Letter to the editor (comment on Greenhalgh et al. Face masks for the public during the covid-19 crisis. BMJ 2020;:m1435)

Covid-19: important potential side effects of wearing face masks that we should bear in mind.

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Dear Editor:

Two side effects of wearing surgical face masks in the public have already been highlighted:

(1) Wearing a mask may give a false sense of security and make people adopt a reduction in compliance with other important infection control measures.[1]

(2) People must avoid touching their masks and adopt other management measures, otherwise masks are counterproductive.[1,2]

However, other potential side effects that we must consider are:

(3) The quality and the volume of speech between people wearing masks is considerably compromised and they may unconsciously come closer.

(4) Wearing a mask makes the exhaled air go into the eyes. This generates an impulse to touch your eyes. If your hands are contaminated, you are infecting yourself.

(5) Face masks make breathing more difficult.[3] Moreover, a fraction of carbon dioxide previously exhaled is inhaled at each respiratory cycle. Those phenomena increase breathing frequency and deepness, and they may worsen the burden of covid-19 if infected people wearing masks spread more contaminated air. This may also worsen the clinical condition of infected people if the enhanced breathing pushes the viral load down into their lungs.

(6) The innate immunity's efficacy is highly dependent on the viral load.[4] If masks determine a humid habitat where the SARS-CoV-2 can remain active due to the water vapour continuously provided by breathing and captured by the mask fabric, they determine an increase in viral load and therefore they can cause a defeat of the innate immunity and an increase in infections.

The context of the current covid-19 pandemic is very different from that of the "parachutes for jumping out of aeroplanes".[5,6] It is necessary to quantify the complex interactions that may well be operating between positive and negative effects of wearing surgical masks at population level. It is not time to act without evidence.

Competing interests: All authors declare no competing interests

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