



Access to Personal Protective Measures to Physiotherapy Interns amid Covid-19 Pandemic.

¹Nikhita Kumbhare, ²Dr. Poonam Patil

¹Physiotherapy Intern, ¹Physiotherapy

¹Krishna College of Physiotherapy, Krishna Institute of Medical Sciences, deemed to be University, Karad, India

Submitted: 01-09-2021

Revised: 07-09-2021

Accepted: 10-09-2021

ABSTRACT:

The Covid-19 pandemic, globally has evolved as a major concern. Healthcare workers (HCWs) working in the forefront, fighting the virus are at higher risk of contracting the infection compared to the general population. Among the health care workers, Physiotherapist play an important role in treatment of covid 19 symptoms. It is seen that some hospitals lack these basic of personal protective which in turn risks the life of the health care worker. The aim of this study is to find out the access of personal protective measures to physiotherapy interns. A 12-item structured questionnaire was used (prepared by members of the COVID-19 Working Group of IASC; Inter-American Society of Cardiology) to evaluate participants' access to personal protective measures. A total of 80 physiotherapy interns consented and filled the questionnaire. Out of 80 participants i.e., female participants were more, participants were between the age group of 22 years to 25 years. They had highest access to gel hand sanitizer whereas lowest access to disposable gowns; 100% access to personal safety policies and procedures in the workplace as well as to COVID-19 treatment in case sick whereas only 35% had access to telemedicine and follow up. In case of institutional support with human resources in case healthcare workers are sick, the mean \pm SD score was 7.28 ± 0.82 , medical institutions and local authority taking all necessary measurements to protect physical integrity in the workplace, the mean \pm SD score were 7.13 ± 0.97 and 6.134 ± 1.16 respectively.

KEYWORDS: Covid- 19 Pandemic, Physiotherapy Interns, Personal Protective Measures.

I. INTRODUCTION

The novel Coronavirus (COVID-19 or SARS-COV-2) was first reported in December 2019, as a cluster of acute respiratory illness in Wuhan, Hubei Province, China. It was declared as a global pandemic by World Health Organisation

(WHO) on 12th March 2020. The Covid-19 spread occurs through droplet, feco-oral, and direct contact with an incubation period of 2-14 days, even though many cases of higher incubation periods have been reported. COVID-19 affects different people in different ways. Most infected people will develop mild to moderate illness and recover without hospitalization. Most common symptoms being fever, dry cough, tiredness; Less common symptoms: aches and pains sore throat, diarrhoea, conjunctivitis, headache, loss of taste or smell, a rash on skin, or discolouration of fingers or toes. Its outbreak has fundamentally changed the world and, consequently, is changing the reality of healthcare workers. This pandemic is creating profound changes in governments, the global economy, and healthcare system. Based on current evidence, the covid-19 virus is transmitted between people through close contact and droplets. Different vaccines are available and are effective in the treatment of covid 19 virus. According to World health organisation (WHO), "A vaccines teach our immune system how to recognise and fight an external threat", it typically takes a few weeks after vaccination (against covid-19) for the body to build protection (immunity) against the virus. This means that a person could still get infected by Covid-19 in the few days immediately following the vaccination, because the person would not have had enough time to develop immunity. The people most at risk of infection are those who are in close contact with a covid-19 patient or who care for covid-19 patients and therefore the healthcare workers are at significant risk of contracting the disease. Precautions need to be implemented by healthcare workers caring for patients with covid-19 include using appropriate personal protective equipment (PPE). The World Health Organization (WHO) and other national and international public health authorities recommend implementing safety protocols for healthcare workers for combating the spread of infection. In India, health care sector too is facing major crisis in controlling of the covid 19 infection. Due to the emergence of second wave of



coronavirus in India the healthcare sector is finding it difficult to cope with the surge in cases. Vaccination of such large population in India will take time. Therefore, basic precautionary measures must be followed before getting vaccination and even after vaccination. It is recommended that the common people must use face masks, hand hygiene, and physical distancing as well as follow cough/sneeze etiquette in public places and must not abandoned these precautions just because covid - 19 vaccination has been taken. It is also recommended for the healthcare workers to use personal protective measures for their as well as others safety. Despite the recommendations, some hospitals lack these basic personal protective measures, which in turn risks the life of the saver of several lives. Therefore, the purpose of this study was to evaluate the access of personal protective measures to physiotherapy interns amid covid – 19.

II. METHOD

A 12-item structured questionnaire was used (prepared by members of the COVID-19 Working Group of IASC; Inter-American Society of Cardiology) to evaluate participants' access to personal protective measures. The study questionnaire comprised four sections. Section 1 had five items that collected demographic information of the responders, age, sex (male or female), occupation, type of practice and geographic location.

Section 2 comprised four items and was designed to evaluate access to PPE (gel hand sanitizer, disposable gloves, disposable gowns, disposable masks, N95 masks, facial protective shields), access to personal safety policies and procedures (yes or no), access to COVID-19

diagnostic and treatment algorithms (yes or no), access to telemedicine to evaluate and follow up with patients (yes or no), and institutional support with human resources in case healthcare workers are sick (10-point Likert scale; 0 = no resources, 10 = full access to resources).

Section 3 comprised two items designed to evaluate participants' perceptions about their medical institutions taking all necessary measurements to protect physical integrity in the workplace (10-point Likert scale; 0 = no support, 10 = full support) and participants' perceptions regarding their local public health authorities taking all necessary measurements to protect physical integrity in the workplace (10-point Likert scale; 0 = no support, 10 = full support).

The Participants were given consent form along with the questionnaire which they were able to complete. Before the survey the participants were explained about confidentiality of the study as well as the need and objectives of the study. The survey questions that were prepared by members of the COVID-19 Working Group of IASC were used for this study.

III. RESULTS(As per the questionnaire)

• Section 1

A total of 80 physiotherapy interns (medical profession) willingly participated & completed the given questionnaire. Out of them, female participants were more than male participants. (Figure 1), all in the age group 22 years to 25 years (figure2) at Krishna College of Physiotherapy, KIMSDU Karad, Maharashtra.

Figure 1 : Gender

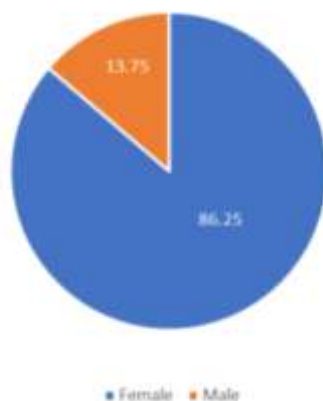
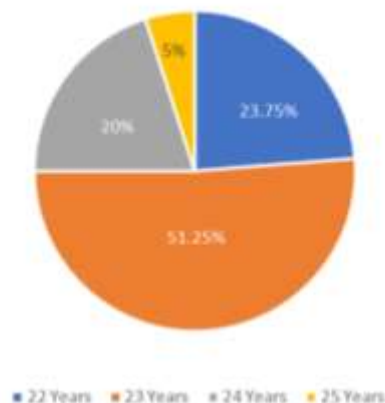


Figure 2: Age (in %)





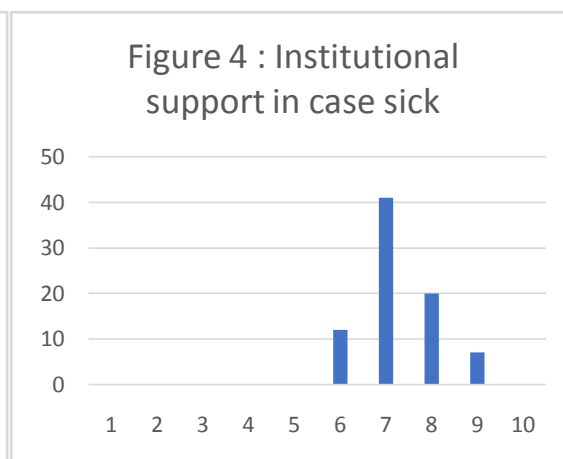
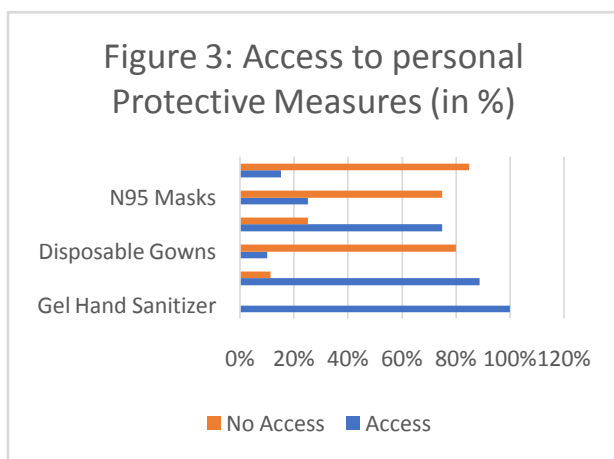
Section 2

Participants indicated that they had access to the following essential items:

The participants had highest access to gel hand sanitizer whereas had lowest access to disposable gowns. When asked about the access to personal safety policies and procedures in the workplace 100% participants said that they had the access to it, and also agreed to having 100% access to

COVID-19 treatment in case sick. Regarding access to telemedicine and follow up, the participants had less access to it (Only 35%). (Figure 3)

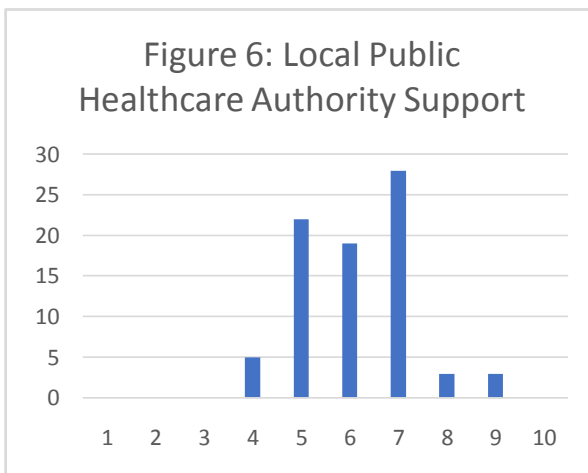
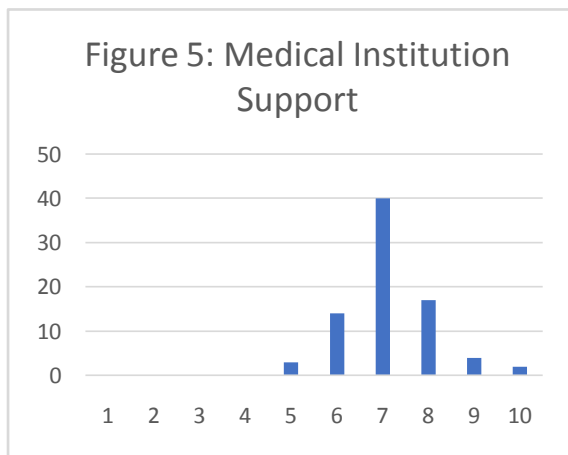
When asked about institutional support with human resources in case healthcare workers are sick, the mean \pm SD score was 7.28 ± 0.82 (Figure 4).



Section 3

When asked about medical institutions and local authority taking all necessary measurements to protect physical integrity in the workplace, the

mean \pm SD score were 7.13 ± 0.97 and 6.134 ± 1.16 respectively. (Figure 5 & Figure 6 respectively).



IV. DISCUSSION

This study included 80 physiotherapy interns of Krishna College of Physiotherapy, Krishna Institute of Medical Sciences Deemed to Be University, Karad, Maharashtra.

All had filled the consent form and completed the given questionnaire. In this study, the majority of the participants were female and the

participants were in the age group of 22 Years to 25 Years.

All the participants agreed to have 100% access to gel hand sanitizer while majority of them had access to disposable gloves and masks as recommended by WHO.

Out of 80 participants only 15% had access to face shield and 25% had access to N-95 masks.



When asked about Personal protective measures & policy and treatment in case of sick (COVID-19) all the participants had the access to it. This shows the awareness and importance the institution gives to health of its health care workers. Surprisingly only 35% of the participants agreed to have access to telemedicine and follow up which tells that there is need to improve on technology-based medicine. Institutional support in case sick had mean \pm SD score was 7.27 ± 0.82 on an average good. The perception about the support of medical institution and local public health authority, the mean \pm SD scores were 7.13 ± 0.97 and 6.13 ± 1.16 respectively, which suggests slight need of improvement. The sum of what has been perceived by this study is that it is the 1st cross sectional study conducted among physiotherapy interns about personal protective measures amid COVID-19 pandemic.

Two similar studies on COVID-19 have been recently published. One publication addressed the COVID-19 awareness among medical students in India and the second addressed the personal safety during COVID-19 pandemic among various health care workers in Latin America.

V. LIMITATIONS

1. The study was conducted on a smaller population. (80 Participants)
2. This study did not include other medical professionals and therefore the reality and perspective about COVID-19 could differ from those of other specialities.
3. In the study, the physiotherapy participants did not include the post graduate students, clinicians and academician.
4. This study does not talk about the reasons due to which there is lack in some aspects of personal protective measures.

VI. CONCLUSIONS

In this survey, the participants had access to some personal protective measures (i.e., Gloves, Masks Gel sanitizer) whereas the majority of the participants did not have access to face shields, gowns, N-95 masks.

The perception of the participants about the support Medical Institute and Local Public Health Authority needs to be addressed with strategies implementation with care and urgency in the time of COVID-19 pandemic.

REFERENCES

- [1]. † Diego Delgado 1, *, Fernando Wyss Quintana2, Gonzalo Perez 3, Alvaro Sosa

- [2]. Liprandi 4, Carlos Ponte-Negretti 5, Ivan Mendoza 6 and Adrian Baranchuk 7
- [3]. Personal Safety during the COVID-19 Pandemic: Realities and Perspectives of Healthcare Workers in Latin America.
- [4]. Ibad Sha I1, Ajin Edwin2, Jyothis George3, Namitha Shah4, Roshna S R5
- [5]. COVID-19 Awareness among Medical Students in India: A Questionnaire-Based Survey
- [6]. Kowshik Reddy B, Athul K , Sheetal Swamy , Satyam Bhodaji , Aboli Deshmukh , Sanskruti T , Lalremruati , Jagan Deep singh
- [7]. Knowledge, attitude, awareness and practice towards covid-19 pandemic in Indian citizens during the national lockdown period: a quick online cross-sectional study
- [8]. Azze Buket; Yilmaz Department of Pharmaceutical Microbiology, Cyprus Emrah Guler Department of Medical Microbiology and Clinical Microbiology, Cyprus Buket Baddal; Department of Medical Microbiology and Clinical Microbiology
- [9]. Knowledge, perception and implementation of personal protective measures by citizens during the COVID-19 outbreak in Northern Cyprus: a cross-sectional survey
- [10]. Amirhossein Erfani Reza Shahriarad, Keivan Ranjbar, Alireza Mirahmadizadeh & Mohsen Moghadami
- [11]. Knowledge, Attitude and Practice toward the Novel Coronavirus (COVID-19) Outbreak: A Population-Based Survey in Iran
- [12]. www.google.com
- [13]. https://www.who.int/