



SURVEY ON ATTITUDE, PRACTICE, BEHAVIOUR AND IMPACT OF COVID -19 ON DOCTORS

Pediatrics

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ABSTRACT

BACKGROUND: Every widespread infectious disease imposes concerned human lives with health care crisis, economic instability and a huge burden on their habitat and ecosystem. Similar to other pandemics, COVID-19 has proved to be detrimental to doctors' physical and mental health. **OBJECTIVE:** To study the impact of COVID 19 on mental health of doctors and to study the attitude, practice, behavior of doctors during pandemic. **MATERIALS AND METHODS:** This online study was conducted in 7 days. Information was gathered on background characteristics, attitude and behaviour of the participants in a semi-organized proforma and the pandemic's impact on mental health was measured by the DASS-21. An aggregate of 101 complete responses were received. The data was analysed using SPSS software. **RESULTS:** Among 101 study participants, 46.5% were depressed and 47.5% and 19.8% of doctors were having anxiety and stress, respectively. **CONCLUSION:** Doctors are pushing themselves to the best of their capacity and protecting their patients' best interest. During COVID pandemic most of the doctors are facing psychiatric illness. Satisfactory protective measures should be warranted to safeguard both physical and mental health of doctors.

KEYWORDS

Doctors, COVID 19, mental health, attitude.

INTRODUCTION

Coronavirus infection started in Wuhan, China in December 2019. Soon the infection became widespread in many countries. The world health organization (WHO) declared it as public health emergency of international concern (PHEIC) on 30 January, 2020.¹ On February 11, 2020, the WHO has officially declared the COVID-19 as "pandemic" from the previous status of global health emergency.¹ Occurrence of COVID epidemic worldwide is affecting large number of people both physically and mentally.

This unprecedented pandemic has been overwhelming for the entire medical profession. Whenever situations like these arise, health-care workers come to play a major role and push their limits every day. Doctors, being in the frontline of the system, take the brunt the most. The rate of mental health problems amongst the doctors has been on the rise. The WHO has also expressed its concern over the pandemic's mental health and psycho-social consequences which is devastating not only for the individual but for the nation as well (WHO, 2020).²

The problems of anxiety, fear, depression, insomnia, low self-esteem, excessive use of substances is leading to frequent interpersonal issues among the healthcare workers (HCWs), Studies have also shown that many doctors find it difficult to tell their colleagues or employers about their mental health difficulties.³

The paucity of literature on mental health impact of such stressful events on the frontline warriors' paves way for research in this area. Healthcare providers are continuously working in fearful, stressful, unprepared and resource constrained healthcare settings where they are under the continuous threat of getting exposed and infected. The psychosocial and mental health well-being of these warriors is even more crucial than managing health of the disease affected population as they are the health care delivery agents without who's well-being the nation can be at a verge of collapse.⁴

OBJECTIVES:

1. To study the impact of COVID 19 on mental health of doctors attending COVID patients & also NON COVID patients
2. To study the attitude, practice, behavior of doctors during pandemic

METHODOLOGY:

This is a cross-sectional, observational study carried out on doctors over a period of 7 days in the month of September, 2020. Convenient sampling method was used and a total of 101 doctors took part in the survey. An online semi-structured questionnaire was developed, with a consent form attached to it. The questionnaire was formed on three sections:

1. First section was for demographic data which included age, gender, place of practice, qualification, duration in health-care sectors.
2. Second section comprised of a set of questions targeting attitude and behavior regarding COVID-19.
3. In the third section, the Depression, Anxiety, and Stress Scale (DASS)-21 was applied.

Google forms and the link of the questionnaire was sent through E-mails, WhatsApp, and other social media group comprised of only doctors. Collected data was data entered in the computer on Excel data sheets. SPSS version 25 was used for statistical analysis.

For comparisons between the groups, t-test was used for continuous variables and Chi-square tests were used for categorical variables. Statistical significance was determined at $P < 0.05$.

STUDY TOOLS:

DASS-21 scale⁵

- The Depression, Anxiety and Stress Scale - 21 Items (DASS-21) is a set of three self-report scales designed to measure the emotional states of depression, anxiety and stress. Each of the three DASS-21 scales contains 7 items, divided into subscales with similar content. Scores for depression, anxiety and stress are calculated by summing the scores for the relevant items. Recommended cut-off scores for conventional severity labels (normal, moderate, severe) are as follows:
- Scores on the DASS-21 will need to be multiplied by 2 to calculate the final score.

Table 1: Interpretation of DASS-21 scores

	Depression	Anxiety	Stress
Normal	0-9	0-7	0-14
Mild	10-13	8-9	15-18
Moderate	14-20	10-14	19-25
Severe	21-27	15-19	26-33
Extremely severe	28+	20+	34+

RESULTS:

Among 101 participants, 82 were attending COVID pts and 19 were attending NON COVID pts. Most of the participants among doctors attending COVID patients were in age group 24-29 yrs ($n = 66$, 80.5%) with < 5 yrs of experience ($n = 75$, 91.5%), practicing in urban background ($n = 70$, 85.4%), and having postgraduate qualification ($n = 57$, 69.5%). Table 2 shows the demographic details of the participants.

42.7% of the doctors attending COVID pts were working for 6-12 hrs.

Majority of the doctors are using a N 95 mask (96.3%) and only few of them are using surgical masks (3.7%). 93.9% of the doctors are practicing hand hygiene at a regular interval. The doctors who participated in this survey are mostly washing their hands on an as-and-when-required basis (75.6%). 79% doctors are doing high-risk duties (fever clinic, isolation ward, ICU etc.) and that was the key indicative factor for their higher psychiatric morbidity.

Depression and anxiety were found to be high among those doctors attending COVID patients when compared to those who are not attending COVID patients. Statistically significant association was observed at $p=0.039$ and $p=0.027$ for depression and anxiety respectively among doctors.

Table 2: Demographic details of the participants(n=101)

Variable	Doctors attending COVID pts(n=82) No (%)	Doctors attending NON-COVID pts (n=19) No (%)
Age(in yrs)		
24-29	66(80.5%)	13(68.4%)
30-39	10(12.2%)	5(26.3%)
>40	6(7.3%)	1(5.3%)
Gender		
Male	44(53.7%)	7(36.8%)
Female	38(46.3%)	12(63.2%)
Qualification		
MBBS	23(28.0%)	7(36.8%)
PG	57(69.5%)	10(52.6%)
Super speciality	2(2.4%)	2(10.5%)
Practicing area		
Urban	70(85.4%)	17(89.5%)
Rural	12(14.6%)	2(10.5%)

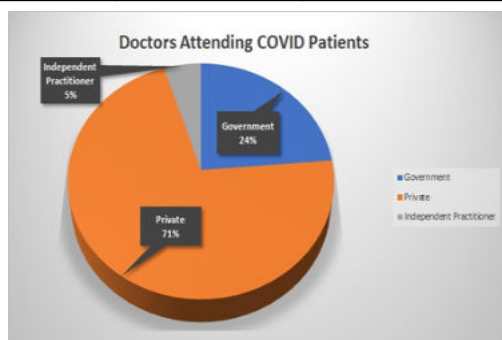


Fig 1: Working sector of doctors attending COVID pts (n=82)

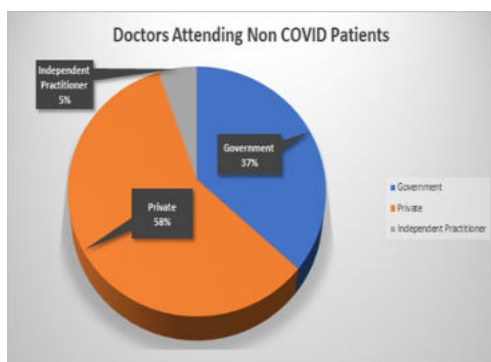


Fig 2: Working sector of doctors attending NON COVID pts(n=19)

Table 3: Impact of COVID 19 on mental health of doctors(n=101)

Variable	Doctors attending COVID pts	n	Mean score	Standard deviation	t value	p value
Depression	Yes	82	5.609	4.862	2.095	0.039
	No	19	3.157	3.131		
Anxiety	Yes	82	4.500	3.535	2.252	0.027
	No	19	2.526	2.988		
Stress	Yes	82	5.524	4.155	1.432	$p > 0.05$
	No	19	3.947	5.016		

Table 4: Attitude and behaviour of doctors during COVID pandemic

Variable	Doctors attending COVID pts(n=82) No (%)	Doctors attending NON COVID pts(n=19) No (%)	X ² value	p value
Speciality				
Medicine and allied sciences	47(57.3%)	6(31.6%)	X ² =28.632	0.000
Surgery and allied sciences	27(32.9%)	1(5.3%)		
Pre-para clinicals and administration	4(4.9%)	7(36.8%)		
Non specialist	4(4.9%)	5(26.3%)		
Feeling proud as doctor to work during pandemic				
Yes	75(91.5%)	14(73.7%)	X ² =4.657	0.031
No	7(8.5%)	5(26.3%)		

DISCUSSION

Our results revealed a 46.5% prevalence of depressive symptoms among doctors during this COVID-19 outbreak. The anxiety and stress symptoms were found to be present in 47.5% and 19.8% of doctors, respectively. Majority of them were giving duties for 6–12 h, which is a positive finding. When more doctors are in quarantine it may result in higher duty hours on the working doctors, which may further worsen their overall mental health. A study from Wuhan, China, revealed 50.4% of depression, 44.6% of anxiety, 34.0% of insomnia, and 71.5% of distress among 1257 health care workers⁶. In March 2020, Similar study conducted by S S Chatterjee in West Bengal among 152 doctors revealed 34.9% depression, 39.5% anxiety and 32.9% stress among doctors.⁷ In April, 2020, in a study on 500 health care workers from Singapore, 14.5%, 8.9% and 6.6% participants screened positive for anxiety, depression, and stress respectively, and 7.7% were positive for clinical concern of post-traumatic stress disorder⁸.

A Cross-sectional descriptive study was done in Spain among 421 professionals, of which 292 were frontline workers, from different health centres in the Basque Country and Navarra 46.7% suffered stress, 37% anxiety, 27.4% depression and 28.9% sleep problems.⁹ A study in Turkey was conducted as Cross-sectional descriptive study among 442 professionals (57% females, average 11 years work experience), of which 231 were frontline professionals, from different hospital. Of all participants, 64.7% had symptoms of depression (9.5% severe and 10.2% extremely severe), 51.6% anxiety (10.6% severe and 11 extremely severe) and 41.2% stress (severe 10.4% and extremely severe 5%).¹⁰ Doctors are having a high prevalence of mental health morbidities, but the topic is very less discussed.¹¹

CONCLUSION

- Doctors are experiencing various mental health problems during this COVID crisis as they have to work for longer duration and are at high risk of getting infected.
- They are also getting themselves separated from their families just to ensure the safety of their loved ones.
- They are not able to spend quality time with their family members which makes them more prone to mental health problems.

LIMITATIONS

- Doctors attending NON COVID pts responded very less in present study.

RECOMMENDATIONS:

Specific screening strategy should be applied for these frontline workers as adverse mental health condition will further affect their service delivery and subsequent patient service. Proper measures should be taken to reduce the longer duty hours so that it does not overburden the doctors.

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