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**Letter to the Editor**

# Hanging Mask Syndrome: A Chink in the Armor of Face Masks

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During the coronavirus disease 2019 pandemic, personal protective equipment emerged as a critical safeguard against infections for healthcare workers. Personal protective equipment instilled a sense of safety, boosting HCWs' confidence in their ability to provide effective patient care. Since the pandemic, PPE has been utilized across all levels of healthcare to mitigate infection risks, from sample collection and diagnosis to treatment and follow-up. However, improper use of PPE or breaches in care protocols can still result in infections with potentially catastrophic consequences.[1] The effectiveness of various face coverings—including cloth masks, surgical masks, N95 respirators, and face shields—in preventing airborne and droplet-transmitted infections has been a contentious topic. Despite the widespread use of PPE, numerous instances of HCWs contracting infections highlight the need for proper usage and strict adherence to safety protocols.[2] Where are the gaps and breaches in implementation that demand immediate attention?

Based on our experience, 2 primary issues contributing to these breaches are prolonged use of the same PPE and improper mask usage.[2]

1. During the pandemic, several protocols permitted the extended use of PPE, including the controversial practice of allowing a single N95 mask to be used for up to 5-7 days. This led HCWs to wear the same mask for extended periods, causing them to re-breathe expelled air and increasing the risk of contamination. Additionally, prolonged mask usage elevated the likelihood of transmitting infections to patients. While the global shortage of PPE kits during the pandemic was a significant challenge, reusing the same mask for 7 days constituted a clear breach of infection prevention and control procedures.[3]
2. Incorrect usage of PPE, particularly masks, poses a significant risk. A common practice involves lowering the mask (surgical or N95) to hang around the neck when no immediate risk is perceived. This habit, referred to as "hanging mask syndrome," creates a false sense of readiness to combat infections. Healthcare workers often seem to be scanning a 6-foot radius for incoming droplets or particles, raising their masks to cover only the nose when they anticipate such risks. However, this practice compromises the mask's protective barrier and exposes the wearer to infection risks.[4]

"Hanging Mask Syndrome" compromises its protective function. This practice is a significant breach in mask usage, similar to having a shield with a gaping hole, offering no real protection. Practices such as "Hanging Mask Syndrome" likely contribute to the spread and contraction of infections.[5]

Additionally, pathogens can accumulate on the outer parts of the mask over time. Therefore, masks should be replaced as recommended by health authorities and manufacturers. When the mask is shifted from the neck to the face, these pathogens can come into contact with the nose and mouth, increasing the risk of infection. To prevent this, masks should be handled by ear loops or ties. The front of the mask should not be touched; if hands do come into contact with the mask's surface, they should be cleaned or sanitized immediately.[3] Any breach in mask usage, such as not wearing it or hanging it around the neck, increases the likelihood of infection transmission, affecting both patients and users. Despite its significance, "Hanging Mask Syndrome" is not often discussed in the literature, possibly because addressing it may reflect negatively on hospital infection control procedures.

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In conclusion, while PPE plays a vital role in infection prevention, its effectiveness is contingent on proper usage and handling. By avoiding practices such as "Hanging Mask Syndrome" and adhering to recommended guidelines, we can ensure that these tools serve their purpose in safeguarding our health. To combat infections effectively, we should ensure that using the appropriate tools is just as important as using them appropriately. Everyone must be aware of the Mask Paradox. It is the duty of clinicians—specifically microbiologists, hospital infection control officers, and infection control nurses—to train the staff on proper PPE usage. They should explain the pros and cons of improperly wearing PPE to all hospital staff members for infection control and prevention. Remember, incorrect use can be detrimental and counterproductive.

**Availability of Data and Materials:** The data that support the findings of this study are available on request from the corresponding author.

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