

Compliance of hand hygiene can play a pivotal role in limiting the spread of Covid-19 through public transportation

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The current pandemic of COVID-19 caused by the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) has put millions of people at risk to a public health threat in a rapidly increasing number of countries.¹ Due to its incessant spread throughout the world, effective strategies should be made that can be used on a long-term basis for different situations and susceptible groups of people during this pandemic. The basic mode of transport for most of the people is public transportation. As the vehicles are confined spaces, they can be source of transmission of this disease through human-to-human transmission. Subsequently, many groups of cases have been reported by several countries in the public transportation facilities caused by respiratory viruses including the SARS-CoV-2. SARS-CoV-2 becomes highly infectious in the confined setting of public transport. Consequently, to limit the spread of this virus, effective measures such as environmental and personal hygiene that also includes hand hygiene.

Hand hygiene is an established practice to curb the spread of an infectious disease. The COVID-19 pandemic has created more awareness about the importance of hand hygiene worldwide. The notion of decreasing the transmission of disease by proper hand cleansing has been supported by the evidence that it decreases the likelihood of disease transmission by 24% to 31%.² However, to prevent the transmission of the virus, it is recommended by the CDC to do frequent hand washing with water and soap for a duration of 20 seconds. Furthermore, if the soap and water are not available, a hand sanitizer can be used that should have at least 60% of alcohol. Frequent hand washing can predispose the person to hand dermatitis if moisturizer is not applied subsequently. During the outbreak of COVID-19 in China, a majority (66.1%) health care workers washed their hands more than 10 times a day,

whereas only one third (22.1%) used a moisturizer afterwards.²

Recent literature has supported the evidence that not washing hands according to the recommendations of WHO results in improper hand hygiene as many areas of the hands are missed. A study conducted by Wong et al. reported that certain areas are commonly missed by people in hand washing that include the hypothenar eminence, dorsum of the hand and the fingertips.³ Recent literature advocates that complete hand drying contributes to a decline in the microbes on the hands that makes it a fundamental aspect of hand hygiene which maintains the integrity of the skin and helps to decrease the number of possible infectious microbes. The proper drying of hands also stops moisture from acting as a bridge, which allows microbes to translocate and also prevents the contamination of the environmental surfaces. In the recent months since the outbreak of the pandemic, there has been a lot of awareness regarding the importance of hand washing and hand sanitization but very less importance has been given to hand drying and its integral parting in maintain an effective hand hygiene.⁴

In a recent study conducted by Bonful et al,⁵ to determine the status of compliance to hand hygiene in stations of public transport facilities using the WHO hand hygiene assessment scale in Ghana reported that in around 87% of the stations the hand washing facilities were rarely used. Around 82% of the stations had not provided any printed guidance in the form of posters to educate people on appropriate hand hygiene. Only 2.5% of the station used audio announcements to guide people about hand washing. The study also reported that in most of the stations (95%), hand washing was not even practiced or done only infrequently. This study shows that the compliance to hand washing is inadequate to limit the spread of COVID-19. More attention needs to be given to this aspect of limiting the spread of COVID-19 as it known to be very effective to control the spread of disease if it is done according to the guidelines, taking care of the hand drying and application of a moisturizer to avoid hand dermatitis. It is basic and cost effective that can

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make public transport a much safer and cheap mode of transport for majority of the population who can only resort to this option. Checking the compliance to hand washing is also not very expensive so developing countries can also use this modality to curb the spread of COVID-19. More research is needed to explore how monitoring of compliance to hand washing can be made much more convenient.

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