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RESEARCH ARTICLE

A SURVEY OF MEDICAL PROFESSIONALS' PERCEPTION AND CHALLENGES IN DEALING WITH COVID-19 OUTBREAK IN INDIA

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ABSTRACT

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Key Words: COVID-19, Pandemic, Healthcare, Survey, Medical, India The Corona Virus Disease 2019 (COVID-19) is a disease caused by a previously unidentified strain of corona virus family which emerged in Wuhan, Hubei, China in December 2019. Since then the outbreak has transformed rapidly into an extensive global crisis, overburdening the healthcare systems worldwide as well as creating economic instability. Prime mode of transmission in humans include droplet or contact transmission. Healthcare professionals are the frontline warriors who are working tirelessly in order to manage the ever increasing number of patients with each passing day. Such a pandemic is bound to have a lasting impact on the mental and physical health of Doctors and paramedical staff for a long time. This paper is an attempt by the authors to examine and understand the perspective of Medical Professionals related to the obstacles they may be facing in these challenging times from the government and the public in general patients

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INTRODUCTION

A novel Coronavirus Disease was identified in Wuhan, China in December, 2019 to be the cause of multiple pneumonia related new cases. The virus is named currently as SARS-CoV-2 and the disease is called as Coronavirus Disease 2019 (COVID-19).^{1,2} The first case of this disease in India was reported on 30th January, 2020. It was declared a pandemic in March, 2020 by WHO.³ As of 30th April 2020, worldwide there are 3,232,975 confirmed cases and 228,517 deaths.⁴ India- As of 30th April 2020, the Ministry of Health & Family Welfare India has confirmed 33,610 cases out of which 24162 are active cases and 1075 deaths with 8373 cases discharged or cured.⁵ On 24th March 2020, under the leadership of PM of India, a nation-wide lockdown of 21 days was exercised for the 1.3 billion people of India which was further extended till 3rd May 2020. The timely lockdown bought sufficient time for healthcare system in India to prepare for a possible surge in cases which happened in other countries, putting a massive burden on healthcare infrastructure. As the largest democracy in the world stays at home to break the chain of the transmission of Corona Virus, health-care

**Corresponding author:* Abhimanyu Sharma, MDS, Sr Research Associate, Oral Surgery, ESICDC, New Delhi. workers being the frontline warriors do the exact opposite putting themselves at high risk from COVID-19.⁶ The lag time between the first reported case, declaration of pandemic and nation-wide lockdown does not take away the fact that the containment measures and preparedness might not comply with the supply-demand deficit.^{7,8}SARS-CoV-2 is spread by droplet and contact. The Centers for Disease Control and Prevention (CDC) recommends the use of personal protective equipment (PPE) when treating patients with COVID-19 to ensure minimal risk of infection. PPE includes a gown, gloves, N95 mask, etc. The major areas to focus on are the potentially overwhelming burden of disease that challenges the capacity of health care facilities and the adverse effects on health care workers including the risk of infection and the consequent mental health issues.^{9,10}

METHODOLOGY

A Pan India online survey was conducted by Excavate Research Pvt Ltd, New Delhi with a purpose to understand the psychological and physical barriers among the doctors. Inclusion criteria for the survey being those doctors who are directly involved in treating COVID-19 patients (ENT, Physician, Cardiologist, ICU/Emergency Care, Anesthetist). Exclusion criteria for the survey comprise of nursing or supporting staff involved. Responses were desired as selection of one of the mentioned options among multiple options in the questionnaire/survey forms (anticipated most suitable) and thus no specific test of statistics was needed or mentioned. Sample size - A survey was conducted among 1635 Doctors of India.

A questionnaire was presented for them to address the questions comprising of COVID-19 pandemic, patients, quality of supply, concerns, discrimination, opinions on steps to be taken by the government and suggestion for patients or people staying at home, etc.

RESULTS

Doctors and COVID 19 patients: It is found that General Physicians and Cardiologists comprise of 64% of the total doctors engaged in treating COVID-19 patients. The estimate of time that a treating Doctor commits on the care giving displays that around $2/3^{rd}$ of the doctors spend around 8-12 hours on the sick patients whereas 14% of the Doctors spend over 12 hours. This implies that 78%, i.e. over $3/4^{th}$ of the doctors are in contact with the sick patients for more than 8 hours. Furthermore, the heterogeneity of the recovery time of the patients is worth consideration. While only 4% patients recover in a week's duration, there is a heterogeneous distribution of patients recovering in 2, 3- and 4-weeks duration. This implies that there is a significant risk of exposure among the doctors engaged in patient care.

Understanding the satisfaction among Doctors and their major concerns amid the pandemic: As the pandemic accelerates, access to personal protective equipment (PPE) for Doctors is a key concern .¹¹ Concerns regarding PPE shortages have been described in the most affected facilities. In the present survey, over half (58%) of the doctors expressed their concerns regarding the lack of availability of PPE. Among these 67% are those who are working for more than 15 hours for whom availability of PPE is the major concern. The survey also displays that only one third of the Doctors are satisfied with the quality of medical equipment, PPE, testing kits, etc. while 27% are not satisfied and 40% are neutral. Among the satisfied Doctors, 83% are also satisfied with the Quantity of the supplies. One interesting finding is of the source of supply and the satisfaction level of the quantity of PPEs. Among the Government source of supply, 23% are satisfied with the quantity and furthermore, 42% are satisfied with the Quality of supplies. Among the Metro Cities 58% of doctors are satisfied with the Quantity of supplies. There is also a burning concern of half of the Doctors regarding their own family members and 41% are worried about their own health. Over one third (38%) of Doctors also express the concerns regarding the uncooperative patients while they are invested in their care. This is critical as they are waiting for the equipment while already seeing patients who may be infected or are supplied with equipment that might not meet requirements.¹² Alongside concerns for their personal safety, doctors are anxious about passing the infection to their families.¹³

Discrimination amid COVID 19: While the frontline warriors including the Doctors and other health workers serving the nation to fight coronavirus have been widely applauded, however, in India, they are also suffering of public assault, stigma, and discrimination. Given the current status of COVID-19 in India, doctors are succumbed to operating at more than maximum capacity for many months.

They are presumed to carry the virus, furthermore, almost half of the doctors mentioned that they are suffering undue discrimination and public assault by the neighbors/landlords either themselves (12%) or their fellow doctors (38%). Such cases where doctors are shunned in public, refused access to public transport, and even evicted from rented homes have been found in other nations as well which is another matter of concern.¹⁴

Perspective, Expectations, Suggestions: In this survey, a Doctors' perspective on the current situation in India is of distinguished importance. While a quarter of the doctors believe that the low number of cases in India is only due to low number of tests being conducted, another 22% think that India is tackling the situation much better than the rest of the world. However, 40% of them think that most Indians are still not taking the situation seriously which is increasing the spread. Among these, 10% think that the situation is going to get worse while merely 3% think that the situation will get better in the coming weeks.

Majority of the Doctors resonate with and encourage the Universal precaution measures of hand washing (81%) and sanitization of outside items (83%). 62% of them express the need of awareness of the current and changing situations as a valuable learning during the current time. Among them, almost half (53%) of the doctors suggest that measures to improve immunity by intake of Vitamin C rich foods is also an important nutritional practice. ¹⁵ As much as we need the frontline warriors, there is a dire need of strategic leadership and decision making from the Government to fight this battle. As per the survey, 74% of these frontline warriors think that extensive door to door screening is one of the most tangible action to contain the spread of virus. 59% of them express the criticality of stricter police action and accommodation for medical professionals. Half of them seek that the government ensure sanitization of affected neighborhood and 49% seek prompt action on building more isolation camps for the infected cases to break the chain and control the spread of infection.

DISCUSSION AND CONCLUSION

This survey aims to ascertain a baseline perspective of Doctors all over India regarding the current pandemic, preparedness, way forward and challenges. Currently, India is in dire need to focus on an adequate health care task force and escalating their potential to cater to an increasing volume of patients.¹⁶ Given that the volume of critically ill patients could surge in the coming weeks to months, it is also essential that the health system should be able to perform to its full potential over an extended period. This survey also supports the universal precautions of hand washing, sanitization, respiratory hygiene and stringent social distancing as the panacea to contain the virus spread. Results from the survey exhibit physical and mental exhaustion, the challenging triage mechanism and the stress of the infection risk to self and family members. Furthermore, they are presumed to carry the virus and suffer undue discrimination and public assault by neighbors/landlords either themselves (12%) or their fellow doctors (38%). There are cases from the globe where doctors are assaulted in public, mistreated by uncooperative patients, refused access to public transport and even evicted from rented homes. This is a matter of concern as presently, health-care workers are our most valuable resource.¹⁷

Simultaneously, the importance of coping with this crisis and emotional stressors cannot be neglected.¹⁴ Health care professionals face greater risk of exposure, burdening work hours, moral dilemmas, and a dynamic environment. ¹⁸ These factors vouch for addressing their concerns, physical and mental wellbeing and strong leadership and advocacy.¹⁹

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