

Impact of Covid-19 Pandemic on Wellbeing of Doctors in Kashmir

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Abstract

After the report of first Coronavirus case from China in December 2020, neither the infection stopped nor its reports. The infection spread so fast that within less than a quarter of year, WHO declared it as a pandemic (March 2020). This pandemic known as Covid-19 pandemic affected almost every life on this planet and caused unprecedented injury to the global economy, job market, people's livelihood, education, development and social life. The impact of this pandemic on the doctors and other healthcare practitioners was more severe as they were the frontlines and the main actors to reduce its impact.

This pandemic has increased the workload and decreased the recovery opportunities of the doctors across the globe. It affected them both physically and psychologically. The impact has been more severe on the doctors of Kashmir as it is reeling under conflict from more than three decades now. The main aim of this paper, the data for which was gathered through a survey among the allopathic doctors of Kashmir, is to understand and document the impact of Covid-19 pandemic on the wellbeing of the doctors in Kashmir.

Keywords

Covid-19 pandemic; Doctors in Kashmir; Psychological impact

Introduction

Covid-19 pandemic

The COVID-19 pandemic is an on-going pandemic of coronavirus disease 2019 that was first identified in December 2019 in Wuhan, China. It then spread rapidly to the other countries of the world. Now (June 22, 2021), the pandemic

has entered into the 77th week, but the world is still struggling to mitigate its affects and defeat the virus. Globally, the total number of cases crossed the 160-million mark and total deaths now stand at over 3.4 million (Weekly Update: Global Coronavirus Impact and Implications, 2021). As of 20 June 2021, there have been 177,108,695 confirmed cases of COVID-19, including 3,840,223 deaths, reported to WHO.

Table 1: Shows the number of confirmed cases and deaths due to Covid 19.

Region	Confirmed Cases	Deaths
Americas	70,303,157	1,848,197
Europe	55,228,011	1,171,603
South East Asia	33,861,437	466,989
Eastern Mediterranean	10,616,152	210,952
Africa	3,750,515	91,046
Western Pacific	3,348,659	51,423

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In India, the number of confirmed cases of Covid-19 is 29,977,861 as of June 22, 2021. The number of reported deaths is 389,302 and 6,62,521 active cases (Government of India, 2021). The unofficial figures claim the figure of Covid-19 cases and deaths about 5 to 10 times greater than the official tally (The Standard, 2021).

Since January 30, 2020 when first case of Covid 19 was reported in India, the virus has entered in every state and union territory of the country. In the northernmost and the youngest union territory of India, Jammu and Kashmir, the virus also spread aggressively and claimed thousands of lives, with many still battling with this infection.

According to the official update, the total number of cases in Jammu and Kashmir were 3,12,156 with 7,759 active cases and 4,262 deaths reported as on June 22, 2021.

While the rate of active cases at national level is 2.21 %, it is 2.49 % in Jammu and Kashmir. Likewise, the death rate (1.37 %) due to Covid-19 is higher at the union territory than the national average (1.31%) (Government of India, 2021).

Impact of pandemic on doctors

Studies have shown that the health officials experience high levels of work stress even during the normal circumstances and the pandemic situations like the one created due to Covid-19 pandemic increases the psychological stress manifold. Stress at work among doctors results in negative impact on health and life satisfaction and the risk of developing symptoms of burnout in the long run.^[10]

As the COVID-19 pandemic increased the work demands of the doctors and limited their recovery opportunity^[8] it had adverse impact on the physical as well as psychological health of the doctors. It has increased the risk of psychological distress among doctors.^[11]

Working for longer hours under stressful circumstances also causes mental fatigue, difficulty in detaching from the work or in controlling the leisure time, thereby resulting in poor recovery.^[25]

The doctors played multiple roles during the pandemic right from its onset. However, during this process they were badly hit. Right from the begin of the covid crisis, doctors not only provided treatment for a disease for which limited information was available but also contributed to accelerated research on potential treatments and vaccines.^[14]

On the basis of the data gathered from several nations across WHO regions, the Organization concluded that the infections among the health workers are far greater than those of the general population. The health workers represent less than 3 per cent of the population in majority of the nations (with less than 2 per cent in the low- and middle-income nations),

however, 14 percent of the Covid-19 cases reported to WHO are among health workers and this figure is as high as 35 percent in some countries. As per the Organization, thousands of health workers have died worldwide due to Covid-19 (World Health Organization, 2020). African Regional Office of World Health Organization reported more than ten thousand health care workers was infected. WHO Pan American Regional Office in Washington DC reported more than 5,70,000 Covid-19 infection cases among healthcare Workers with 2500 died due to Covid-19.^[7]

The Covid-19 pandemic increased the work load of the doctors in several aspects. It has silently affected the doctors psychologically as they witness more death and trauma on daily basis and handling this new and yet-to-be completely explored disease causes more expectations and analysis with respect to diagnosis of Covid-19 symptoms and distinguishing the same from other diseases.

It has affected the physical health of the doctors also as they have to work for longer hours, sometimes without proper protection and nutrition. Moreover, non-Covid patients are to be transferred to other “non-COVID-19” hospitals which consequently cause patients ‘influx and increase work demand^[8] at non-Covid hospitals as well. Concerns about the psychological health of the healthcare workers treating and caring for Covid infected patients is increasing.^[6] Having to balance the personal safety with professional demands can lead to distressing ethical dilemmas for doctors and force them to take the decisions in conflict with their ethical or moral values.^[18]

All the related literature revealed that the wellbeing of doctors has been badly affected by this pandemic as it has increased the levels of stress, depression, fatigue (both physical and mental) among them.

Besides encountering huge patient flow and working under more stressing situations, other factors that include limitation of protective gears, rapidly changing protocols and other relevant information, shortage of medical infrastructure can increase the stress levels.^[18]

The information about the doctors who are infected or died due to Covid-19 infection is not completely compiled by any of the organizations as many of the countries have not make the data publicly accessible.

However, a study conducted by Infectious Diseases International Research Initiative based on the compilation of the data from 37 countries gathered between July 22 and August 15, 2020 revealed that 963 medical doctors have died due to Coronavirus in 35 nations.^[7]

The data released by Indian Medical Association (IMA) revealed that 719 doctors died during the second wave of Covid-19 in India while treating the patients (Financial

Express, 2021). As many as 748 doctors died in India during the first wave of Covid-19 pandemic, making the total as 1467. [29] Important to note that the second wave of pandemic has not subsided in India yet and there are reports that the country may experience the third wave of infection also. As per the news reports, ten doctors from the union territory of Jammu and Kashmir died during the first wave of Covid-19 pandemic in the year 2020, and 3 doctors died in the union territory during the second wave of pandemic. [2] The long working hours, no leaves and stressful environment, limitations of drugs and infrastructure had impacted their physical as well as psychological wellbeing.

This paper is an attempt to understand the perception of the doctors from Kashmir regarding the impact of pandemic on their wellbeing and identify other reasons that increase their stress levels for the doctors. Conducting the studies like this one is essential to access the impact of pandemic on doctors and contribute in developing future strategies to mitigate this impact. It could be largely helpful in developing prevention and response strategies as well.

Methodology

This is a cross-sectional study conducted among the allopathic doctors working at all government health facilities in the Indian part of Kashmir. The main research method adopted for the study is Survey and the research tool was a structured questionnaire. A survey is a method of collecting data in a consistent way. Survey research is useful for documenting existing community conditions, characteristics of a population, and community opinion. [15] More specifically, a survey is a method of collecting data in a consistent, or systematic, way. This usually involves constructing a set of questions that are either asked by means of a questionnaire or through an interview.

Questionnaire/Interview Schedule: A structured questionnaire prepared was used for the purpose of the study. The questionnaire was framed to get a varied range of responses. The questionnaire was made available online to the doctors who were requested via varied mode of personal communication (telephones, emails, WhatsApp) to participate in the survey. Wherever the situation demanded (in the case where the internet facility was not available to the respondent or they preferred to verbally share their opinion rather responding to the online questionnaire, the questions were used as an interview schedule to elicit the response of the respondents.

Sample Size: Fifty doctors were interviewed for the purpose of the study. The sample was divided equally among females and males. Care was taken to include the doctors from different age groups and from varied specializations. Data were collected in May & June 2021 when the valley was witnessing second wave of Covid-19 infection cases. The information was gathered on the condition of anonymity where the name and the contact details of the respondents

was asked 'optionally' as some of the doctors had a fear to share information in view of a circular issued by the Directorate of Health Services, Jammu and Kashmir on April 1, 2020 that prohibit all the government servants, including doctors to speak against the government's efforts to combat the pandemic on social media or to the press (Jammu and Kashmir Directorate of Health Services, 2020).

Healthcare and availability of doctors in Kashmir

As per the information shared by Ashwani Kumar Choubey (Union Minister of State for Health and Family Welfare) during a parliamentary session, there are about 12,55,786 (about 12.5 lakh) allopathic doctors in India that include 3,71,870 (about 3,72 lakh) specialized doctors who hold post-graduate qualifications. The doctor-population ratio in India is 1:1343 (1:3629 for specialized doctors) considering the population of the country as 135 crores. However, out of the total number of allopathic doctors, only 52,666 are registered with Medical Council of India. The maximum doctors are in the state of Maharashtra (1,88,540), followed with Tamil Nadu (1,48,216) and Karnataka (1,30,698). [12] However, there is no data available on the distribution of doctors in rural and urban areas. There are 479 medical colleges in India with an intake capacity of 67,218 students per annum (Press Trust of India, 2017).

In Jammu and Kashmir, the total number of doctors registered with the State Medical Council is 16,491. [12] As per the Directorate of Health Services, Kashmir, the number of doctors in Kashmir is 1980 (including 162 in-position doctors in the Union Territory of Ladakh) (Directorate of Health Services, Kashmir). The undated data was retrieved on May 23, 2021. Doctor-patient ratio in Jammu and Kashmir is among the lowest in India. [20] There are 79 total doctors for every lakh population in Jammu and Kashmir that includes 72.3 allopathic doctors, 3.7 ayurvedic doctors, 0.3 homeopathic doctors and 2.6 unani doctors (World Health Organization, 2016).

Kashmir, the northernmost place of India that lies between Himalayan and Pir Panjal mountain range is reeling under conflict from last three decades that make it one of the 'world's most dangerous conflict'. [4] The decades old conflict has shattered the valley socially, economically and politically. Being a conflict-torn territory, the valley citizens are suffering from multiple psychiatric disorders. As per a report, about 1.8 million people in the Valley have reported the symptoms of mental distress, A survey conducted by an international NGO, Medecins Sans Frontiers (MSF, also called Doctors Without Borders) revealed that 41% of the population have symptoms of depression, 26% have symptoms of showed signs of anxiety and 19% showed probable symptoms of post-traumatic stress disorder (PTSD). [35] As per a web portal maintained by Institute for Conflict Management established by an Indian Police Service Official, the number of people killed during the conflict in Jammu and Kashmir is 45,230 from 1988 to 2019 (The Institute for Conflict Management, 2019). Some actors in the conflict claim that death tolls are higher, more than one lakh

people died in Kashmir since 1989 (1989-2008) (Reuters, 2008). These circumstances have put a huge stress on the healthcare system of the valley in general and doctors in particular.

For more than ten months during Covid-19 pandemic, the 4G mobile internet services were suspended in most districts of Kashmir, during which the healthcare professionals were struggling to access the researches and other material related to the treatment and reaction to the coronavirus disease (The Wire, 2021). It was suspended in the valley for more than 17 months since August 2019 when the Centre's withdrew the erstwhile state's special status. [5] As per a news report published in national daily newspaper, there is a shortage of doctors in Kashmir that has overburdened them as they are supposed to attend huge number of patients without respite or leave (Hindustan Times, 2014). Few months before the outbreak of Coronavirus disease, a news article on a news portal raised similar concerns that basic healthcare and emergency services in Kashmir are working in extremely difficult circumstances (The Scroll, 2019), that had also resulted in long waits at hospitals, medical shortages and patients going without urgent surgeries (Ali & Maqbool, 2019). The density of the homeopathic doctors in Jammu and Kashmir is also among the lowest. It is 0.3 per cent in Jammu and Kashmir as compared to national density of 6.5 per cent and 91.3 per cent of the doctors in Kashmir are allopathic doctors (World Health Organization, 2016).

Though there is an acute shortage of female doctors across the country as only 17 per cent of all allopathic doctors and 6 % of those in rural areas of India are women. [19] The percentage of female doctors (allopathic doctors) in Jammu and Kashmir is only 23.6 per cent (World Health Organization, 2016).

Survey Findings

The respondents of the survey include department heads, medical officers, associate professors, professors, consultants, senior/junior residents, and the doctors pursuing their post-graduate degrees. Majority of the doctors (92 %) of the doctors interviewed for the study had attended/treated the Covid-19 patients, while another 2 % were not sure whether they have attended/treated Covid-19 patients.

Fifty-six per cent of the doctors interviewed were infected by the coronavirus. Among the doctors who were infected, 68 per cent had mild symptoms of the infection, 28 per cent had moderate symptoms and about 4 per cent had got severe symptoms. Majority of the respondents (77.4 percent of the infected respondents) felt that they got the infection while on duty (at hospitals or clinics). Ten percent of the respondent doctors opined that they might have got the infection through their other contacts or from other places (like market, personal gathering, neighborhood, etc.) and about 13 per cent of the respondents had no idea as from where they contacted the infection.

Family members of 64 percent of the doctors were infected by the coronavirus, 44.4 per cent of them (family members)

had moderate symptoms and 11.1 per cent of them had severe symptoms. About 9 per cent of them had reported deaths in their families due to Covid-19. About 59 percent of them thought that their family members might have caught the infection through them.

It reflects that, it is not only the doctors themselves, who have got infected in the line of their duties but their families were also equally vulnerable due to the professional responsibilities of these medical practitioners.

Effect on normal life: While the pandemic affected societal structure in many ways but the impact has been much more on the doctors. Ninety-four percent of the respondent doctors said that they have avoided meeting their families for many days as they thought they were exposed to virus during duty. Thirty-eight percent of the respondents had avoided meeting their families more than 10 times thinking that they were infected. Other forty-two percent had avoided it 4-10 times, 15.5 per cent avoided it for 1-3 times. Eighty-two percent of the doctors said that they were not able to spend their leisure time with their families and children, 46 per cent said that they couldn't manage to eat healthy, nutritious and food of their choice due to pandemic.

Infrastructure and satisfaction: Only 12.2 per cent of the doctors said that they were provided decent accommodation when they require it for isolating themselves or during illness. Eighty-three percent of the respondents said that they were not provided accommodation and 5 percent said that though the accommodation was provided but it was not decent enough. Three-fourth (75.7 %) of the doctors said that they were not provided any medical care during isolation period or illness.

Majority of the respondent doctors (56 %) felt that they were not provided sufficient protective gears while on duty. Sixty-two percent respondents were not satisfied with the quality of the protection gears provided to them at duty and 72 per cent were not satisfied with the number of the protection gears as provided to them during the pandemic. Only 18 per cent of the doctors felt that the healthcare facilities in Kashmir are sufficient to control the pandemic.

Doctors and vaccination: Majority of the doctors i.e., 86 percent said that they got the vaccination on priority while the remaining 14 per cent felt that no such priority was enjoyed by them.

Pandemic and Mental Health of doctors: Researches reveal that even before the Covid-19 pandemic, the doctors were at a greater risk of suicide across the globe. As per one such report, 23.78 percent of the healthcare workers have reported anxiety, 21.75 percent have signs of depression and 40 percent of them experience sleeping difficulties and/or insomnia. Besides milder mood symptoms are very common among the healthcare workers across the globe. [21] As per World Health Organization, 25 per cent of the reported cases of depression and anxiety and 33 per cent of the suffered insomnia cases during Covid-19 pandemic are the health care professionals (World Health Organization, 2020).

This study revealed that more than one-fourth of the doctors (28%) had to work for more than 50 hours a week, 24 percent doctors work for 40-50 hours per week, 28 percent work for 36-40 hours a week and the remaining 20 percent had less than 36 duty hours a week. Eighty-four percent of the doctors felt that the pandemic had a bad impact on the mental health of doctors in Kashmir. Ninety-four percent of the doctors said that the current pandemic is impacting their personal psychological health [Figure 1].

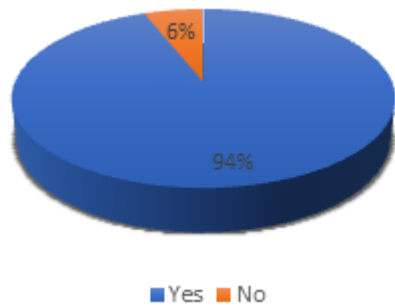


Figure 1: Impact of Covid-19 pandemic on psychological health.

A large majority (96%) of the respondents felt that the work of doctors is very stressful during pandemic and the magnitude of stress the doctors experience is reflected in the Fig. 2 that shows 86 percent of doctors experience high levels of stress. Thirty-two per cent of doctors said that they are not able to share their stress and problems with their families and thirty-six percent said that they are not able to share the stress and problems with their peers and colleagues.

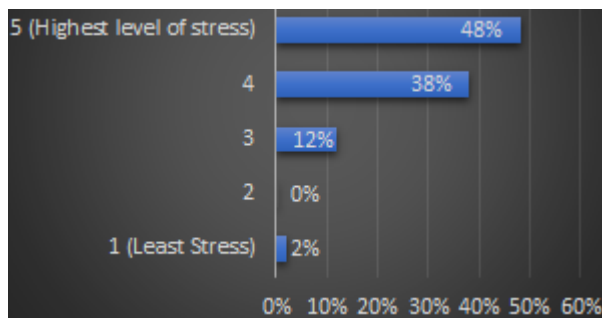


Figure 2: Magnitude of stress among doctors.

The figure below [Figure 3] presents a picture of the impact of Covid-19 pandemic on the mental health of the doctors in Kashmir. Majority of the doctors (64%) reported that they experience irritating behaviour during the pandemic, 62 % experience anxiety, 60 % felt difficulty in concentration and more than one-half (54%) said that they feel emotionally isolated. Forty-two percent doctors experience insomnia and slightly less than this number (40%) has lost their interest in their appearance. More than one-third of the doctors feel frightened and slightly less than one-fourth of them (24%) experience depression. Thirty percent of them said that they feel aggression in their behaviour. It is surprisingly to note that only 4 percent of the respondent doctors said that they have none of these symptoms. More than one-fourth of the

doctors (28.6 %) said that they had thought of leaving their profession during this profession.

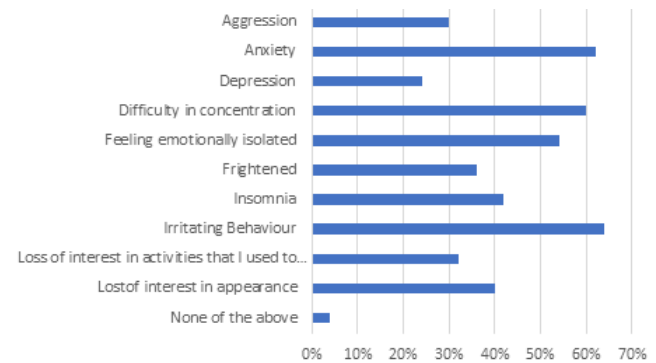


Figure 3: Symptoms experienced by doctors during Covid-19 pandemic.

Majority of the doctors said that their concern regarding the health and safety of their children and family have increased their stress levels manifold. As per a female doctor, ‘a doctor dies several times a time, whenever he is helpless in saving a life from this deadly disease’. Some report having nightmares of the dead patients. ‘Whenever a patient dies despite hard efforts of doctors, we doubt the treatment that we are following’, said another doctor.

The doctors reported that the rumours and mis-information regarding vaccination, non-availability of support facilities, witnessing young people dying and witnessing the pain and trauma every family experience after a death due to Covid multiply the impact of the pandemic on their mental health. Lack of sufficient good quality protective gears, long duty hours, hectic duties, unavailability of good accommodation and no medical support during illness has made their life more stressful and depressing. A few doctors also consider lack of coordination between doctors and administrative management, harassment of doctors at work-places, impulsive attendants and thankless patients the cause of high work stress. ‘It is mostly the ungrateful attitude of the patients' attendants despite best efforts that puts the doctors down. Also, a little appreciation from superiors could be very helpful. Constant pressure from both the sides is too much to bear with at times’, suggestion from a senior doctor

None of the respondents felt that there is no need of psychological counselling for the doctors working during current pandemic. While 76 % said responded there is a need for the psychological counselling to the doctors, 24 % of them were not sure whether this service is required and responded as ‘may be’.

Leaves: After the spike of Covid-19 cases reported in Kashmir in 2021, the leaves of doctors, nurses and other paramedical staff in the valley hospitals were cancelled by an order of the director health services, Kashmir (PTI, 2021).

The survey revealed that majority of the doctors (82 %) was not able to take any leaves during the pandemic. And the types of the leaves taken by the other doctors during pandemic are of emergency nature that includes medical or

maternity/paternity leave. Seventy percent doctors said that doctors in Kashmir don't get sufficient leaves/breaks and 26 % said that some doctors get sufficient leaves/breaks but not all the doctors. Eighteen percent of the doctors said that they don't get one-day off every week.

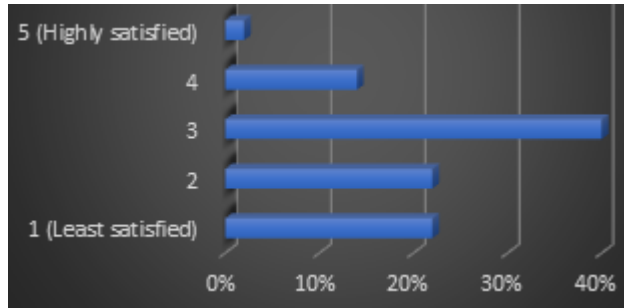


Figure 4: Level of satisfaction with the duty schedules during pandemic.

Only 18 percent of the doctors are satisfied with their duty schedules during the pandemic. The level of their satisfaction is represented in Fig.4. More than one-third of the doctors expressed that they want reduction in their duty hours while other 37.5 percent of the respondents felt the need of more breaks and leaves.

Eighty-two percent of the doctors perform night shifts. While forty-two percent of doctors have more than five night shifts every month and forty percent of the remaining doctors have at least one night shift every month [Figure 5].

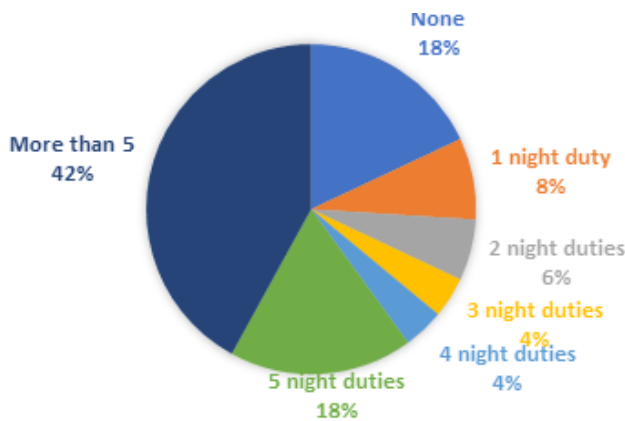


Figure 5: Number of night shifts every month.

Conclusion and Discussion

The survey is the first known effort to gauge the impact of the Kashmiri doctors on their wellbeing during Covid-19 pandemic. The Covid-19 pandemic had affected the physical wellbeing and mental health of the doctors across the globe in varied ways but this impact is more stressful in Kashmir as it is one of the oldest conflicts in the world. The study based on the inputs from fifty doctors from the valley revealed that the pandemic has affected their personal lives as well as the health of their families. About 9 % of the doctors have deaths due to Covid-19 infection in their families and majority of them think that their family members got the infection through them. It reflects that, it is not only the doctors

themselves, who have got infected in the line of their duties but their families were also equally vulnerable due to the professional responsibilities of these medical practitioners.

The pandemic has affected the social life of the vale doctors in many ways as they were not able to meet their families for longer periods thinking that they were exposed to the infections. Besides they were not able to spend sufficient time with their families and spend quality time with them and enjoy nutritious food of their choices. Mostly the doctors seemed dissatisfied with the facilities provided to them during the pandemic like decent accommodation, medical care during illness and sufficient good-quality protection gears.

Majority of the doctors are experiences high levels of stress during pandemic and majority of them reported the symptoms of anxiety, feeling of isolation, irritating behaviour and difficulty in concentration. The doctors are not very satisfied with their work environment, quality and quantity of protective gears and healthcare facilities available as majority of them have not been provided decent accommodation and medical care during their illness. Almost all of them (96%) felt that the work is very stressful for them during pandemic. Among the multiple recommendations made by the doctors to mitigate the exposure level of the doctors and minimizing the impact of the pandemic on the wellbeing of the doctors:

Human infrastructure: The need of having increased human resources at the hospitals was expressed by the doctors. The doctors believed that increased human resources can help to reduce the exposure levels of the doctors.

For reducing exposure: The doctors are exposed to high levels of infection. To minimize this exposure, the respondents made some important recommendations that include adoption of online mode for academic and administrative meetings and online post-discharge consultations of patients; besides compulsory RT-PCR tests for the newly admitted patients. In emergencies, the patients should be treated as 'infected' and treated with proper protective gears on, that should be made available to all the doctors in sufficient quantity. Random testing of patient attendants was also recommended, along with regular (like weekly) testing of all the patients. The restrictions on the entry of attendants were also suggested. In case any of the employees have any symptom of the infection, his/her attendance should be excused.

Work schedules, duties: Many doctors suggested proper rotational shifts should be followed to regularly shift the doctors from high-risk wards to low-risk wards to avoid high viral load exposure. The duration of the shifts should also be reduced to 6 hours along with the reduction in the number of days. The need of leaves or fatigue breaks were badly felt by most of the doctors interviewed for the study.

Vaccination: Vaccinations should be made compulsory to all especially all employees. Pertinent to mention that presently, vaccination for all the employees is aggressively being campaigned.

Infrastructure: Many doctors recommended adopting Telemedicine module that involves diagnosis and treatments of patients by means of varied telecommunication technologies. As majority of the respondents were not satisfied with the quantity and quality of the protection equipment provided, it was also recommended that to work on these areas, besides making decent accommodation to the doctors, at least at the time of need. Up gradation of the hospital infrastructure and employment of adequate manpower were the main suggestions made by the doctors. It was followed by the suggestions on the quality and quantity of the protection gears.

Other suggestions include availability of proper food and recreational facilities for doctors at hospitals and providing encouraging incentives to the doctors treating/attending Covid-19 patients. The doctors expressed the urgent need of organizing regular counselling sessions for them during the pandemic.

A well thought out work roster and rationalization of the healthcare practitioners was greatly felt during the study. Need for increasing the human resources and physical infrastructure has become the need of the hour.

Author contributions

All authors contributed to the design, analysis of literature, writing and revision of the article.

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