

# Assessment of Perceptions Regarding Societal Behavior Towards COVID-19 Positive Health Care Workers and their Families

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**Abstract:** In the currently ongoing COVID 19 pandemic, most susceptible group at risk of mental health problem is Health Care Workers (HCWs). The aim of this study is to assess the COVID 19 positive HCW's perception to societal behavior towards them and their family. This descriptive study was conducted on COVID 19 positive HCWs in a Dedicated COVID Facility of Western Maharashtra during February 2021 to May 2021. After explaining the purpose of study, prospective participants were assured for anonymity and confidentiality of data and their informed consent were taken. Data were collected by using online questionnaire formed on Google forms. There was a total of 151 respondents. The mean age of male and female HCWs were 33.85 +/- 9.25 years and 33.87 +/- 9.19 years respectively. A significantly higher proportion ( $p=0.0007$ ) of female respondents felt hurt by people's behavior after becoming COVID-19 positive. A significantly large proportion of females ( $p=0.0004$ ) agreed that COVID 19 will affect our society for long duration. Workplace exposure, risk of getting infected and transmitting the infection to family members and friends and poor acceptance to COVID 19 positive status in society has all contributed to affecting the physical, mental and psychosocial status of the HCWs in this COVID 19 Pandemic. By increasing awareness in society and recognizing the concerns with efforts to support, facilitate, and protect HCWs, will certainly improve the current situation.

**Keywords:** COVID 19, Health Care Workers, Societal Behavior

## 1. Introduction

China reported an outbreak of unexplained pneumonia in Wuhan, the capital of Hubei province in December 2019. 2019–novel Coronavirus (2019–nCoV) name was given after isolation of virus from Human airway epithelial cells. [1] On March 11, 2020 after assessing the situation worldwide, World Health Organization (WHO) declared the coronavirus disease 2019 (COVID-19) outbreak caused by the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) a pandemic. [1],[2] This viral infection commonly causes cough, cold, fever, breathing problems which ultimately leads to pneumonia [3].

The COVID-19 pandemic has triggered an unprecedented scenario not only for the public, but also for healthcare workers

around the world. Following in the footsteps of China's response to the COVID19 outbreak, social distancing measures such as nationwide lockdowns and mass movement restrictions had been taken by the governments of all affected countries to limit the spread of the virus, prevent transmission and infection from person to person. [4] The spread of COVID-19 in India was initially characterized by fewer cases and fewer deaths compared to many developed countries due to strict lockdown and demographic factors. [5] Limiting social interactions in the workplace, recreation and educational settings gives vulnerable populations a higher chance of surviving the outbreak. [6] The Covid19 pandemic has resulted in prolonged exposure to stress. The recent Covid19 pandemic has had significant psychological and social impacts on people. [4],[7] Many of the researches have enumerated the effect on psychological well-being of the most exposed groups, such as children, college students, and health care workers, as they are more likely to develop post-traumatic stress disorder, anxiety, depression, and other symptoms of distress. [7]

Regarding the mental health impact of the pandemic, healthcare workers represent a particularly vulnerable group due to the high risk of infection, increased work stress and fear of contagion to their families. [8] A research conducted on medical care workers in China's seven provinces mentioned about perceived threat and social support. [9] There are very few studies which assess the cause of psychosocial effect on health care workers. The aim of this study is to assess the perception of social behaviour and thoughts, of COVID 19 positive workers towards them and their family.

## 2. Material and Methods

This descriptive study was conducted on COVID 19 positive health care workers working in Dedicated COVID Hospital of Thane district, Maharashtra. The study was conducted between February 2021 to May 2021. All HCWs of the facility, who tested positive for COVID 19 either by Antigen testing or RTPCR testing, during the study are included (Complete

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enumeration). HCWs who were not employees of facility but were admitted for treatment were excluded from the study. Clerical, managerial and security staff were also excluded from this study. The final study participants included Patient care and housekeeping staffs working in the above-mentioned facility. After explaining the purpose of study, prospective participants were assured about anonymity and confidentiality of data and their informed consent was taken.

Data was collected by interviewing the HCWs using electronic survey as per their convenience. Questionnaire was pre tested and pre validated by subject expert. To reduce the ambiguity in responses, dichotomous options of “Agree” and “Disagree” were given. Obtained data was then entered into Microsoft Excel spreadsheet and analysis was done. 95% Confidence interval was stated as [Mean-(1.96)\*Standard Error] – [Mean+(1.96)\* Standard Error]. Standard error of difference between the sample means and sample proportions were calculated to determine the statistical significance at  $p < 0.05$ . Chi-square test was applied to assess the social perceptions.

1) *Operational definitions*

- *Patient care*- This category included HCWs directly involve with treatment and care such as Doctors, Staff nurses and Ward boys.
- *House Keeping*- Personnel involve in cleaning of wards, toilets and clothing materials etc.

**3. Results**

A total of 151 respondents participated in this study: 79 (52.32%) were Females and 72 (47.68%) were Males. The mean age of male and female HCWs were 33.85 +/- 9.25 years and 33.87 +/- 9.19 years respectively. As per work profile 122(80.79%) participants were associated with patient care while 29 (19.20%) were housekeeping staff. Among all, 121 participants (80.14%) had education attainment up to higher secondary level or above (Fig.1). Highly significant gender difference was found in work profile ( $Z=4.359, p=0.00001^*$ ) and level of education ( $Z=3.776, p=0.00008^*$ ) of HCWs at the COVID facility.

Questions of social perceptions were based on observations of participants. Their thoughts and experiences were assessed in person with the preformed questionnaire. Thirty-five males (49%) and 41 females (52%) were concerned about people’s discriminating attitude towards them at the time of their COVID 19 positive status. (Table-1) A significantly higher proportion ( $p=0.0007$ ) of female respondents felt hurt by people’s behavior after becoming COVID-19 positive and also a significantly large proportion of females ( $p=0.0004$ ) agreed that COVID 19 will affect our society for long duration as shown in Table 1.

**4. Discussion**

Social distancing, Isolation and quarantine are the measures to contain the spread of COVID-19 pandemic, but these measures had severe consequences on the mental health in general population as well as on healthcare workers across the globe. Specifically, frustration, loneliness, and concern about

the future are common reactions and represent well-known risk factors for several mental disorders, including anxiety, depression, and post-traumatic stress disorders (PTSD). [10],[11] These Concerns arose in healthcare workers due to highly infectious nature of disease, workplace exposure and continuous risk of getting infected and transmitting to family and friends, uncertainty and lack of control over the disease progression due to lack of definite treatment options modalities, uncertain and long working hours and disturbed professional and personal life, extreme precautions and fatigue due to PPE, and lack of social support due to isolation and social distancing. [4] In this study, 67% male and 72% female health workers had opinion that being COVID-19 positive is a cause of social rejection. This is an example of lack of social support. Psycho-social interventions include Pre-employment training to identify and respond to psychological problems in COVID19 patients, shortened shifts, Psychological counselors often come to the rest area to listen to all difficulties and stories that employees are facing at work and provide appropriate support,[12] 24x7 telephone hotlines for health care personnel to get in touch with psychiatrists or psychologists to provide immediate psychological support, personal protective equipment, space to rest and training on how to deal with

Table 1  
Particulars

Particulars	Responses	Male (n=72)	Female (n=79)	X <sup>2</sup>	p value
Most people with COVID are rejected when others find out	Agree	48	57	0.53	0.4645
	Disagree	24	22		
Some people who knew that I had COVID have grown more distant towards me	Agree	29	29	0.20	0.6525
	Disagree	43	50		
Since learning I had COVID I worried about people discriminating against me	Agree	35	41	0.16	0.6865
	Disagree	37	38		
I have been hurt by how people reacted after they knew that I had COVID	Agree	18	41	11.45	0.0007*
	Disagree	54	38		
I feel COVID is being portrayed as being more dangerous in our society than it actually is	Agree	39	32	2.82	0.0930
	Disagree	33	47		
I feel COVID will have a long-term psycho-social effect in society	Agree	49	72	12.60	0.0004*
	Disagree	23	7		

painful patient conditions and take action on complaints from healthcare professionals.[13],[14].

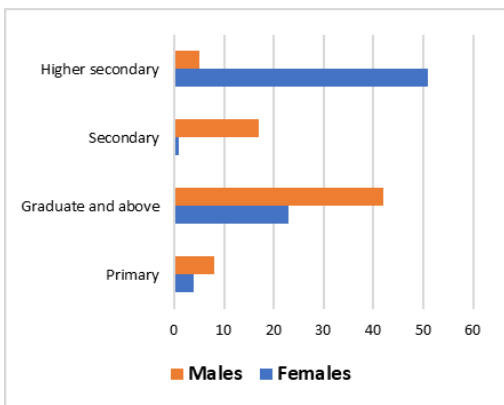


Fig. 1. Gender Distribution for level of education

### 5. Conclusion

COVID 19 pandemic causes severe psychosocial impact on health care workers across the world. Pre employment counselling, formulation of standard operating protocols, Tele-psychiatric consultation are the important measures to tackle the situation. As the pandemic is progressing, awareness is increasing as well as vaccination programmers across the world is helping in controlling the damage, but the long-term consequences of previous waves are topic of research. Further research on psychosocial concern will improve our knowledge and can be helpful in formulating strategies not only for the COVID-19 pandemic but in general for mental health of Health care workers.

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