

## Concerns of Healthcare Professionals during Covid-19 Pandemic in Pakistan

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### Abstract

**Background:** COVID-19 pandemic has adversely affected healthcare professionals.

**Objective:** To determine the concerns of healthcare professionals during the COVID-19 pandemic.

**Methodology:** This descriptive cross-sectional study was conducted at the Department of Obstetrics and Gynaecology Unit-5, Lady Aitchison Hospital, Lahore from 1st March to 31st March 2020. Sample size of 108 healthcare professionals was taken. Six main categories of concerns were made and various themes were recognized in each category. These included; the provision of PPE, risk of getting disease at work, transmission of infection to family members, access to COVID-19 testing if symptomatic, training to provide high-quality care, and support from institutional governing bodies. Data was analyzed by using SPSS version 20.

**Results:** Regarding the provision of PPE; 35% got PPE from hospital administration, and 29% faced a shortage of kits during initial days. Regarding the risk of getting disease at work; 21% of Healthcare providers, and patients were not practicing any precautionary measures, and social distancing was not practiced appropriately (15%). Overall 36% feared transmission of infection to family members. Limited number of testing kits available per day was another concern of Healthcare providers (23%). There was not enough training or guidelines and set protocols was a concern shown by 27% and 46% showed nonavailability of funds.

**Conclusion:** It is concluded that the health care professionals are concerned about the provision of PPEs, the risk of transmission of infection to family members, lack of proper training, and shortage of funds.

**Keywords:** Concerns, Health Care Professionals, COVID-19, Pandemic

**Article Citation:** Ayyaz M, Khanum A, Maqsud M, Aiman Z, Noureen K, Jamil S. Concerns of Healthcare Professionals during Covid-19 Pandemic in Pakistan. JSZMC 2022;13(4):08-11. **DOI:** <https://doi.org/10.13101.129>

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### Introduction

Coronavirus disease is caused by severe acute respiratory syndrome coronavirus 2 (SARS COV-2). Its first outbreak occurred in Wuhan City, Hubei province of China in December 2019, which is why it is called COVID-19, and then it spread globally. WHO declared it a public health emergency and pandemic later on. Pakistan confirmed its first case of COVID-19 in February 2022, when a student in Karachi with a history of travel from Iran tested positive for coronavirus. Due to the deficiency of kits and lack of guidelines it was difficult to manage the healthcare crisis for the government and to protect healthcare professionals, it was important to provide sufficient personal protective equipment and to identify suspected cases so that the healthcare system could efficiently manage this pandemic.<sup>2</sup> COVID-19 originated in animal species bats and then spread to human species. Person-to-person spread is through respiratory droplets and contaminated hands.<sup>3</sup> Patients present with fever, dry cough, shortness of breath, diarrhea, body aches, and alteration of sense of taste and smell.<sup>4</sup> Pakistani government has developed its

own guidelines to deal with this infection by the Ministry of National Health Services, Regulation and Coordination and all hospitals dealing with it have formulated standard operating procedures.<sup>4,5</sup> Healthcare professionals including doctors, nurses, and paramedical staff play an important role in fighting against this disease. They are vulnerable to infection and mental health problems. Addressing their concerns and observing changing trends is important for better control of this pandemic.<sup>3,4</sup> The Pakistani government took the initiative of lockdown, media awareness campaign, education at the mass level, public service message, telemedicine, and established special hospitals and isolation centers for affected individuals.<sup>6,7</sup> As a result of this health care professionals have to bear the dual burden of social isolation due to lockdown and provide extra services for the additional burden of disease, therefore it is need of hour to understand and address the concerns of healthcare professionals so they can work at their maximum capacity with peace of mind and provide proper counselling and treatment of patients. The objective of this study

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**Received:** 11-09-2020

**Published:** 00-00-2022

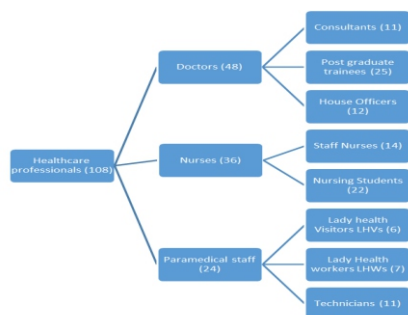
was to determine the concerns of healthcare professionals during the COVID-19 pandemic.

## Methodology

This descriptive cross-sectional study was conducted from 1<sup>st</sup> March to 31<sup>st</sup> March 2020 at the Obstetrics and Gynaecology Unit-5, Lady Aitchison Hospital Lahore. A sample size of 108 healthcare professionals was calculated by taking a confidence level of 95%, Absolute precision as 9%, and expected prevalence of administration issues as 35%.<sup>8</sup> Non-probability convenient sampling technique was employed. Healthcare professionals (doctors, nurses, and paramedics) who were willing to take part in the study were given a questionnaire to fill out about their concerns. The concerns of the Healthcare professionals included; the provision of PPE, risk of getting disease at work, transmission of infection to family members, access to COVID-19 testing if symptomatic, training to provide high-quality care, and support from institutional governing bodies. Data was analyzed by using SPSS version 20. Concern categories were presented as percentages and compared with reference to sex, and category of Healthcare provider. Ethical approval was sought from the Hospital Ethical Committee.

## Results

Our sample consisted of 108 Healthcare professionals of which 48 were doctors, 36 nurses, and 24 paramedical staff. Consultants, postgraduate trainees, house officers, staff nurses, nursing students, LHVs, LHWS, and technicians took part in the study. Their age range was 24-55 years.



All participants were working at Lady Aitchison Hospital during the COVID-19 pandemic; they were given a questionnaire and asked about their responses.

**1.Provision of PPE:** The responses of participants

about the supply of personal protective equipment were the follows: 35% got PPE from hospital administration, 29% faced a shortage of kits during initial days but later on these were easily available, 17% arranged by using their own resources either private funding or own money, 11% got this protective equipment from senior contribution either head of department or associate professors helped, and 8% gave dual response that at times PPE was easily available and at other times it was very difficult to get these kits.

**2.Risk of getting the disease at work:** This is a main area of concern for healthcare professionals that they can themselves become COVID positive: according to 21% of Healthcare providers, patients are not practicing any precautionary measures and can transmit the disease to health workers, there is increased patient load (16%) and social distancing not practiced appropriately (15%), this infection can be decreased by wearing proper personal protective equipment and training (15%), there is increased risk of disease due to disease carried by co-workers (13%), Healthcare providers if found infective can transmit disease to patients (9%), there is huge number of unbooked patients whom health status is unknown.

**3.Transmission of infection to family members:** The main fear of workers was to infect others, 36% said their old age family members are at high risk of contracting the disease due to medical comorbidities, 18% minimized infection by taking precautionary measures and practicing social distancing, education of family members is an important tool to decrease virus transmission by observing hygienic practices (17%), 12% used hand sanitizers and practiced twenty seconds hand washing 12%, one diseased member can infect whole family (10%), 7% gave dual response according to some family is affected but others denied it completely.

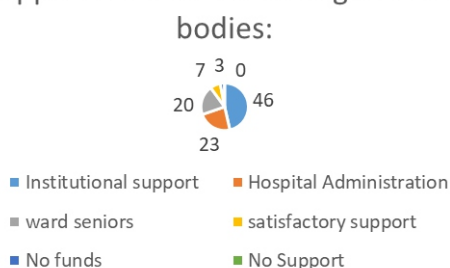
**4.Access to COVID-19 testing if symptomatic:** While caring for COVID patients health professionals develop symptoms of infection, they were inquired about testing facilities at their hospital, the limited number of testing kits available per day (23%), 21% said private testing was expensive. Results were received after a delay of two weeks (18%), access to tests is difficult (11%), the test should be free of cost and easily available at every health care facility (15%), the testing facility is available at Mayo hospital not at Lady Aitchison

Hospital (3%), there is easy access for testing is available (3%), long waiting queues (4%), and sample misplaced (2%).

**5. Training to provide high-quality care:** Overall 28% of Healthcare providers responded that public awareness message was displayed in the outpatient department, which helped in their training about this infection, there was not enough training or guidelines and set protocols (27%), 13% learned by their own, media was the source of information (16%), there should be training at mass level, doctors are already trained (7%), information was acquired by global updates (7%), excellent level of training should be there to provide high-quality care (2%).

**6. Support from Institutional Governing Bodies:** There are two extremes, 46% showing nonavailability of funds and 23% showing administrative support.

Support from Institutional governing



## Discussion

COVID-19 is RNA virus that causes infection by taking control of host cells.<sup>7</sup> Virus is surrounded by glycoprotein S which attaches to host cell receptors and causes replication of RNA.<sup>8</sup> This virus initially affects the respiratory system but other body systems are also involved. It leads to fluid retention in lung alveoli which causes edema and decreased oxygen pressure.<sup>9,10</sup>

In the circulatory system blood pressure drops, and perfusion to various organs is reduced resulting in respiratory distress and multiorgan involvement.<sup>11</sup>

This pandemic has affected a large number of countries worldwide and severely affected health resources, the economy, trade, everyday lifestyle, social gatherings (restaurants, marriage, and cinema halls, parks, entertainment spots), and the education system.<sup>12</sup> There is a great burden of disease on health care personnel and hospitals have to provide facilities to cope with the extra burden on their resources.<sup>4</sup> Dealing with this infectious disease is a new challenge to frontline health providers in the sense they have no past experience of dealing with it. Their emotional responses and anxieties are genuine fear of the unknown. They can acquire the disease while performing their duties and

their close relatives are vulnerable to infection due to direct contact. Healthcare professionals are affected in many ways by this pandemic. Their concerns were studied about the problems they faced while managing patients with COVID-19.

As we inquired about the availability of personal protective equipment, most of them got it from the administration, there was a shortage initially later on it was easily available. Head of department and associate professors contributed to this cause also. Some workers collected money on their own and managed to buy it with private funding until it was easily available from the hospital administration. Most of the healthcare professionals were worried about getting disease at work due to long duty hours, dealing with a large number of unbooked patients, and social distancing was not observed. Patients were not practicing precautionary measures so they could transmit disease to healthcare workers, also diseased health personnel were a source of infection for patients and their coworkers. This can be decreased by wearing personal protective equipment and appropriate training.

In Pakistan, hospitals are not maintaining proper records of this pandemic, and resources to manage coronavirus patients are also deficient.<sup>9</sup> Due to less knowledge and research available about transmission and protection of disease, number of equipment required for testing is less so there is rapid spread of disease.<sup>10</sup> Family members of healthcare professionals were at increased risk of getting COVID-19 infection especially old aged and immunocompromised are more vulnerable. One member can infect the whole family because this infection is transmitted by droplets and direct contact. It can be minimized by educating family members regarding hand washing, proper cleaning of surfaces, and clothes, and practicing social distancing.<sup>10</sup>

Healthcare professionals were concerned about access to COVID-19 testing if they developed fever, cough, and sore throat. The testing facility was at Mayo Hospital. It was difficult to access and a result was received after 14 days, sometimes sample was misplaced and there was a long waiting queue. Private testing was expensive. Ideally, it should be free of cost and easily available at every healthcare facility. A limited number of testing kits was available only 3% responded that they had easy access to COVID-19 testing. Another aspect that requires immediate attention is the training of healthcare workers to manage COVID-19 patients, 27% responded that there was not enough training, protocols, and guidelines, and many learned on their own, some through media and global updates. Public awareness messages should be

displayed in outpatient departments. Only 2% responded that they have access to an excellent level of training to provide high-quality care and that the general public should be trained, doctors already know about the disease.

Overall 46% were of the view that there was no support from institutional governing bodies initially but later on condition improved. Hospital administration and ward seniors were supportive during this crucial time. Only 1% was of the view that they did not receive any support and also funds were not available. The government has also developed protocols to prevent disease spread by using face masks, rushy areas, cough and sneezing etiquettes, a distance of 6 feet between individuals, and also addressed myths of this disease.<sup>11</sup>

### Conclusion

It is concluded from the above study that the concerns of healthcare professionals can be minimized by providing personal protective equipment, support from institutional governing bodies, and adequate training and there should be prompt access to COVID-19 testing. Healthcare workers should adopt precautionary measures so they are not infected and their family members remain healthy. To decrease the burden on healthcare professionals, additional options for undergraduate medical students or paramedics may be utilized in such emergency situations. However, the workforce should be kept on standby and increased so that duty hours and exposure can be reduced. Online psychotherapy and counseling services should be available to healthcare workers.

**Authors Contribution:** **MA:** Conception of work, Design of work, Acquisition & Analysis of data and Drafting. **AK:** Conception of work, Acquisition and Analysis of data and revising. **MM:** Conception of work, Interpretation of data and Drafting. **ZA:** Design of work and drafting. **KN:** Interpretation and revising. **SJ:** Acquisition & Analysis of data and revising.

All authors critically revised and approve its final version.

**Conflict of Interest:** No conflict of interest among authors.

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