

Does Sputnik V vaccine have the highest potential to save India from Delta Variant?

31 July 2021 | Views

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The new variants of coronavirus led to tormenting repercussions for all of us, leading to some alarming death tolls all over the world. Considering how densely populated India is with more than 1.38 billion people, it couldn't be far from guessing that our country indeed had the highest potential for this virus to produce the most dangerous mutations of coronavirus that the world has seen so far. With its tendency to attack the immunity cells, these mutations are speedy as compared to human cells. They further have mechanisms to proofread the genome and repair a sequence if an error is detected.

It was on Tuesday (June 15, 2021) when India had the lowest recorded cases of COVID-19 with 60,471 infections. This is the Delta Variant, which was majorly the reason behind the unbelievable striking increase in coronavirus cases in the last two months. As per researches, Delta virus is the most transmissible form of the virus and probably deadlier too^[1] The Delta plus variant has been formed due to a mutation in the Delta or B.1.617.2 variant, first identified in India and one of the drivers of the deadly second wave. Though there is no indication yet of the severity of the disease due to the new variant, Delta plus is resistant to the monoclonal antibody cocktail treatment for COVID-19 recently authorised in India. B.1.617.2 or Delta variant first detected in India has now emerged as a variant of concern globally - potentially reducing the effectiveness of vaccines. Other mutant forms of coronavirus such as those that originated from Brazil, Britain, South Africa, and the US aren't as dangerous as the Indian variant.

One of the worst repercussions of such unprecedented mutations is that it calls for a vaccine that promises the highest levels of efficacy and safety. While, India is in the process of bringing in more vaccines, the Russia-made vaccine, which became a part of India's vaccination drive recently, is effective against all variants of COVID known today. Very recently the makers of the vaccine shared that Sputnik V is more efficient against the highly transmissible Delta variant of coronavirus disease (COVID-19), which was found in India, with an efficacy of over 91.6 per cent, according to a study. It would not be wrong to say that the Russian vaccine along with Covaxin and Covishield will put up a strong fight against the Delta variant. The health ministry will soon share scientific details of the proportion of antibody titers produced by these Covaxin and Covishield.

However, last week, RDIF also shared that Sputnik V will soon offer a booster shot to work against the Delta variant of coronavirus, to other vaccine manufacturers. It is imperative to say that the makers of Sputnik V have always adopted a proactive approach in vaccine collaboration. In November 2020, Sputnik V shared one of its two human adenoviral vectors

with AstraZeneca to increase the efficacy of AstraZeneca vaccine. Using two different vectors for two vaccine shots resulted in higher efficacy than using the same vector for two shots. Hopefully, other vaccines too will realise the advantages of heterogeneous boosting and strengthen the fight against the COVID 19 mutations.

While scientists are currently not sure if the Delta variant will be creating problems for India, we still need to be prepared ahead to fight against this as this could be one of the prime reasons behind the much expected third wave. We cannot let our guard down especially when we have already seen the devastation caused by the second wave of the coronavirus virus. It will be thus inevitable to conclude that Indians should strictly follow COVID protocols and get vaccinated as soon as possible.

Davies et al.(2021); Pearson et al. (2021); Faria et al. (2021); Allen et al. (2021); Centre for Disease Control and Prevention; Public Health England.