thus showing the role of burden with unpreparedness, long working hours, fear of contraction, with poor provision of protective equipment and covid incentives. Further follow up studies are necessary for a better understanding of the effects of pandemic, in order to implement effective measures for taking care of "who takes care", it must be at the top of the agenda of governments and health care institutions everywhere.

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