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COVID-19 reinforces the importance of hand washing

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At the time writing this editorial, COVID-19 has spread around the world with virtually no region left untouched. The speed of the spread and the alarming death rates have seen many countries and jurisdictions introduce measures to prevent the spread of COVID-19, and hand washing features very strongly in all of these. Hand washing has received considerable attention during the COVID-19 pandemic. It is a simple, primary preventive measure that most people can do independently. Hand washing with soap and water for at least 20 seconds or the use of alcohol-based hand sanitisers when soap and water are not available is the first line of defence in stopping the spread of infection (CDC 2020). There is ample evidence however, that many years before the epidemic hand washing among health care workers (HCW) remained an area that needed improvement (CDC 2019, Erasmus *et al.* 2010).

Our hands are a critical vector for transmitting microorganisms (Edmonds-Wilson *et al.* 2015). The cross-transmission of these organisms to others occurs when we fail to wash hands effectively. Within health care systems and services, there have been almost continual awareness campaigns in place to encourage hand washing among health service personnel, patients and visitors. For instance, the international campaign, '*My five moments for hand hygiene*' defines the key moments at which HCWs should comply with hygiene rules while making contact with patients or their surroundings (Sax *et al.* 2009). The '*Cleanyourhands campaign*' was a national campaign launched in the U.K. aiming to reduce the risk associated with hospital-acquired infections via enhanced hand hygiene compliance among HCWs (Stone *et al.* 2012). The campaign included a message "It's OK to ask" to encourage patients to ask HCWs to wash their hands (Stone *et al.* 2012) and supports patient involvement to prompt hand washing and to work together with nurses and other HCWs to reduce the transmission of infection (Alzyood *et al.* 2018).

The current COVID-19 pandemic has seen a focus of education and information on hand washing aimed both at people working within the health sector as well as to the general public. There has been a proliferation of public health messages through various sources about the importance of handwashing, and the correct techniques for hand washing. Memes and short videos aimed at reaching people on their hand held devices, as well as through social media, and mainstream television, radio, print ads and billboards are all in use, and all with the same message, that effective hand washing is crucial to stopping the spread of COVID-19.

In addition to a greater presence on social media platforms and other advertising outlets, the importance of hand washing is now frequently seen on daily news reports, as hand washing initiatives are taken on by service users, politicians, public figures and many others. It is commendable to see greater and more widespread efforts to raise hand washing awareness and a notable increase in people speaking up and talking about the importance of handwashing.

As nurses, we are aware that handwashing has not always been taken as seriously as it should, with compliance and adherence in clinical settings far from optimal over time (Bezerra *et al.* 2020, Pittet 2001). Multiple reports from different countries have shown that hand hygiene compliance rate has been estimated at only 40% (Erasmus *et al.* 2010) while the rate of adherence in critical care units was only 46.25% (Bezerra *et al.* 2020). Although this is a simple and lifesaving task, it is not, regrettably, always undertaken (Doronina *et al.* 2017). The current pandemic has made handwashing the focus of attention. We must now ensure that this focus continues.

Once this pandemic is over, nurses must continue to promote hand washing with the same enthusiasm and commitment not only within the health care arena but widely throughout communities and populations. The significant growth of interest in promoting hand washing behaviours since the start of COVID-19 pandemic should be harnessed and continued well after this outbreak is contained. Thus, nurses can support the protection of their communities against this and the many other infectious agents that pose a threat.

References

Alzyood, M., Jackson, D., Brooke, J., & Aveyard, H. (2018). An integrative review exploring the perceptions of patients and healthcare professionals towards patient involvement in promoting hand hygiene compliance in the hospital setting. *Journal of Clinical Nursing*, *27*, 1329-1345. <u>https://doi.org/doi:10.1111/jocn.14305</u>

Bezerra, T.B., Valim, M.D., Bortolini, J., Ribeiro, R.P., Marcon, S.R. & Moura, M.E.B. (2020). Adherence to hand hygiene in critical sectors: Can we go on like this?. *Journal of Clinical Nursing*. Accepted Author Manuscript. <u>https://doi.org/10.1111/jocn.15293</u>

Centers for Disease Control and Prevention (2019). *Hand Hygiene in Healthcare Settings*. Retrieved from <u>https://www.cdc.gov/handhygiene/index.html</u> (Accessed 26th March 2020).

Centers for Disease Control and Prevention (2020). *Coronavirus Disease 2019 (COVID-19):* FAQ on Hand Hygiene. Retrieved from <u>https://www.cdc.gov/coronavirus/2019-</u> <u>ncov/infection-control/hcp-hand-hygiene-faq.html</u> (Accessed 26th March 2020).

Doronina, O., Jones, D., Martello, M., Biron, A. and Lavoie-Tremblay, M., (2017). A Systematic Review on the Effectiveness of Interventions to Improve Hand Hygiene Compliance of Nurses in the Hospital Setting. *Journal of Nursing Scholarship*, 49, 143. https://doi.org/10.1111/jnu.12274

Edmonds-Wilson, SL., Nurinova, NI., Zapka, CA., Fierer, N., & Wilson, M. (2015). Review of human hand microbiome research. *Journal of Dermatological Science*, *80*, 3-12. https://doi.org/10.1016/j.jdermsci.2015.07.006

Erasmus, V., Daha, T. J., Brug, H., Richardus, J. H., Behrendt, M. D., Vos, M. C. & van Beeck, E. F. (2010). Systematic review of studies on compliance with hand hygiene guidelines in hospital care', *Infection Control & Hospital Epidemiology*, *31*, 283-294. https://doi.org/10.1086/650451

Pittet, D., (2001). Improving adherence to hand hygiene practice: a multidisciplinary approach. *Emerging Infectious Diseases*, 7, 234. <u>https://doi.org/10.3201/eid0702.010217</u>

Sax, H., Allegranzi, B., Chraïti, M.N., Boyce, J., Larson, E. and Pittet, D., (2009). The World Health Organization hand hygiene observation method. *American Journal of Infection Control*, *37*, 827-834. <u>https://doi.org/10.1016/j.ajic.2009.07.003</u>

Stone, S.P., Fuller, C., Savage, J., Cookson, B., Hayward, A., Cooper, B., Duckworth, G., Michie, S., Murray, M., Jeanes, A. and Roberts, J., (2012). Evaluation of the national Cleanyourhands campaign to reduce Staphylococcus aureus bacteraemia and Clostridium difficile infection in hospitals in England and Wales by improved hand hygiene: four year, prospective, ecological, interrupted time series study. *BMJ*, 344, e3005. <u>https://doi.org/10.1136/bmj.e3005</u>