

Saurabh Mittal, Anant Mohan, Karan Madan, Tarun Krishna Boppana, Pawan Tiwari, Vijay Hadda

Department of Pulmonary, Critical Care and Sleep Medicine, All India Institute of Medical Sciences, New Delhi, India

Face shields for prevention of SARS-CoV-2 in community — need of the hour

To the Editor

Since the onset of the current pandemic of coronavirus disease-19 (COVID-19), the concerns regarding availability and cost of personal protective equipment (PPE) have been raised in all countries. Most of the governments have taken cognizance of this and have provided PPE to healthcare workers (HCWs) in the hospital. Community healthcare workers are one group which still suffer exposure to COVID-19 and needs to be protected in a better way. Recent news in the media highlighted that sample collection is done in some parts of India without the appropriate use of PPE [1]. This brings us to the main concern regarding how to protect the community HCWs. As there are concerns regarding airborne transmission, investigations have confirmed that as of now, community transmission rates are consistent with droplet and contact spread rather than airborne spread [2]. This leads to the conclusion that barriers to droplet transmission, along with hand hygiene, should remain a priority to prevent transmission. The two main barrier options for preventing droplet transmission include face masks and face shields. Face masks are being accepted and used regularly by the community HCWs; however, the use of face shields is not universal. In this regard, a recent prospective study was published in Journal of American Medical Association by Bhaskar et al. where the authors have presented their experience with the use of face shields in the community to prevent transmission to healthcare workers [3]. They have described the use of face shields in addition to 3-layered surgical masks, shoe covers as well as gloves in the community of health workers and found a marked reduction in transmission of SARS-CoV-2. Although face shields remain one of the essential components of personal protective equipment in the hospital, its use is less common in community settings. One main confounder of this assessment includes the behavioural change of healthcare workers, which ensues as one becomes more experienced as well as when one has peers who have suffered from the infection. The time spent in initial training for infection control practices may vary, and adherence to the same improves with time [4]. It is not feasible to measure the adherence to infection control measures, and it remains one of the major limitations in deriving the conclusion that face shields were the sole reason for the reduction in transmission. Nevertheless, face shields should continue to remain one cost-effective method of protecting the community HCWs as it prevents ocular transmission, and reduces mask, and face contamination as well.

Conflict of interest

None declared.

References:

- www.bhaskar.com/local/bihar/bhagalpur/jamui/news/sampling-without-wearing-ppe-kit-safe-telling-yourself-an-anm-infected-127621332.html. Published August 17, 2020. Last accessed: 17.08.2020.
- Burke RM, Midgley CM, Dratch A, et al. Active monitoring of persons exposed to patients with confirmed COVID-19 — United States, January-February 2020. MMWR Morb Mortal Wkly Rep. 2020; 69(9): 245–246, doi: 10.15585/mmwr.mm6909e1, indexed in Pubmed: 32134909.
- Bhaskar ME, Arun S. SARS-CoV-2 infection among community health workers in india before and after use of face shields. JAMA. 2020; 324(13): 1348–1349, doi: 10.1001/jama.2020.15586, indexed in Pubmed: 32808979.
- Barker AK, Brown K, Siraj D, et al. Barriers and facilitators to infection control at a hospital in northern India: a qualitative study. Antimicrob Resist Infect Control. 2017; 6: 35, doi: 10.1186/s13756-017-0189-9, indexed in Pubmed: 28405312.

Address for correspondence: Saurabh Mittal, Department of Pulmonary Medicine and Sleep Disorders All India Institute of Medical Sciences, Ansari Nagar, New Delhi, India;

e-mail: saurabh_kgmu@yahoo.co.in D0I: 10.5603/ARM.a2020.0185 Received: 28.08.2020 Copyright © 2021 PTChP ISSN 2451–4934