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# On the roads to H1N1 pandemic era: drive safe and fearless using colour-coded masks

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## ABSTRACT

Notwithstanding the end of 2009 H1N1 pandemic, the threat for its revisit still persists and WHO has warned to remain vigilant. During that time the situation was more panicky than fatal. In this article, a suggestion to minimize the panic is provided by the usage of colour-coded masks and is proposed hereby as a “population segregation” approach in case of the revisit of H1N1 or similar threatening respiratory viral infections.

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Although World Health Organization (WHO), on 10th of August 2010, declares the official end of H1N1 influenza pandemic, but still warns that the 2009 H1N1 virus has not disappeared and it still poses a risk for serious illness, especially for young children, pregnant women, and persons with respiratory or chronic illnesses[1]. The WHO Director-General advised public health authorities to remain vigilant about the 2009 H1N1 virus instead of letting down their guard[1].

After the detection of first case of H1N1 infection in a Mexican patient, swine flu had spread its arms to other countries very quickly and on June 11, 2009, WHO

declared that transmission of the novel influenza virus had morphed into a full-blown pandemic[2–4]. The situation had even become worst due to human-to-human transfer of the infection[5,6]. The situation was really worrying in few countries however it was panicky in many countries where there were only a few and localized cases. Most of the countries had even opened “H1N1 Screening Centers (SCs)” in many of their cities, but there are few questions which generally arise in everyone’s mind, especially if the pandemic crisis revisit again in future:

a) Who are the persons requiring H1N1 screening; should it be voluntary to every person having flu-like symptoms, or to doubtful cases referred by general practitioners?

b) How safe is visiting SCs voluntarily for a patient having symptoms of common cold? It is to be emphasized here that diagnosing H1N1 in first 48 hours is crucial and could save life of a patient. However many people are scared of moving to SCs in an apprehension to be really trapped up with H1N1 from doubtful cases present in the center.

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The CDC says that a good way to prevent any flu disease is to avoid exposure to the virus which can be done by frequent hand washing, not touching your hands to your face, and avoiding any close proximity to or touching any person that may have flu symptoms. Some physicians say face masks may help prevent getting airborne flu viruses (for example, from a cough or sneeze), but others think the better use for masks would be on those people who have symptoms, sneeze or cough. Still, there are no firm guidelines from WHO or CDC regarding the usage of face masks in case of arrival of a wave of influenza epidemic or re-emergence of influenza pandemic in near future. In fact, we now need to prepare ourselves before the next pandemic knocks our doors, especially the preparation to minimize the influenza-panic.

This is one of the constructive suggestions to cope with the H1N1-panic in near future and, I am sure it will open active discussions and even genuine modifications to this suggestion would help fight H1N1-panic in near future.

Our main strategy should not only be the detection and treatment of cases but also to limit human-human spread apart from swine-human spread. Apart from this we should have a method to cope with the panic due to the visit of a pandemic due to air borne spread of infectious agents, like that of H1N1-influenza. This can be achieved by case segregation when a confirm case of H1N1 is detected, however, the main issue is related to doubtful cases and also with patients not having H1N1 infection but symptoms of common cold. I suggest here a protocol which I call as "Population-segregation" which is based on a strategy similar to that of "Waste-segregation" in colour-coded bags during their disposal. I suggest here usage of colour-coded mask to differentiate (1) the H1N1-infected, (2) doubtful, (3) non-H1N1- infected (but having symptoms of common cold) and (4) healthy population. According to this protocol, a patient found doubtful for H1N1 infection by a GP or hospital-clinic should be prescribed, along with symptomatic medication and confirmatory lab test, to wear a "Yellow" coloured mask until his confirmatory report for H1N1 is received from the laboratory. If found positive for H1N1, then he/she should be segregated from the normal population along with the prescription to wear "Red" coloured mask (this red coloured mask will easily warn others that the person wearing is suffering from H1N1 infection). And if found negative for H1N1 in lab confirmation, then the physician should prescribe him to wear "Green" coloured mask which will indicate others that the person is having common cold and not the H1N1 infection. In this manner we can significantly minimize the panic in general population for H1N1 infection. During the recent H1N1 pandemic, due

to panic, majority of normal-population used face masks in order to avoid getting trapped with infection from infected person. This was clearly noticed globally during air travel. However, it was really difficult to find out whether the person wearing mask is infected with an air-borne viral infection or wearing it prophylactically. I therefore suggest that, if desired, the normal population may wear "White" coloured mask in order to differentiate themselves from the other groups mentioned above. This suggestion will easily address the questions (a) and (b) asked above *i.e.* a person having flu like symptoms can visit SCs voluntarily after wearing "Yellow" mask as he will be classified doubtful at this stage until the physician declares him non-H1N1 infected or his lab report is received. The colour of the mask can then be changed accordingly. Secondly, the persons visiting the SCs or public places can easily maintain their required distance from infected and doubtful cases based on easy identification by the colour of the masks.

In nutshell, this protocol of "Population-segregation" resembles that of traffic lights (Red, Yellow, and Green) and if adopted in reference guidelines by the competent authorities prior to the arrival of next wave of pandemic we may easily be able to minimize the panic. Moreover, this will also help prevent spread of infection as the population will identify among themselves based on the colour codes and can maintain the required distance from infected and doubtful cases.

### Conflict of interest statement

We declare that we have no conflict of interest.

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