



# Enfermedades Infecciosas y Microbiología Clínica

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Letter to the Editor

## There may be interpretation bias regarding donning and doffing process



### *Puede haber un sesgo de interpretación con respecto al proceso de colocación y retirada*

Dear Editor:

We read with interest the article by Kozanhan et al. showing YouTube might be used for learning donning and doffing of personal protective equipment (PPE) for health care workers.<sup>1</sup> In their research, the evaluation method of each video related to donning and doffing was based on European Centre for Disease Prevention and Control Guidance. On the other hand, there are lots of suggested guidelines for donning and doffing PPE and until now there is no evidence-based, gold-standard technique to donning and doffing PPE.<sup>2,3</sup> While donning recommendations of different authorities are similar, doffing instructions vary somewhat across the world. Since the authors use only one evaluation method as a reference, we are concerned that this discrepancy between different accepted donning and doffing methods may create interpretation errors while evaluating the videos. We believe that until testing of which donning and doffing procedure protects best with simulation and clinical studies, the results of such studies may not reflect actual evidence.

## Funding

No.

## Reply to “There may be interpretation bias regarding donning and doffing process



### *Respuesta a “Puede haber un sesgo de interpretación con respecto al proceso de colocación y retirada”*

Dear Editor,

We thank Basaran B and et al. for their interest in our article, which investigates whether videos available on YouTube, presenting procedures of donning and doffing personal protective equipment, can be useful learning resources for healthcare workers.<sup>1,2</sup> They expressed concern about interpretation errors while evaluating the Youtube videos of donning and doffing personal protective equipment (PPE) because of our European Centre for Disease Prevention and Control (ECDC) preference hence the lack of evidence-based gold-standard technique among guidelines yet.<sup>3,4</sup> Scientific research conducted over time will reveal that which of the guideline prepared regarding using PPE are the “gold standard,” however more than one donning and doffing method may be acceptable.<sup>5</sup> Several factors influenced the

## Conflicts of interest

No.

## References

1. Kozanhan B, Tutar MS, Arslan D. Can “YouTube” help healthcare workers for learning accurate donning and doffing of personal protective equipments? *Enferm Infecc Microbiol Clin*. 2020, <http://dx.doi.org/10.1016/j.eimc.2020.11.005> [Epub ahead of print].
2. Peters MDJ, Marnie C, Butler A. Policies and procedures for personal protective equipment: Does inconsistency increase risk of contamination and infection? *Int J Nurs Stud*. 2020;109:103653, <http://dx.doi.org/10.1016/j.ijnurstu.2020.103653>.
3. Verbeek JH, Rajamaki B, Ijaz S, Sauni R, Toomey E, Blackwood B, et al. Personal protective equipment for preventing highly infectious diseases due to exposure to contaminated body fluids in healthcare staff. *Cochr Datab Syst Rev*. 2020, <http://dx.doi.org/10.1002/14651858.CD011621.pub4>. Art. No.: CD011621.

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ECDC guideline's preference to evaluate each video's content in our study's donning and doffing procedure. First of all, the ECDC guideline was prepared in 25 non-English languages.<sup>3</sup> Unfortunately, we have been caught unprepared for the public health emergency of an international concern-Covid-19 pandemic—as the world. Therefore, a guideline presented for non-English languages will, of course, may have an extra advantage in this complex environment that confuses. Another reason for our preference is that “handwashing” is specially specified between each step in ECDC.<sup>3</sup> Hence performing proper hand hygiene according to international recommendations is a critical aspect.<sup>6</sup> Especially after the shift-at the stage where mistakes were more possible-HCWs need more attention. Cheng Lin and et al. showed that removing the gown and mask with the buddy's assistance avoided contamination and exposure to the greatest extent.<sup>7</sup> Finally, ECDC also was recommended a second operator's aid for both donning and doffing of PPE.<sup>3</sup> Considering all of these and our study results, YouTube can be used as a learning resource during the Covid-19 outbreak if an appropriate selection process is applied to identify useful videos that help to don and doffing PPE.vadjust