



Letter

A reality check on the use of face masks during the COVID-19 outbreak in Hong Kong

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Despite the rapid spread of coronavirus disease 2019 (COVID-19) into a pandemic, an 'east-west' divide remains between the recommendations of different health authorities on the use of face masks in the community [1,2]. We respectfully differ from the WHO recommendation on its effectiveness [3]. In our opinion, mass masking in the community is one of the key measures that controls transmission during the outbreak in Hong Kong and China. Moreover, it would be futile to convince individuals who experienced the SARS or swine flu outbreaks, not to wear face masks for protection.

We have recently completed an observational study of 10,211 pedestrians in several regions across Hong Kong between 1st–29th Feb 2020 and would like to make a preliminary report for rapid dissemination. In our study, 94.8% ($n = 9683$) wore masks of which 83.7% wore disposable surgical masks. However, 13.0% wore them incorrectly; with 35.5% worn 'inside-out' or 'upside-down'; and 42.5% worn too low, exposing the nostrils or mouth. Many individuals who did not wear masks were smoking, eating, or covering their mouth and nose with tissues or hands. This is a dangerous practice which risks transmission from contaminated fomites.

An online survey to explore local citizens' views on wearing face masks is in progress. Among them ($n = 2859$), 94.1% believed mass masking reduces the chance of infection and community outbreak. Intriguingly, 76.3% of respondents reused their masks. Clearly, there

is a need for public education on measures to prevent self-contamination; and on the method of mask usage in order not to waste resources. We examined the packaging of different brands of surgical mask sold locally, and very few provided instructions on correct usage. Although instructions were previously considered unnecessary as the face mask was intended for use by healthcare professionals, many users now are the lay public. While the local health authority has revised its guidelines to recommend wearing masks in the community, details on the correct usage and handling are insufficient.

Despite being considered unsafe, reusing surgical masks is common when resources are stretched. In the face of a global challenge [4], we urge infection control experts to proactively formulate rational guidelines and devise methods for safe handling and storage of face masks for reuse, should it become necessary. This may prove to be the lesser of the two evils, and lives will more likely be saved than harmed if these guidelines are followed.

We declare no competing interests.

References

- [1] Feng S, Shen C, Xia N, Song W, Fan M., Cowling BJ Rational use of face masks in the COVID-19 pandemic. *Lancet Respir Med* 2020; published online March 2. DOI: [https://doi.org/10.1016/S2213-2600\(20\)30134-X](https://doi.org/10.1016/S2213-2600(20)30134-X).
- [2] Leung CC, Lam TH, Cheng KK. Mass making in the COVID-19 epidemic: people need guidance. *Lancet* 2020; published online March 2. DOI: [https://doi.org/10.1016/S0140-6736\(20\)30520-1](https://doi.org/10.1016/S0140-6736(20)30520-1).
- [3] WHO. Advice on the use of masks in the community, during home care, and in health care settings in the context of COVID-19, 19 March 2020. <https://apps.who.int/iris/rest/bitstreams/1272436/retrieve>. (accessed March 30, 2020).
- [4] CDC. Recommendations for cloth face covers, 3 April 2020. <https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/cloth-face-cover.html>. (accessed April 4, 2020).

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