

This is an Open Access document downloaded from ORCA, Cardiff University's institutional repository: <https://orca.cardiff.ac.uk/id/eprint/132316/>

This is the author's version of a work that was submitted to / accepted for publication.

Citation for final published version:

Robling, Michael R. 2020. Variable uptake of face masks could reinforce health inequalities. *The BMJ* 369 , m2001. 10.1136/bmj.m2001

Publishers page: <http://dx.doi.org/10.1136/bmj.m2001>

Please note:

Changes made as a result of publishing processes such as copy-editing, formatting and page numbers may not be reflected in this version. For the definitive version of this publication, please refer to the published source. You are advised to consult the publisher's version if you wish to cite this paper.

This version is being made available in accordance with publisher policies. See <http://orca.cf.ac.uk/policies.html> for usage policies. Copyright and moral rights for publications made available in ORCA are retained by the copyright holders.



Face masks and reducing health inequalities

Dear Editor

Trisha Greenhalgh and colleagues present a pragmatic argument for face mask use by the public in response to COVID-19. [1] Their precautionary principle model in the absence of clear evidence invokes the parachute approach to evidence-based medicine. [2] To extend that analogy, while trialling parachutes seems redundant, considerations such as quality control, 'user' training and ultimately reach remain relevant. To implement guidance from the CDC and others at scale, how it may work to benefit some but not others needs consideration. [3]

The health impact of COVID-19 and living under social distancing will be experienced differently within populations. For example, manual key workers, those unable to work from home or those who fear for their jobs will have increased exposure. Social distancing works better for some than others. [4] Levels of risk factors will sharply differ across social gradients. [5] Whilst the pandemic may affect all communities, some will be more affected than others.

In general, engagement with health promotion messages will also vary along socio-demographic lines and levels of health literacy. [6] Currently promoted health behaviours such as hand washing will mirror such generic differences. In a survey in Hong Kong fifteen years after the SARS outbreak, higher education level and lower age predicted hand hygiene behaviour. [7] Also in Hong Kong, female gender and higher-level education predicted hand hygiene knowledge and behaviour. [8] Individuals and communities will respond more and less effectively when presented with health promoting guidance.

Rapid action is necessary but it is also possible that key messages will unintentionally re-enforce health inequality. A policy promoting face masks for the public seems desirable in the absence of clear harms. Nevertheless, care should be exercised to ensure that variable uptake does not re-enforce existing health inequalities and perpetuate Julian Tudor Hart's Inverse Care Law. [9]

References

1. Greenhalgh T, Schmid MB, Czypionka T, et al. Face masks for the public during the covid-19 crisis BMJ 2020;369:m1435.
2. Potts M, Prata N, Walsh J, Grossman A. Parachute approach to evidence based medicine. BMJ 2006;333:701-3.
10.1136/bmj.333.7570.70110.1136/bmj.333.7570.701 17008675
3. Centers for Disease Control. How to protect yourself. 4 Apr 2020. [https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/prevention.html?CDC_AA_refVal=https%3A%2F%2F\[http://www.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fprepare%2Fprevention.html\]www.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fprepare%2Fprevention.html](https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/prevention.html?CDC_AA_refVal=https%3A%2F%2F[http://www.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fprepare%2Fprevention.html]www.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fprepare%2Fprevention.html)
4. <https://www.theguardian.com/commentisfree/2020/apr/01/coronavirus-covid-...>

5. Office for National Statistics. Adult smoking habits in the UK: 2018. Statistics Bulletin Release date 2 July 2019
6. Marmot M, Allen J, Boyce T, Goldblatt P, Morrison J. (2020) Health equity in England: The Marmot Review 10 years on. London: Institute of Health Equity
7. Wong JSW, Lee JKF. The Common Missed Handwashing Instances and Areas after 15 Years of Hand-Hygiene Education. Journal of Environmental and Public Health Volume 2019, Article ID 5928924, 7 pages <https://doi.org/10.1155/2019/5928924>
8. Suen LKP So ZYY, Yeung SKW, Lo KYK, Lam SC. Epidemiological investigation on hand hygiene knowledge and behaviour: a cross-sectional study on gender disparity BMC Public Health (2019) 19:401 <https://doi.org/10.1186/s12889-019-6705-5>
9. Tudor Hart J. The Inverse Care Law. The Lancet 1971; 297, 405-412

Competing interests: No competing interests

11 April 2020

Michael R Robling
Professor and Director of Population Health Trials
Centre for Trials Research, Cardiff University,
Neuadd Meirionnydd, Heath Park, Cardiff
CF14 4YS