Mask wearing to reduce the spread of COVID-19

On 28 February 2020, the World Health Organisation (WHO) upgraded the global risk of the spread of COVID-19 to very high.

Dr Leung and colleagues Dr Lam and Dr Cheng discuss the benefits to infection control that face masks can bring. Health authorities worldwide have advised that face masks are somewhat effective in limiting the spread of infection when worn by a person who is infected with COVID-19 but do not protect a person who is not infected. However, the authors argue that face masks, when used systematically in a community, do help slow the spread of the virus.

In Mainland China, extreme forms of social distancing and compulsory mask wearing in public places appear to have been effective in successfully reducing the incidence after the initial explosive outbreak in Hubei Province. This approach has also contained secondary community transmission in other provinces after five million people left Wuhan before the Chinese New Year. Most cases subsequently detected appeared clustered, especially in households, which thus greatly facilitated early case finding and contact quarantine. In Macau, mass mask use in public places and tightened border surveillance were adopted early to cope with the tens of thousands of people who cross the border to and from Mainland China each day. Together with voluntary social distancing, hand hygiene practices and closure of government offices and casinos, there were no further new cases for almost four weeks.

In the absence of similar containment measures, the situation outside China is worsening rapidly with new cases outnumbering those inside China. The experience in China clearly shows that with effective control measures, including mass mask use, the COVID-19 epidemic is containable.

Similar to influenza and other respiratory infections, droplets and fomites are key routes of transmission. Human coronaviruses can maintain their viability outside the host for as long as 9 days, which greatly increases transmission risk through fomites. Wearing a mask can intercept respiratory droplets at source, thus greatly reducing the risk of both direct droplet spread and fomites.

As the WHO urgently assesses which aspects of China’s control measures would help to stall the spread elsewhere, Leung et al. proposed that mask wearing should be a serious candidate to be
considered when major community outbreaks threaten, especially in places where extreme social distancing cannot be easily achieved (3).

References


3. Leung et al., 2020. Let us not forget the mask in our attempts to stall the spread of COVID-19. IJTL

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