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Correspondence



Collective and individual rationality dilemma and the failure of anti-Covid-19 policies: Why some people don't wear masks?

Dear Editor,

The SARS-CoV-2 virus was identified in early 2020 in Wuhan Province, China, and spread worldwide, leading to the "COVID-19" pandemic. By the end of 2020, 83 million people all over the world were infected with the disease [1]. Accordingly, governments, national and international institutions have worked globally to design and perform appropriate policies to prevent, control, and mitigate the disease's various consequences. Despite many advances, a safe and effective vaccine for this highly transmissible respiratory virus has not yet been fully developed [2] and the efficacy of the vaccines developed so far [3] is also unclear due to mutations of the COVID-19 virus and their characteristics. In such a circumstance, following health guidelines like regular hand washing, physical distancing, and use of face masks still are the only effective ways to prevent the pandemic in the world [1,4]. Consequently, according to the World Health Organization's research and recommendations, one of the most important and useful methods of combating coronavirus is mask-wearing [5–7]. Some researches have shown that if all people wear masks, COVID-19 prevalence can be significantly reduced [1,8,9]. Despite such an approach's effectiveness, studies have shown that many people do not wear a mask [7]. This paper tries to answer the question of why some people do not use face masks? To our knowledge, this may be due to a conflict between an individual and collective rationality. This situation usually occurs when free-riding being possible, with benefits from a public good/service without paying any cost, and appears when we are faced with a collective and individual dilemma. According to collective rationality, it is wise that everyone wears a mask to remain safe from coronavirus outbreak consequences. Ordinarily, everyone's interest is to wear a mask, not to travel, and not to serve food in restaurants. In other words, if everyone wears a mask, the result of mask-wearing, which is for coronavirus control, is beneficial to all. However, as mentioned earlier, many people do not wear masks. This behavior can be explained according to the nature of the COVID-19 phenomenon, which allows rational actors to act as a free rider. The highest protection against COVID-19 is achieved when a face mask-wearing by everyone in public settings is performed [1]. In other words, when somebody is wearing mask, but people around him/her do not, he/she is also at risk. In this condition, rational actors who believe mask does not protect them find benefits in not using it according to their thin rationality. Because wearing a face mask not only protects him/her against coronavirus, but also brings him/her problems like difficulties with daily living activities, inhaling large amounts of carbon monoxide daily, etc. If the policies of COVID-19 be successful to put it under control, the rational actors will have gained its benefits. In other words, whether or not the actor participates in the collective action against coronavirus (masking, not traveling, etc.), the benefits will be reaped if control policies succeed. Since the coronavirus control

achievements are general, it is not possible to exclude those who do not participate, and the so-called free riding is possible. In such circumstances, the actor's benefits are obtained by not participating in anti-coronavirus policies, including face mask-wearing. Based on study results, there are three forms of policy implementation on guidelines in terms of severity: recommended by governments and organizations but not mandated in law, mandated in law without punishment, or mandated in law with enforced punishment [10]. In the situation where there is a possibility of free riding, it is necessary to use coercion and persuasive policies to force people to wear masks. It seems that the third level of policy implementation, which is laws with punishment, is more fruitful in the struggle with the COVID-19 pandemic in the ongoing global context.

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