

Get Vaccinated to Quash the COVID-19 Pandemic

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Abstract

The battle continues with the unseen killer; (COVID-19), it is out breaking around the world. As the pandemic progress, the virus changes itself, mutate and produce more variants across the globe. The vaccine is the most important way to curb the COVID-19 pandemic by reaching the community immunity (Herd immunity). Spreading of the virus is unlikely when the herd immunity is achieved. In fact, a remarkable reduction in the percentage of infection, hospital admission and severe cases is witnessed in various countries after the vaccination. Although Saudi Arabia holds a low fatality rate in comparison with other parts of the world, the COVID infection is highly prevalent besides the presence of other comorbidities. Hesitancy in getting the vaccine raise the risk of continuing the COVID-19 global pandemic, its transmission and evolution will continue and we might face a novel stage of contagion; COVID-20. The virus owns an unexpected spread rate, its profound impact on people health and healthcare system makes it highly important to end up the pandemic through vaccination. We must be all responsible, vigilant, caring about our health and urge community immunity by encouraging every person to take the vaccine.

Keywords: COVID-19; Variants; Contagion; Community immunity; Herd immunity

The Steep Raise in COVID-19 Infection

The battle continues with the unseen killer; Coronavirus Disease 2019 (COVID-19), it is out breaking around the world. Johns Hopkins University revealed data showed more than 165 million confirmed cases and more than 3 million deaths across nearly 200 countries as of May, 2021 [1]. COVID summer surges threaten the end of the pandemic due to eager travelers and loss of commitments to the precautionary measures. Moreover, as the pandemic progress, error-prone virus replication leads virus to change itself, mutate and produce more variants across the globe. For instance, a new variant of COVID-19 known as B.1.1.7 found to be dominant in the UK and it is associated with high risk of death compared to other variants [2,3]. It is thought to anchor tighter to the human cells, yet luckily, it does not seem to evade the natural nor the vaccine-enhanced immune memory cells or post vaccine immune response [4]. B.1.351 is another variant emerged independently in South Africa and the US. A unique mutation is discovered in Brazilian variant P.1, which was detected in the US later [4]. In addition to the recently identified Indian variants B.1.617 and B.1.618 that are found to be highly transmissible and resist neutralization by therapeutic monoclonal antibodies or convalescent sera. However, the modest neutralization resistance

to vaccine-elicited antibodies supports preserving the current vaccine protection [5].

Vaccination is the Ultimate Solution

The vaccine is the most important way to eventually curb the COVID-19 pandemic through reaching the community immunity; or the vaccine- induced herd immunity. Spreading of the virus is unlikely when the herd immunity is achieved, as supported by WHO [6,7]. Global research studies actively worked on introducing effective vaccines, most of which have successfully been approved for use for all levels of income nations. The majority of countries prioritize the vaccination for the elderlies, healthcare providers and clinically vulnerable people [8]. With vaccination rates continues to increase in many countries, the daily cases status is steadily stable or downward, except for India due to new COVID-19 variant wave, and also few European countries such as Turkey, France and Germany [1].

Public health England data analysis showed 70% reduction of COVID-19 cases among the healthcare providers after active vaccination campaign, while hospital admission and death is reduced by 75% [9]. In the UK, the rates have fallen steadily since January and remarkably faster among the elderly vaccinated group [10]. By March 2021, high population rate like the state of Israel and United Arab Emirates, witnessed a significant drop in the infections and initially the mortality went down in individuals over

60 years old who are vaccinated since December 2020 [11,12]. A real-life effect of the vaccination on the pandemic dynamics has been demonstrated by Rossman, et al. study [11]. Obviously, a clear demographic shift was noticed, the age of hospital admission has gone down among young and middle-age rather than old people [13]. Although, this is a sign of success in protecting the older population through vaccination, yet, this pulls the attention towards the younger generations [14].

Be Vaccinated but Keep the Precautions

Having the corona vaccine is a great step, however, this is not going to show efficacy without consideration of precautionary measures even after receiving the first dose. This is what exactly took place in Chile, where people left up the precautions despite having one of the most successful vaccines in the world, which resulted in reporting a higher rate of infection in April [14]. In contrast, a case control study published in *New England Journal of Medicine*, revealed that the Pfizer BioNTech coronavirus vaccine produced great results in the real world and provided protection from the first dose. It reduced symptomatic cases by 57%, hospitalization by 62% and severe disease by 62%. However, two doses of this mRNA vaccine succeeded to reach 94%, 87% and 92% reduction of symptomatic, hospitalization and severe cases respectively [15].

Let us Terminate the Pandemic for Good

Some people think of being naturally infected and therefore immune! Though, some symptomatic cases evidenced to have life altering and disruptive effects. Worldwide cases are watched to persist a long-term health struggles such as headache, dizziness, fatigue, postural tachycardia, orthostatic palpitations. Unfortunately, getting back to normal might take months in fact [16,17]. Nevertheless, the unprecedented COVID-19 pandemic has affected lifestyle activities, sleep attitude, mental behavior which needs extreme efforts in order to restore the well-being [18]. The daily new coronavirus cases and daily deaths in the Kingdom of Saudi Arabia (KSA) is increasing during May after being stable in first quarter of 2021 compared to world status [19]. Although KSA holds a low fatality rate in comparison with other parts of the world, the COVID infection is highly prevalent besides the presence of other comorbidities [20].

Hesitancy in getting the vaccine raises the risk of continuing the COVID-19 global pandemic. Unless global equity in vaccinations is achieved, its transmission and evolution will continue and we might face a novel stage of contagion; COVID-20. It is time to terminate the pandemic and everyone should be vaccinated to restrain the spread. Saudi Arabia was witnessed to be a quick respondent and keenly aware of the pandemic consequences,

it conducted intensive efforts to contain the outspread [21,22]. Furthermore, the kingdom has improved in research development, put a high sense of alert in country readiness to unprecedented events, and imposed a number of extreme precautionary measures on social, travel, business and religious gathering proactively [23]. By May, vaccine rollout data showed that KSA has administered more than 13 million doses of COVID vaccines, which is enough to cover only about 20% of the population within the kingdom, assuming that every person needs the two doses [24].

As the virus owns an unexpected spread rate, its profound impact on people health and healthcare system makes it highly important to end up COVID-19 pandemic through the vaccination. Thankfully, the Saudi Arabian government led by the custodian of the two holy mosques has committed millions of dollars funding the production of safe and effective vaccines. It has approved more than one type of vaccine for use in the Kingdom provided free for all groups of citizens and residents. The Saudi ministry of health has expanded the vaccination centers across all regions of the Kingdom, in addition to inoculating campaigns to reach a wider segment of the society. The under-line message is that we must be all responsible, vigilant, caring about our health and urge the community immunity by encouraging every person to get the vaccine to quash this pandemic.

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