



LETTER TO THE EDITOR

Is There A Vaccine for Covid-19 and Are We Unaware of It?

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Dear Editor,

Vaccine production and immunization of the susceptible population against novel coronavirus (COVID-19) is the most important public health strategy in controlling and preventing the spread of disease. Considering the absence of a vaccine for COVID-19, physicians have to treat symptomatically using potential antiviral drugs (e.g. Tadalafil, Atorvastatin, Telmisartan, Ribavirin, Dipyridamole, Chloroquine phosphate and so forth). In such circumstances, the main question may arise on how we can change the epidemiologic trend of COVID-19 disease and reduce the morbidity and mortality rates associated with it. Definitely, self-care measures, paying attention to the recommendations of world health organization, establishing syndromic surveillance system, quarantine and the like can be useful and effective in this regard. Concomitant with the increase of our knowledge in different aspects of COVID-19 as an emerging disease, the authors of this paper would like to present a novel hypothesis in an attempt to bring scientists (especially immunologists) one step closer to producing a vaccine for COVID-19 disease. The evidence from previously published studies has shown that morbidity and risk of mortality are significantly lower at younger age and children (< 10-years-old) than older age and adults [1-5]. Due to co-morbidity with other disease, it is sensible to have a higher risk of mortality among older people

afflicted with COVID-19. However, the skeptical and questionable issue is why the COVID-19 disease has not had heavy progression or fatality in the children from the beginning of the current COVID-19 pandemic. Do children have a protective factor against the disease that adults lack? In the present article, a novel hypothesis suggests that antibody titer in one of the routine viral vaccines of children may reduce the virulence related to COVID-19 virus. It is unknown to us which of these routine vaccines creates this effect. Perhaps one of the reasons for higher fatality of COVID-19 virus in the elderly and adults is that they have not been vaccinated, the routine vaccination history in such people is incomplete or their antibody titers have decreased with the passage of time. As a result, their immune system has been attenuated against the COVID-19 virus.

It is necessary to examine this hypothesis in a case-control seroepidemiologic study. The authors suggest that in countries affected by COVID-19 disease, the vaccination history of people with and without COVID-19 disease be checked in terms of receiving or not receiving routine viral vaccine and their level of antibody titers be examined. We surmise that the antibody elicited by measles vaccine in children reduces the adhesion ability (avidity) of new coronavirus antigens to cell receptors because the epidemiological aspects of measles virus (for example the virus is so contagious and can remain on surface for more than two hours and also patients with measles can feel healthy but spread the disease and so forth) are similar to COVID-19 virus.



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Declarations

Authors' contributions

Author 1 JA -searching data, wrote manuscript, acted as corresponding author and editing the manuscript and supervision of the manuscript.

Author 2 KM -searching data, wrote manuscript, acted as corresponding author and editing the manuscript and supervision of the manuscript.

All authors have read and approved the manuscript.

Consent for publication

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