

# A Study On Psychological Symptoms Experienced By Health Care Workers During This Covid -19 Pandemic.

Malladi Subramanya Sarma, 2) S Shri Lakshmi, 3) Rachakonda Parvathi,

Professor, Department of Pathology, Coordinator Medical education unit, NRIIMS, Visakhapatnam Associate professor, Department of Pathology, NRIIMS, Visakhapatnam

Professor and Head of the Department, Department of Physiology, NRIIMS, Visakhapatnam

Submitted: 25-07-2021	Revised: 04-08-2021	Accepted: 06-08-2021

#### **ABSTRACT:**

The 2019 novel coronavirus pandemic (COVID-19) is an international public health emergency unprecedented in modern history. Besides the biological context, and due to the wide and longlasting changes in daily life it may cause, coping with it represents a challenge to psychological resilience. Previous studies have shown that epidemics and contamination outbreaks of diseases have been followed by drastic individual and social psychosocial impacts, which eventually become more pervasive than the epidemic itself. Currently, due to this pandemic, high levels of anxiety, stress and depression have already been observed in the general population. Considering this scenario, it is essential that health authorities identify groups with high risk of developing emotional issues. Amongst these are the healthcare workers assisting patients with known or suspected COVID-19

In the present study we are trying to find out the various psychological symptoms experienced by the health care professionals during this pandemic.

The present study was done on 400 health care professionals working in and around the covid hospitals in visakhapatnam.

Health professionals who are in direct contact with infected patients need to have their mental health regularly screened and monitored, especially in relation to depression, anxiety and suicidal ideation. In the same way, it is essential to identify professionals with a history of exposure to psychosocial risk factors.

Keywords: health care professionals, depression, anxiety

## I. INTRODUCTION

The 2019 novel coronavirus pandemic (COVID-19) is an international public health emergency unprecedented in modern history<sup>1</sup>. Besides the biological context, and due to the wide and long-lasting changes in daily life it may cause, coping with it represents a challenge to psychological resilience. Previous studies have shown that epidemics and contamination outbreaks

of diseases have been followed by drastic individual and social psychosocial impacts, which eventually become more pervasive than the epidemic itself<sup>2,3</sup>. Currently, due to this pandemic, high levels of anxiety, stress and depression have already been observed in the general population <sup>4,5</sup>.

Considering this scenario, it is essential that health authorities identify groups with high risk of developing emotional issues - in addition to the biological peril, already well established and publicized - to monitor their mental health and carry out early psychological and psychiatric interventions <sup>3,4</sup>. Amongst these are the healthcare workers assisting patients with known or suspected COVID-19. Primary care workers, such as nurses, nursing technicians and medical doctors who are in direct contact with patients and their body fluids, are those most vulnerable to infection <sup>3,6</sup>.

During pandemics, as the world faces a shutdown or slowdown in daily activities and individuals are encouraged to implement social distancing so as to reduce interactions between people, consequently reducing the possibility of new infections<sup>7</sup>, health professionals usually go in the opposite direction. Due to the exponential increase in the demand for healthcare, they face long work shifts, often with few resources and precarious infrastructure<sup>8</sup>, and with the need of wearing Personal Protective Equipment (PPE) that may cause physical discomfort and difficulty breathing<sup>6</sup>. In addition, many professionals may feel unprepared to carry out the clinical intervention of patients infected with a new virus, about which little is known, and for which there are well-established clinical protocols no or treatments<sup>6</sup>. Also, there is the fear of autoinoculation, as well as the concern about the possibility of spreading the virus to their families, friends or colleagues  $^{9,10}$ . This can lead them to isolate themselves from their family nuclear or extended, change their routine and narrow down their social support network 6

In the present study we are trying to find out the various psychological symptoms



experienced by the health care professionals during this pandemic.

### **II. MATERIALS AND METHODS:**

The present study was done on 400 health care professionals working in and around the covid hospitals in visakhapatnam. The health care workers included in the study were medical doctors and nurses working in covid hospitals. A questionaire was given to them which was filled online and the results are analysed.

A proper online consent was taken from the participants and their identity was kept confidential. The questionaire included the following questions:

Age/gender

Place of working

Duration of working hours

Psychological symptoms experienced by them during and after their covid duties like fear, stress, anxiety, depression or any other?

Any loss of appetite?

Insomnia?

Whether symptoms were self limiting or required treatment?

The completed filled in questionaires were analysed for results.

RESULTS:

Out of 400, 350 completed filled questinaires were received which were analysed for the results.

The following results have been obtained:

98% of the participants were in the age group 30-45 years of age

Females(56%) experienced more psychological symptoms in comparision with bthe male(44%) participants.

The psychological symptoms experienced by the participants are

Fear -97%, they had fear of contracting the disease themselves and being a carrier of the virus to their families.

Stress – 88% participants complained of stress

Anxiety experienced by 92% of the participants

Depression experienced by 94% of the participants 80% of the participants had loss of appetite and insomnia.

Other symptoms experienced by them were headache, myalgias, fever, tiredness and dryness of throat.

Most of these symptoms subsided on their own without much medication after the emergency with little psychyological support extended from family, friends and colleagues.

## **III. DISCUSSION:**

During such pandemics, long working hours under pressure can result in different levels of psychological pressure, which may trigger feelings of loneliness and helplessness, or a series of dysphoric emotional states, such as stress, irritability, physical and mental fatigue, and despair <sup>6</sup>. The work overload and the symptoms related to stress make health professionals especially vulnerable to psychological suffering <sup>8,9,10</sup>, which increases the chance of developing psychiatric disorders <sup>11</sup>. If, on the one hand, healthcare teams - mainly in emergency services - may be used to feeling physical fatigue and mental weariness, on the other hand, due to the fear, insecurity and uncertainty caused by a pandemic, these well-known factors could now relationships. Historically. impact human catastrophes can mobilize teams due to commotion, but they are usually exempt from fear of the transmissibility of the infection, as despite the threat being invisible, possible negative outcomes are an inconvenient and frightening reality. Therefore, the recognition of risks and planning of interventions aimed at reducing the damage to the psychological health of professionals involved in the care of patients infected by COVID-19 should be a priority, and actions need to be established and implemented.

During the severe acute respiratory syndrome (SARS) outbreak in 2003, 18 to 57% of health professionals experienced serious emotional problems and psychiatric symptoms during and after the event <sup>12</sup>. In 2015, during the Middle East respiratory syndrome (MERS) outbreak, also caused by coronavirus, dysphoria and stress were observed among health professionals. These conditions were a predictor of misconduct, delays in treatment due to communication failures and absenteeism, among others. In these situations, it is common for feelings that are not verbally expressed by the teams to end up being expressed in the work environment through absences and omissions. Frontline professionals were also shown to be at higher risk of developing post-traumatic stress disorder (PTSD), which persisted even after a period of absence from work<sup>12</sup>. There are also studies reporting that the mental health implications for health workers involved in healthcare during epidemics can be persistent. High levels of stress, depression, anxiety and PTSD were observed after some time had transpired since the end of the emergency<sup>2,3</sup>.

The Burnout syndrome was also reported by health professionals involved in assisting patients during an epidemic caused by another type



of coronavirus that occurred in Korea in 2016<sup>13</sup>. Although this condition is usually established longitudinally and is related to organizational factors (such as institutional climate, moral harassment, excessive workload, low wages, among others), the severity of the pandemic can trigger emotional exhaustion<sup>14</sup>.

Vicarious trauma or secondary traumatic stress, a phenomenon in which health professionals experience symptoms similar to the patients' due to continued exposure, is also common during catastrophes. The main symptoms of indirect trauma are appetite loss, fatigue, physical decline, sleep and attention disorders, irritability, numbness, fear and despair<sup>2</sup>. In addition, professionals involved directly in the care of a disease with high potential of contagion may suffer stigma. At the other end of the spectrum, a trend that in COVID-19 is more triggered is to give health professionals a status of super heroes, and if on the one hand it adds value, on the other hand, it has additional pressure, because superheroes don't fail, don't give up or get sick. This can be reinforced by the media due to the sensational character of an event with worldwide proportions, demarcating the need for emotional support, encouragement and appreciation <sup>15</sup>. Moral suffering also can lead to situations such as the collapse of the health system, preventing health professionals from making adequate decisions due to internal (fear, inability to face suffering, lack of knowledge) or external pressures (hierarchial pressure, communication and organizational problems, lack of resources and support from other services).

Recently, a study with nurses and physicians involved in the treatment of COVID-19 found a high incidence of stress, anxiety and PTSD, with higher levels of anxiety in women and nurses compared to men and physicians, respectively. This can be explained by the fact that nurses have longer work shifts and closer contact with patients, which can easily lead to fatigue and tension. Another study with a similar sample found that the physicians' level of social support was significantly associated with efficacy and quality of sleep, and negatively associated with anxiety and stress <sup>16</sup>. The finding in the present study are at par with the previous studies.

## **IV. CONCLUSION:**

Health professionals who are in direct contact with infected patients need to have their mental health regularly screened and monitored, especially in relation to depression, anxiety and suicidal ideation. In the same way, it is essential to identify professionals with a history of exposure to psychosocial risk factors. Therefore, psychiatric treatments should be provided to those with more serious mental health problems. Specifically regarding the mental health of healthcare professionals in the context of COVID-19, it is important to identify secondary psychosocial factors that may potentially generate stress, e.g., professionals with chronic diseases, living with young children or older family members, among others <sup>15</sup>.

It is suggested that somatic symptoms such as insomnia, anxiety, anger, rumination, decreased concentration, depression and loss of energy are evaluated and managed at the institution by the mental health professionals. It is also recommended that psychological/psychiatric care is provided to professionals in hospitals or other healthcare settings. In addition, strict measures must be implemented to prevent infection and ensure a safe environment for consultations, as well as practical training on how to use PPE properly<sup>17</sup>

## REFERENCES

- [1]. World Health Organization. Novel coronavirus (2019-nCoV) situation reports. Geneva: World Health Organization; 2020.
- [2]. Li Z, Ge J, Yang M, Feng J, Qiao M, Jiang R, et al. Vicarious traumatization in the general public, members, and non-members of medical teams aiding in COVID-19 control. Brain Behav Immun 2020; [Epub ahead of print].
- [3]. Ornell F, Schuch JB, Sordi AO, Kessler FHP. "Pandemic fear" and COVID-19: mental health burden and strategies. Braz J Psychiatry 2020; [Epub ahead of print].
- [4]. Wang C, Pan R, Wan X, Tan Y, Xu L, Ho CS, et al. Immediate psychological responses and associated factors during the initial stage of the 2019 Coronavirus disease (COVID-19) epidemic among the general population in China. Int J Environ Res Public Health 2020; 17:E1729.
- [5]. Zhu Y, Chen L, Ji H, Xi M, Fang Y, Li Y. The risk and prevention of novel coronavirus pneumonia infections among inpatients in psychiatric hospitals. Neurosci Bull 2020; 36:299-302.
- [6]. Huang JZ, Han MF, Luo TD, Ren AK, Zhou XP. Mental health survey of 230 medical staff in a tertiary infectious disease hospital for COVID-19. Zhonghua Lao Dong Wei Sheng Zhi Ye Bing Za Zhi 2020; 38:E001.



International Journal Dental and Medical Sciences Research Volume 3, Issue 4, July-Aug 2021 pp 478-481 www.ijdmsrjournal.com ISSN: 2582-6018

- [7]. Wilder-Smith A, Freedman DO. Isolation, quarantine, social distancing and community containment: pivotal role for old-style public health measures in the novel coronavirus (2019-nCoV) outbreak. J Travel Med 2020; 27:taaa020.
- [8]. Shigemura J, Ursano RJ, Morganstein JC, Kurosawa M, Benedek DM. Public responses to the novel 2019 coronavirus (2019-nCoV) in Japan: mental health consequences and target populations. Psychiatry Clin Neurosci 2020; 74:281-2.
- [9]. Kang L, Li Y, Hu S, Chen M, Yang C, Yang BX, et al. The mental health of medical workers in Wuhan, China dealing with the 2019 novel coronavirus. Lancet Psychiatry 2020; 7:e14.
- [10]. Xiang Y-T, Yang Y, Li W, Zhang L, Zhang Q, Cheung T, et al. Timely mental health care for the 2019 novel coronavirus outbreak is urgently needed. Lancet Psychiatry 2020; 7:228-9.
- [11]. Malta M, Rimoin AW, Strathdee SA. The coronavirus 2019-nCoV epidemic: is hindsight 20/20? EClinicalMedicine 2020; 20:100289.
- [12]. Lee SM, Kang WS, Cho AR, Kim T, Park JK. Psychological impact of the 2015 MERS outbreak on hospital workers and quarantined hemodialysis patients. Compr Psychiatry 2018; 87:123-7.
- [13]. Kim JS, Choi JS. Factors influencing emergency nurses' Burnout during an outbreak of Middle East respiratory syndrome coronavirus in Korea. Asian Nurs Res (Korean Soc Nurs Sci) 2016; 10:295-9.
- [14]. Herrer MG. Coronar la cumbre. Riesgos emocionales y cuidado del personal sanitario

ante el COVID-19. https://humanizandoloscuidadosintensivos.c om/es/coronar-la-cumbre-riesgosemocionales-y-cuidado-del-personalsanitario-ante-el-covid-19/ (accessed on Mar/2020).

https://humanizandoloscuidadosintensivos.c om/es/coronar-la-cumbre-riesgosemocionales-y-cuidado-del-personalsanitario-ante-el-covid-19/

- [15]. Associação de Medicina Intensiva Brasileira. Recomendações para o bem-estar emocional da equipe multidisciplinar durante a pandemia Sars-Cov-2. pelo https://www.amib.org.br/fileadmin/user\_upl oad/amib/2020/marco/18/corona psico ami b\_15h56\_18032020.pdf Xiao H, Zhang Y, Kong D, Li S, Yang N. The effects of social support on sleep quality of medical staff treating patients with Coronavirus disease 2019 (COVID-19) in January and February 2020 in China. Med Sci Monit 2020; 26:e923549.
- [16]. The impact of the COVID-19 pandemic on the mental health of healthcare professionals impacto da pandemia de COVID-19 na saúde mental dos profissionais de saúde El impacto de la pandemia de COVID-19 en la salud mental de los profesionales de la salud Felipe OrnellSilvia Chwartzmann HalpernFelix Henrique Paim KesslerJoana Corrêa de Magalhães

Narvaezhttps://doi.org/10.1590/0102-311X00063520