

# Editorial

## Elbow instead of hand: is it more helpful or harmful?

Coughing or sneezing into the elbow has been widely recommended as an intervention to reduce respiratory virus transmission. The World Health Organization (WHO) advises to cover the mouth and nose with a flexed elbow or tissue when coughing and sneezing.<sup>1</sup> However, a laboratory-based study of 31 healthy nonsmokers performing cough etiquette maneuvers found that using the arm/sleeve as a barrier may not be able to ward off the potential risk of respiratory infections if contact precautions are not followed.<sup>2</sup> Moreover, many people meet and greet each other by elbow bumping instead of hand-shaking due to the concern of transmission of virus by hands during the current Coronavirus Disease 2019 (COVID-19) pandemic. Nevertheless, severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) was found to remain viable from hours to days on different surfaces,<sup>3</sup> and a similar study on the survival of H1N1 virus on household surfaces reported that it remained infectious for 8 hours on a cloth surface.<sup>4</sup> Thus, elbow contact is likely to be another potential risk factor for transmission of respiratory virus, especially if the infected person coughs or sneezes into his/her elbow and then greets another person by elbow bump. In addition, no precautions after performing cough or sneeze etiquette with the elbow is established, and it is not convenient to change the clothes frequently or disinfect the sleeve after coughing or sneezing into the elbow or upper sleeve, which increases the risk of viral transmission. Last but not the least, elbow bumps put a person within 1 m from the other person.<sup>5</sup>

In summary, it cannot be concluded that coughing or sneezing into the elbow or upper sleeve can effectively prevent the spread of respiratory virus. More attention is needed in future studies on whether these etiquette maneuvers reduce respiratory viral transmission. Elbow bump is not proven to be a safe way of greeting during the current pandemic, before the relevant follow-up contact prevention measures are introduced.

## Conflict of interest

The authors declare that there are no conflicts of interest.

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