# **ORIGINAL ARTICLE**

# Perception, Challenges, and Consequences of Covid-19 Pandemic on Doctors Working in Government and Private Hospitals of Lahore

NUDRAT RASHID<sup>1</sup>, AMMARA ASHRAF<sup>2</sup>, REHANA AYUB<sup>3</sup>, ALIA BASHIR<sup>4</sup>, MOHAMMAD ALI<sup>5</sup>, NAYAB FATIMA<sup>6</sup> <sup>1</sup>Assistant Professor Gynae SIMS/ Services Hospital Lahore

<sup>2</sup>Senior Registrar Gynae SIMS/ Services Hospital Lahore

<sup>3</sup>Associate Prof FJMU/ Ganga Ram Hospital Lahore.

<sup>4</sup>Professor Gynae SIMS/ Services Hospital.

<sup>5</sup>VF KEMU/ Mayo hospital Associate Professor Paediatrics CMC/ HMTH.

<sup>6</sup>House Officer Shalamar Hospital Lahore.

Correspondence to: Dr. Nudrat Rashid, Email: Unsa.ali@yahoo.com, Contact: 03334429778

### ABSTRACT

**Background:** Healthcare workers (HCWs) fighting the 2019 coronavirus disease (COVID-19) pandemic are under enormous pressure, putting them at a higher risk of developing mental health problems and other issues. **Aim:** To highlight the problems faced by health care providers working during COVID-19 in government and private hospitals of Lahore.

**Methodology** This cross-sectional study was done by collecting data from Services Hospital Lahore, Mayo hospital Lahore, and Shalimar hospital Lahore.Data were collected in 2 weeks from 122 health care providers (HCP) using random sampling.

**Results:** A total of 97(79.5%) cases had suffered from mental health issues, while self-reported depression, anxiety, and stress were seen in 18(14.8%), 40(32.8%), and 44(36.1%), respectively. There were 110(90.2%) subjects who were worried about the health of their family members. According to 28(23%) subjects, PPE for suspected/confirmed covid-19 patients were always provided, regarding the facility of Covid-19 PCR, 99(81.1%) subjects said it's available for them. There were 83(68.0%) who told that their educational activities were affected, 72(59.0%) reported that their workload has increased, 51(41.8%) said that new doctors / medical staff has been inducted to handle this pandemic in their hospital and 62(50.8%) told that social distancing is being observed in their ward and emergency department.

**Conclusion:** This study concluded that the self-reported depression, anxiety and stress were high among doctors, they were afraid about the transmission of COVID -19 to their families and they were also concerned about the provision of facilities like personal protected equipment. Hence the authorities must consider their issues for their safety.

Keywords: COVID-19, psychological issues, safety, transmission

# INTRODUCTION

The novel coronavirus that appeared at the end of 2019 is commonly referred to as severe acute respiratory illness that is known as coronavirus disease-2019 (COVID-19). Coronavirus causes infection of the respiratory tracts<sup>1,2</sup> which can lead to complicated pneumonia and aspiration pneumonia. Rare COVID-19 symptoms include nasal congestion, runny nose, and body aches.<sup>3</sup>.Many people may encounter loss of smell and taste. In countries with limited health facilities and services, Covid-19 is spreading rapidly. Pakistan is at significant risk due to lower health facilities<sup>4</sup>. Pakistan is atsubstantial risk due to insufficient health facilities.<sup>3</sup>The unprecedented pandemic has led to several mental health problems, especially among front-line health workers.<sup>4</sup>The longevity and disruption to the normality of the crisis are unknown. With COVID-19 set to be a chronic medical problem, clinicians will be required for an extended period to maintain a state of high alert<sup>5</sup>.

Anxiety, depression, burnout, insomnia and stressrelated illnesses also impair front-line HCW's personal and professional life<sup>4</sup>. This is primarily influenced by individuals' biopsychological vulnerabilities; socio-environmental influences such as the danger of virus transmission,

Received on 23-05-2020 Accepted on 29-11-2020 productive risk contact to HCWs, accessibility of protective equipment, work-related discomfort, perceived shame and psychological effect of exclusion and interpersonal distance often play a major role.<sup>4</sup>HCWs mainly doctorsfacingCOVID-19pandemic are extremely stressed<sup>6-9</sup>.

The accelerated dissemination of the disease has generated problems for healthcare facilities and pressured healthcare staff to cope with clinical and non-clinical stressors, including personal protective equipment shortages, COVID-19-related mortality and morbidity, anxiety of taking the virus back to relatives, and the fear of sacrificing colleagues to the disease<sup>1</sup>. Data from past outbreaks, along with early evidence from the COVID-19 pandemic, shows that these accidents had major shortand long-term impacts on health care workers' mental health<sup>1</sup>.

A survey recorded that during the COVID-19 pandemic in China, the incidence of signs of fear, depression, insomnia and general psychiatric disorders in health workers was 46.04 percent, 44.37 percent, 28.75 percent and 56.59 percent respectively.<sup>10</sup> The prevalence of the overall psychological problems in physicians, medical residents, nurses, technicians and public health professionals was 60.35%, 50.82%, 62.02%, 57.54% and 62.40%, respectively. The incidence of general psychiatric disorders was seen as in clinicians (60.35%), clinical residents (50.82%), nurses (62.02%), technicians (57.54%)

and public health practitioners (62.40%). <sup>10</sup>In HCW, several sociodemographic factors such as gender, occupation, age, place of employment, work department and psychological factors such as poor social support, self-efficacy have been correlated with elevated tension, anxiety, symptoms of depression, and insomnia<sup>11</sup>. Increased concern, stress and fear among specific populations across countries have been created by the current conditions due to the COVID-19 pandemic<sup>12</sup>. Hence current study was designed to highlight the issues faced by health care providers in government and private hospitals of Lahore.

# MATERIALS AND METHODS

This cross sectional study was done by collecting data from Services hospital Lahore, Mayo hospital Lahore and Shalimar hospital Lahore.Data was collected in 2 weeks from 122 health care workers (HCW) mainly doctors, using random sampling. A self designed questionnaire was given to HCW working in medicines, surgery, peads and dentistry, etc. All 100% returned the Proforma without missing data. HCW having diagnosed with COVID-19, and having history of psychiatric disorder were excluded. Using SPSS version 24, for quantitative data mean  $\pm$  S.D was calculated and f(%) was used for categorical data. Chi-square test was applied to compare categorical data in different groups, considering p-value  $\leq$  0.05 as significant.

#### RESULTS

There were 42(34.4%) postgraduate trainee (PGs), 71(58.2%) house officers (HO), 3(2.5%) medical officers and 6(4.9%) assistant professors. There were 60(49.2%) were from medicine, 34(27.9%) were from surgery and 28(23.0%) were from other departments. There were 89(73%) participants from government and 33(27%) participants were from private hospitals.A total of 97(79.5%) cases had suffered from mental health issues, while self-reported depression, anxiety and stress was seen in 18(14.8%), 40(32.8%) and 44(36.1%) respectively. There were 110(90.2%) HCW mainly doctors were worried about health of their family members. According to 28(23%) HCW, PPE for suspected / confirmed covid-19 patients were always provided, 50(41%) told PPE are provided usually, 18(14.8%) told rarely and 26(21.3%) told PPE for suspected / confirmed covid-19 patient are never provided. According to 103(84.4%) doctors patients care was disturbed due to COVID-19. Regarding facility of Covid-19 PCR, 99(81.1%), 13(10.7%), 6(4.9%) and 4(3.3%) told that its available for themselves, family members, for none and for themselves and family members respectively. There were 83(68.0%) who told that their educational activities were affected, 72(59.0%) reported that their work load has increased, 51(41.8%) reported thatnew doctors / medical staff inducted to handle this pandemic in their hospital and 62(50.8%) told that social distancing is being observe in their ward and emergency department.

HOs were significantly more worried about health of their family members, PGs were highly worried about transmission of covid-19 to family, workload was significantly increased for PG, HO and MOs, p-value < 0.05. The doctors from medicine and surgery department were significantly suffering from one of mental health

problem, people from surgery were significantly less worried about health of their family members and were less worried about transmission of covid-19 to family, and had significantly increased response on never had PPEs for suspected / confirmed covid-19 patient, patient's care was significantly disturbed in medicine and surgery, the responses were significantly higher for surgery department about social distancing was being observe in their department, p-value < 0.05. Frequency of depression, education activities disturbance, social distancing were being observe, work load increased, new doctors / medical staff inducted to handle pandemic were significantly higher in Government hospital when compared to private hospital, p-value < 0.05.

| Variables   |                            | Frequency | %age |  |
|---|----------------------------|-----------|------|--|
| Designation   | PG                         | 42        | 34.4 |  |
|   | НО                         | 71        | 58.2 |  |
|   | МО                         | 3         | 2.5  |  |
|   | AP                         | 6         | 4.9  |  |
| Department  | Medicine                   | 60        | 49.2 |  |
|   | Surgery                    | 34        | 27.9 |  |
|   | Others                     | 28        | 23.0 |  |
| Hospital  | Govt.                      | 89        | 73   |  |
|   | Private hospital           | 33        | 27   |  |
| During covid pandemic,<br>suffering any mental health<br>problem                                    | Yes                        | 97        | 79.5 |  |
| Depression  | Yes                        | 18        | 14.8 |  |
| Anxiety   | Yes                        | 40        | 32.8 |  |
| Stress  | Yes                        | 44        | 36.1 |  |
| Worry about health of your family members   | Yes                        | 110       | 90.2 |  |
| worried about transmission of covid-19 to family  | Yes                        | 104       | 85.2 |  |
| Provision of PPE for<br>suspected /<br>confirmed covid-19<br>patient?                               | Always                     | 28        | 23.0 |  |
|   | Usually                    | 50        | 41.0 |  |
|   | Rarely                     | 18        | 14.8 |  |
|   | Never                      | 26        | 21.3 |  |
| Disturbance in management of pt. care   | Yes                        | 103       | 84.4 |  |
| Facility of Covid-19 PCR  | Self                       | 99        | 81.1 |  |
|   | Family Members             | 13        | 10.7 |  |
|   | None                       | 6         | 4.9  |  |
|   | Self and family<br>members | 4         | 3.3  |  |
| Educational activities affected?  | Yes                        | 83        | 68.0 |  |
| Work load is increased?   | Yes                        | 72        | 59.0 |  |
| Are new doctors / medical staff inducted to handle this pandemic in your hospital?                  | Yes                        | 51        | 41.8 |  |
| Do you think that social<br>distancing is being observe<br>in your ward and<br>emergency department | Yes                        | 62        | 50.8 |  |

|   |                            | Designation |           |          | n value  |          |
|---|----------------------------|-------------|-----------|----------|----------|----------|
|   |                            | PG          | НО        | MO       | AP       | p-value  |
| During covid pandemic, suffering any mental<br>health problem   | Yes                        | 31(73.8%)   | 60(85.7%) | 2(66.7%) | 4(66.7%) | 0.327    |
|   | No                         | 11(26.2%)   | 10(14.3%) | 1(33.3%) | 2(33.3%) |          |
| Depression  | Yes                        | 7(16.7%)    | 11(15.5%) | 0(0%)    | 0(0%)    | 0.635    |
|   | No                         | 35(83.3%)   | 60(84.5%) | 3(100%)  | 6(100%)  |          |
| Anxiety   | Yes                        | 12(28.6%)   | 23(32.4%) | 2(66.7%) | 3(50%)   | 0.438    |
|   | No                         | 30(71.4%)   | 48(67.6%) | 1(33.3%) | 3(50%)   |          |
| Stress  | Yes                        | 14(33.3%)   | 29(40.8%) | 0(0%)    | 1(16.7%) | 0.319    |
|   | No                         | 28(66.7%)   | 42(59.2%) | 3(100%)  | 5(83.3%) |          |
| Worry about health of your family members   | Yes                        | 38(90.5%)   | 66(93%)   | 1(33.3%) | 5(83.3%) | 0.008*   |
|   | No                         | 4(9.5%)     | 5(7%)     | 2(66.7%) | 1(16.7%) |          |
| worried about transmission of covid-19 to family  | Yes                        | 39(92.9%)   | 62(87.3%) | 0(0%)    | 3(50%)   | <0.001** |
|   | No                         | 3(7.1%)     | 9(12.7%)  | 3(100%)  | 3(50%)   |          |
| Provision of PPE for suspected /<br>confirmed covid-19 patient?   | Always                     | 11(26.2%)   | 15(21.1%) | 0(0%)    | 2(33.3%) | 0.330    |
|   | Usually                    | 22(52.4%)   | 24(33.8%) | 1(33.3%) | 3(50%)   |          |
|   | Rarely                     | 5(11.9%)    | 12(16.9%) | 1(33.3%) | 0(0%)    |          |
|   | Never                      | 4(9.5%)     | 20(28.2%) | 1(33.3%) | 1(16.7%) |          |
| Disturbance in management of patient care   | Yes                        | 37(88.1%)   | 60(84.5%) | 2(66.7%) | 4(66.7%) | 0.459    |
|   | No                         | 5(11.9%)    | 11(15.5%) | 1(33.3%) | 2(33.3%) |          |
| Facility of Covid-19 PCR  | Self                       | 37(88.1%)   | 54(76.1%) | 3(100%)  | 5(83.3%) | 0.198    |
|   | Family Members             | 1(2.4%)     | 12(16.9%) | 0(0%)    | 0(0%)    |          |
|   | None                       | 1(2.4%)     | 4(5.6%)   | 0(0%)    | 1(16.7%) |          |
|   | Self and family<br>members | 3(7.1%)     | 1(1.4%)   | 0(0%)    | 0(0%)    |          |
| Educational activities affected?  | Yes                        | 33(78.6%)   | 45(63.4%) | 2(66.7%) | 3(50%)   | 0.290    |
|   | No                         | 9(21.4%)    | 26(36.6%) | 1(33.3%) | 3(50%)   |          |
| Work load is increased?<br>Are new doctors / medical staff inducted to<br>handle this pandemic in your hospital?            | Yes                        | 33(78.6%)   | 35(49.3%) | 2(66.7%) | 2(33.3%) | 0.011*   |
|   | No                         | 9(21.4%)    | 36(50.7%) | 1(33.3%) | 4(66.7%) |          |
| Do you think that social distancing is being<br>observe in your ward and emergency<br>department<br>Work load is increased? | Yes                        | 20(47.6%)   | 30(42.3%) | 1(33.3%) | 0(0%)    | 0.173    |
|   | No                         | 22(52.4%)   | 41(57.7%) | 2(66.7%) | 6(100%)  |          |
| Are new doctors / medical staff inducted to handle this pandemic in your hospital?  | Yes                        | 20(47.6%)   | 38(53.5%) | 1(33.3%) | 3(50%)   | 0.862    |
|   | No                         | 22(52.4%)   | 33(46.5%) | 2(66.7%) | 3(50%)   |          |

#### Table-2: Comparison of all variables with their designation

\*Significant

\*\* Highly Significant

# DISCUSSION

The significant 2019 outbreak of novel coronavirus disease (COVID-19), first identified in Wuhan, influencing medical and nursing staff's mental wellbeing was causing them to pursue assistance. These findings, though, are yet to be determined using epidemiological evidence. Healthcare professionals and medical personnel are still at high risk of contracting infection when they work with the sick individuals on the frontline.<sup>13, 14</sup>As the risk of contracting infection in health care jobs is higher and growing day by day, the protection of health care staff is important.<sup>15</sup>In this research, we have observed that 110 (90.2 percent) subjects were concerned about the health of their family members. A study recorded that anxiety among HCWs was closely correlated with the risk of infection among themselves and their relatives, along with a lack of help from concerned health authorities.16

In current study a total of 97(79.5%) cases had suffered from mental health issues, while self reported depression, anxiety and stress was seen in 18(14.8%), 40(32.8%) and 44(36.1%) respectively. There were 110(90.2%) subjects were worried about health of their family members. The prevalence of anxiety among HCWs varying from 44.6 percent <sup>6</sup> to 62 percent has been reported by studies from China in COVID-19. <sup>13</sup> Studies performed during the SARS have reported a prevalence of depression among the front-line HCWs of 38.5 percent <sup>17</sup>The assistance obtained before and during an event is likely to affect whether the clinical prevalence of depression among the front-line HCWs is likely to be 38.5 percent or

less. There is an array of evidence on disease epidemiology, pathogenesis and poor infection management. <sup>5</sup> The self-reporting depression, anxiety and tension are also strong in the present research, as reported in the literature.

There are a variety of factors that have led to the psychological strain of HCPs, including lack of appropriate and quality personal protective equipment. <sup>18</sup> According to 28(23 percent) participants, PPE was often issued for suspected/confirmed covid-19 patients, 50(41 percent) were usually given PPE, 18(14.8 percent) rarely reported getting PPE and 26(21.3 percent) reported never getting PPE. Because of COVID-19 medical treatment was altered according to 103(84.4 percent) subjects.

#### CONCLUSION

This study concluded that the self-reported depression, anxiety and stress were high among doctors, they were afraid about the transmission of COVID -19 to their families and they were also concerned about the provision of facilities like personal protected equipment. Hence the authorities must consider their issues for their safety.

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