



International Journal of Current Research Vol. 13, Issue, 08, pp.18442-18445, August, 2021 DOI: https://doi.org/10.24941/ijcr.41971.08.2021

#### **RESEARCH ARTICLE**

## EXPERIENCE OF HEALTHCARE WORKERS INFECTED WITH COVID-19 IN A SELECTED HOSPITAL OF MUMBAI

#### MD. Najemoddin Quazi, Sheryl Cornelio and Capt. Valsa Thomas

Dr. Lh Hiranandani Hospital, Powai, Mumbai, Maharashtra, India

#### **ARTICLE INFO**

# Article History: Received 27<sup>th</sup> May, 2021 Received in revised form 10<sup>th</sup> June, 2021 Accepted 15<sup>th</sup> July, 2021 Published online 30<sup>th</sup> August, 2021

#### Key Words:

COVID-19, Healthcare Workers, COVID-19 Experiencce.

\*Corresponding author: Azra Kamal

#### **ABSTRACT**

Title with Purpose of the study: COVID-19 infection is spreading throughout the world and collapsing the morale of the world. In this pandemic the health care workers are at risk of contracting the pandemic due to direct exposure to the covid 19 positive patients. It is imperative to identify the risk factors and hence protect the healthcare workers in order to safeguard the patients and healthcare workers. The objective of the study was to assess the experience of healthcare workers infected with COVID-19. Material and Methods: The study was conducted at Dr L H Hiranandani Hospital. Sample size was 110 selected by non-probability convenience sampling technique. The tools used for the study were: Tool1: Demographic data consisting of demographic information of the healthcare workers infected with Covid 19. Tool 2 consisted of open ended questionnaires on experience of Covid 19. Data was collected and analysed by using inferential statistic method. Results: Analysis of the data has revealed that majority (24.5%) of the sample were in the age group of 25-30 years of age. A vast majority (58.8%) of the samples were females. Among the various occupation, a vast majority (38.88%) of them were nurses. Interestingly, a majority of 67.27% of the healthcare workers infected were working in Covid area and 74.55% of the samples infected used PPE while on duty. An open ended questionnaire was given to all the samples, the content of which was collated, Experience was collated. The common theme identified were: Theme 1: Fear: Of being in isolation and fear of death, fear of being contaminated., Theme 2:Experience of infection: physical discomfort, Theme 3: Psychological effect- panic situation, loneliness due to isolation. Theme 4: Social impact: Social stigma, isolation, impact on near and dear ones by the society. Theme5: Spiritual bargaining.

Copyright © 2021, Najemoddin Quazi et al. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Citation: MD. Najemoddin Quazi, Sheryl Cornelio and Capt. Valsa Thomas. 2021. "Experience of healthcare workers infected with covid-19 in a selected hospital of Mumbai.", International Journal of Current Research, 13, (08), 18442-18445.

#### INTRODUCTION

COVID-19 originated from WUHAN city of China and crossed the border by infecting hundreds of countries and whole world was shaken deeply in all sectors specially, health, finance, tourism as well as basic needs of life. As per the reports, in June 2020, at least 90,000 healthcare workers have been infected by COVID-19 and more than 260 nurses have lost their lives to the pandemic.

#### **BACKGROUND**

As per the statistics, among the 110 healthcare workers died among the 1313 healthcare workers infected in India which amounted to a mortality rate of 0.01per 1,00,000 population. Evidences suggest that symptomatic and pre symptomatic transmission Covid 19 is one of the major contributing factor for the spread of Covid 19 infection. Major reason for the spread of this infection has been the magnitude of exposure among the healthcare workers and prevelance of the asymptomatic cases.<sup>1</sup>

It was speculated that HCW infection could potentially contribute to exacerbating the chain of transmission in hospitals and outside health facilities, and therefore proper protection of HCW against COVID-19 through mandating protective protocols had to be prioritised<sup>2</sup>

**NEED FOR THE STUDY:** Quoting a recent research data given by Mumbai University, BMC Chief said, "Mumbai's R (rate of people getting infected) has come to 1.1 from 9. This shows every infected individual was infecting 9 other people in the city. This has come down to 1.1 in Mumbai. If we go with the WHO standard, if R goes anywhere below 1.1, this would mean that COVID-19 pandemic is over. We are putting in efforts to reach below 1.1" S. Ramachandran; 2020, published case report on A junior doctor's experience of critical illness: from treating patients to becoming a patient with COVID-19. It was explained as to how it is managed by NHS, The focus of the study was both on the experiences from the perspective of the doctor and other as a COVID-19 positive patient. H Jing and L Lili conducted a study on experiences of nurses infected with Covid 19 infection in Jan 2021.

A phenomenological approach was used for the study. The findings revealed that nurses infected by COVID-19 experienced a physical and psychological shock. They had a strong sense of responsibility and willingness to take risks. Based on the findings in the above researches and the interest of the researcher, the current study is aimed to find out the experience of healthcare workers infected with COVID-19 so that necessary support and guidance could be provided to the healthcare workers.

**Research problem statement:** A study to assess the experience of healthcare workers infected with COVID-19 in a selected hospital in Mumbai city.

#### **Objectives:**

- To identify the demographic variables among the healthcare workers infected with Covid 19
- To assess experience of healthcare workers infected with COVID-19.

#### METHODOLOGY

Setting: Dr. LH Hiranandani Hospital, Mumbai.

**Population:** Healthcare workers infected with COVID-19 infection.

**Sample:** Healthcare workers infected with COVID-19 infection in a designated hospital in Mumbai city.

**Research approach:** Researcher used Quantitative approach qualitative approach

**Sampling technique:** Non-probability Convenience sampling technique.

Sample size was 110. Data collection: Data was collected between17<sup>th</sup> October 2020 and 17<sup>th</sup> January 2021 at Dr L H Hiranandani Hospital, Mumbai. Data analysis: Data was analysed using Descriptive statistics and common themes were analysed based on the response given by the samples.

#### **Tools Used**

**Tool 1: Demographic tool** consisting of age, gender, designation, co-morbidities, working in COVID-19 area, area of work and PPE used.

**Tool 2: Structured Questionnaire** on experience of COVID-19 infection.

#### Analysis of the findings

## Section I: Analysis of demographic characteristics of the samples.

The table 1 depicts the demographic details of the healthcare workers infected with COVID-19. It has been found that majority of the healthcare workers were between 25-30 yrs of age group, majority of them were females, mainly nurses, and majority of them were working in COVID area, and were wearing the PPE.

Table 1. Distribution of HCWs according to demographic data in terms of frequency and percentage n=110

Sr. No.	Demographic Data Range		frequency(f)	Percentage
				(%)
1	Age in Year	< 25	25	22.73
		25-30	27	24.55
		30-35	14	12.73
		35-40	17	15.45
		40-45	14	12.73
		45-50	8	7.27
		> 50	7	6.36
2	Gender	Male	46	41.82
		Female	64	58.18
3	Designation	Doctor	11	10
		Nurse	42	38.18
		Pharmacist	22	20
		Technician	20	18.18
		Housekeeping	11	10
		Admin	4	3.64
		Others	18	16.36
4	Working in	Yes	74	67.27
	COVID area	No	36	32.73
5	PPE Used	Yes	82	74.55
		No	28	25.45

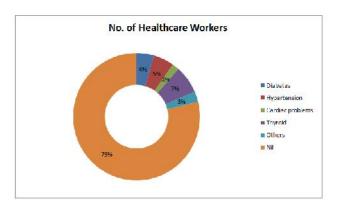


Fig. 1. Distribution of samples based on their Co-morbidities n=110

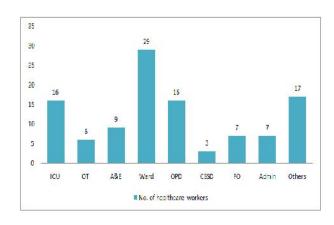


Fig 2. Distribution of samples based on their Area of work n=110

The above figure depicts that a vast majority of 79% of the samples did not have any comorbidities. As per figure 2, a large number of samples i.e) 29% of them were working in the wards. Also 16% of the health care workers were from the ICU and another 16% were from OPD. The major reason for the infection could be an exposure to the covid positive patients in the wards, ICU and also exposure to patients in the OPD.

Section II: Analysis of data related to symptoms experienced by Health Care Workers during COVID-n=110

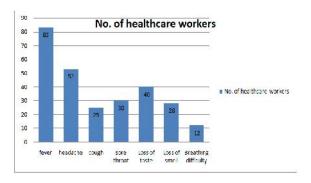


Fig. 3. Symptoms experienced by HCWs during COVID-19

n=110

The figure depicts that majority 83% of the health care workers experienced fever, followed by 53% of them having headache, 40% of them having loss of taste. Only 12% of the samples developed breathing difficulty.

## Section III: Prophylactic treatment taken by HCWs before being tested COVID-19 positive. *n*=110

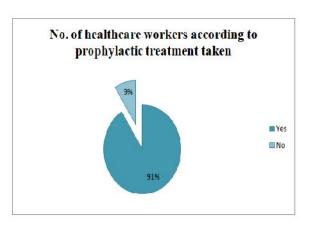


Fig. 4. Prophylactic treatment taken by HCWs before being tested COVID-19 positive. n=110

The figure 4 depicts that majority of the samples -91% of them had taken prophylactic treatment with Tab. Hydrochloroquine

### Section IV. Exposure of HCWs to COVID-19 positive patient.

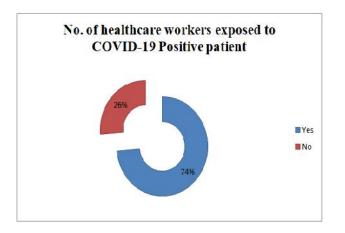


Fig. 5. Exposure of HCWs to COVID-19 positive patients. *n*=110 Section V. Overall experience of HCWs infected with COVID-19

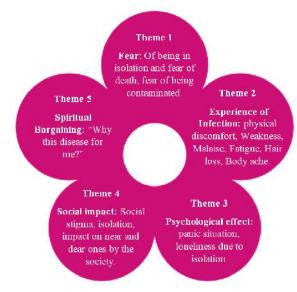


Fig. 6. Overall experience of HCWs infected with COVID-19. n=110

Figure 6 depicts that there were 5 themes that aroused after analysing the experience of the healthcare workers infected with Covid 19.

**Theme 1: Fear:** Of being in isolation with the intention of not infecting other family members and colleagues. There was a tremendous fear of death as the treatment modalities were not streamlined, fear of being contaminated with infection and being the cause for spread of infection to others.

**Theme 2: Experience of infection**: most of them experienced physical discomfort including fever, Weakness, malaise, Fatigue, Hair loss, Body ache and sore throat.

**Theme 3:** Psychological effect- This was one of the impact which a majority of them experienced. There was panic situation in the family as they were not able to move out of the houses and were dependent on significant others for their daily chores. Loneliness due to isolation was also experienced by majority of them infected with covid 19.

**Theme 4: Social impact**: There were experiences of Social stigma and isolation in the work place and in the family too. The society members viewed the samples and their families as contagious and infectious. Hence, they were kept in isolation not only by the government officials but also by the society.

**Theme5: Spiritual bargaining.** Since it was the first time people had experienced such a pandemic, people referred to this as a bane to self and the society. There was a constant bargaining with the supreme power as to "Why this disease for me?"

#### DISCUSSION

The findings in the current study revealed that majority (24.5%) of the sample were in the age group of 25-30 years of age. A vast majority (58.8%) of the samples were females. Among the various occupation, a vast majority(38.88%) of them were nurses. In a similar study conducted on COVID-19 infection among healthcare workers by S golnar, M Mohsen, H Leila, *et al* The majority of infected cases were among nurses (51.3%), while the most case infection rate (CIR) was among

physicians (27 positive cases out of 842 performed test (3.2%)). Also, the highest rate of infection was in the emergency rooms (30.6%). Also, 35.5% of the patients were asymptomatic and the most frequent clinical features among symptomatic patients were myalgia (46%) and cough (45.5%). The analysis of the experience of healthcare workers infected with Covid 19 identified the following themes: Fear, experience of infection, psychological effect, social impact and spiritual bargaining. A similar study was conducted by H Jing, L Lili identified the following themes: social support, pursuit of self worth, health beliefs and experience of infection

#### Conclusion

The current study revealed that the healthcare workers infected Covid 19 infection were the once who were in direct contact with the patients. Though a majority of them had taken prophylactic treatment for the same, they experienced the signs of infection. Most of them infected were among the ones who wore the PPE while caring for the patients. The experience they had were categorized into 5 themes: Fear, experience of infection, psychological effect, social impact and spiritual bargaining. It is very essential to care for the healthcare professionals who are the covid warriors as they are the frontline workers. If the safety of the healthcare workers is not safeguarded, it will in turn effect the care of the patients. Also they might tend to infect the other patients and healthcare professionals.

#### Recommendations

The present study was conducted in only one setting. It is recommended that the study can be replicated in a larger setting and over a longer period of time.

#### REFERENCES

Ariel, S., B Edward, C Phillip, *et al.* 2021. COVID-19 Infection Among Healthcare Workers: Serological Findings Supporting Routine Testing. International journal of infectious disease. Healthcare worker infections and deaths due to COVID-19: A survey from 37 nations and a call for WHO to post national data on their website. Jan; 102: 239–241.

Howard, C., 2020. Nursing in the COVID 19 pandemic and beyond: protecting, saving, supporting and honouring nurses. International Nursing Review- Nursing and Health Policy.

Mandana, G., FIman, S Sidra, *et al.* 2021. A systematic review and meta-analysis. International journal of infectious disease, Vol 104, Mar.

Transmission of SARS-CoV-2: implications for infection prevention precautions. WHO report.

\*\*\*\*\*