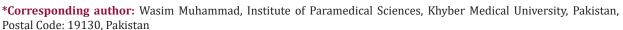


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# Procedure of using Personal Protective Equipment (PPE) during COVID-19

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## ABSTRACT

Safety is a major problem for day laborers and skilled laborers in this epidemic. Each year, accidents occur commonly in the construction industry and sometimes it is due to the absence of Personal Protective Equipment (PPE) or failure to wear the provided PPE. PPE is equipment that will defend workers against health or safety risks on the job. The purpose is to decrease employee exposure to hazards when engineering and administrative controls are not feasible or effective to reduce these risks to acceptable levels.

# Introduction

Coronavirus disease 2019 (COVID-19) has been announced as epidemic by the World Health Organization, later it declared as a pandemic on 12th March of 2020, with Italy being considered the fresh "epicentre" of the emergency, which started in the province of China, Wuhan. 22,512 cases have been accounted for in Italy when begins from 15 March 2020, 2,026 (9%) of which belong to people who works in hospitals [1]. Tragically, rates for emergency unit with the requirement for mechanical ventilation and tracheal intubation and are roughly 5% in patients having Corona Virus [2]. Given the fast development of this outburst and the need to bound death rate in medical care laborers, it is principal that medical services experts be comfortable with mutually the meaning of an excessive hazard introduction and the right donning & doffing methods for the PPE required throughout the consideration of these infectious people. A great hazard introduction has been characterized as "delayed near interaction with Corona virus patients who are not using mask whereas the medical services specialist's mouth and nose are presented to objects conceivably contaminated with the infection [3].

At the point when medical services suppliers' mouth, nose or eyes are insecure during the lead of airborne creating clinical methodology on patients with Corona disease (e.g., Nebulizer therapy, Cardiopulmonary resuscitation, intubation, extubation and bronchoscopy) around is a great danger of infection [3]. At the point when utilized effectively, PPE shields from this Virus, yet this is basic that PPE is appropriately donned and properly doffed. The breadth and variety of different types of PPE, such as facemasks, gloves, and respiratory equipment, as well as the extended use beyond previous standards, have led to a spectrum of common dermatologic conditions, including contact/irritant dermatitis, pressure-related skin injury, acneiform eruptions, and moistureassociated skin irritation [4]. These reenactments have uncovered basic parts of the cycle that, whenever done inappropriately, may prompt penetrates in biosafety and possible risk with the infection, triggering Corona infection.

#### **Donning**

**Mask:** Mask N95 is suggested. Mask quality examination must perfectly be done be acted ahead of time, as right face mask and

size are expected to guarantee an appropriate seal. Facial hair at the face-mask interface advances seal spillage and may diminish security [5].

**Gloving:** In spite of the fact that not should have been sterile, consistently utilize expanded sleeve gloves. Guaranteeing that the most distal piece of the outfit's sleeve is protected cozily by the glove is vital to forestalling hand and lower arm infection.

Time Managing PPE ought to be worn appropriately; this ought to be done cautiously and never be surged. This may mean a postponement in giving consideration in code blue/airway organization reaction times.

#### **Doffing**

**Removing of Gloves:** These are viewed as the supreme polluted piece of PPE in the wake of playing out a high danger clinical procedure. Evacuation of the main glove is normally simpler than the subsequent one. While eliminating the subsequent glove, guarantee that there is as negligible interaction as conceivable between the sleeve of the and the un-gloved hand/fingers and gloved hand. Try not to snap of gloves.

**Eliminating Gown:** This is the most 2nd infectious PPE component. Guarantee that uncovered hands don't contact the front of the gown while eliminating. A careful outfit that can be pulled off without untying it might present extra security.

**Eliminating Mask:** Continuously try not to contact the anterior of the mask (and additionally face shield) with the hands while eliminating. Keeping up pressure on the inferior strap is valuable for forestalling snapping while at the same time eliminating. The hand cleanliness with alcohol-based sanitizers be done for 15–20 sec after each item of Protective Personal Equipment is doffed to guarantee total expulsion of infection pollution from hands.

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## Conclusion

The right utilization of Protective Personal Equipment is important to diminish the quantity of contaminated medical services laborers caring about patients with Corona Virus. We trust that featuring a portion of these basic parts of wearing/doffing of PPE will bring down the likelihood of experiencing biosafety breaches, at last converting into a smaller sickness trouble between medical care laborers caring about Corona Virus patients.

#### **Authors' Contribution**

Wasim Muhammad, development of the protocol, developed the original idea and wrote the manuscript. Farzand Ali review the manuscript.

## **Conflicts of Interest**

None.

# **Funding Statement**

None.

## References

- Floyd EL, Henry JB, Johnson DL (2018) Influence of facial hair length, coarseness, and areal density on seal leakage of a tight-fitting halfface respirator. J Occup Environ Hyg 15(4): 334-340.
- (2020) Novel Coronavirus Pneumonia Emergency Response Epidemiology Team. Vital surveillances: The epidemiological characteristics of an outbreak of 2019 novel coronavirus diseases (COVID-19)—China, 2020. China CDC Weekly.
- 3. (2021) Interim US Guidance for Risk Assessment and Work Restrictions for Healthcare Personnel with Potential Exposure to SARS-CoV-2.
- Gheisari M, Araghi F, Moravvej H, M Tabary, S Dadkhahfar, et al. (2020) Skin reactions to non-glove personal protective equipment: An emerging issue in the COVID-19 pandemic. J Eur Acad Dermatol Venereol 34(7): e297-e298.
- Livingston E, Bucher K (2020) Coronavirus disease 2019 (COVID-19) in Italy. JAMA 323(14): 1335.



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