TO GET OR NOT TO GET VACCINATED:
VACCINATION AGAINST COVID-19 AS THE BETTER OPTION

Precious Nwaka, BSc[1]
[1]4A Health Studies, School of Public Health Sciences, precious.nwaka@outlook.com

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ABSTRACT

During the current COVID-19 pandemic, researchers have developed COVID-19 vaccines, conducted successful clinical trials, and administered the vaccines to the public. However, as many opinions circulate throughout communities on whether getting vaccinated is safe, individuals must decide if getting vaccinated is truly better and safer than not getting vaccinated. The author provides statistics and current data on vaccination to prove that getting vaccinated is the best option amongst the two.

In this article, the author lists common arguments against vaccination, acknowledges the validity and misinformation contained in these statements, and provides counterarguments for why vaccination remains the safest option to fight against COVID-19.
Overall, the purpose of this article is to challenge common ideas fostering vaccine hesitancy by providing an opposing point of view supported with credible information.

INTRODUCTION

With the rapid emergence of COVID-19 in 2019 and its global catastrophic consequences, researchers engaged in a race against time to develop, study, and distribute COVID-19 vaccines.[1] Despite the dire need for a quick solution against rising SARS-CoV-2 (the virus causing COVID-19) infection rates, these vaccines were not received with open arms by many.

By conducting sequential processes in parallel, clinical trials done by companies such as Johnson & Johnson, Pfizer/BioNTech, and Moderna passed through phases I and II rather quickly.[2-5] From these clinical trials, each company has concluded their vaccine to be effective and safe for administration to the general public.[2-5]

Various opinions have continued to circulate both inside and outside the health community on whether getting vaccinated against COVID-19 is as safe as clinical trials suggest.[6] One study that filtered through Twitter feeds found that only 57.65% of users supported the idea of COVID-19 vaccination, with 19.30% of users displaying vaccine hesitancy and the other 23.05% opposing vaccination altogether.[7] Another study adopting similar research methods found that COVID-19 vaccine opposition increased by 80% from four months before COVID-19 spread to the United States to four months after community transmission.[8]

To get or not to get vaccinated: that is the question. With sporadic infection rates transcending national borders, one must decide as quickly as possible whether to get vaccinated or not. After exploring and analyzing existing research and statistics concerning the topic of COVID-19 and vaccination, the author

asserts that getting vaccinated is the better option amongst the two.

BODY

Initially, those who oppose COVID-19 vaccination may question its safety by focusing the fact that it is associated with some negative health risks, which is valid to a certain extent. Following the administration of the AstraZeneca Vaxzervria/COVISHIELD COVID-19 vaccines in Canada, reports of thrombosis with thrombocytopenia syndrome and Guillain-Barre Syndrome have been made.[9] Additionally, reports of myocarditis and pericarditis have also been made after the administration of Moderna and Pfizer BioNTech mRNA vaccines.[9] However, as of October 18th, 2021, the Government of Canada reported 4,927 cases of serious adverse effects after COVID-19 dose administration, which is only 0.009% of the total doses administered at that time.[9] Thus, although one may experience adverse health effects after vaccination, the odds of such events are minuscule.

On the other hand, one investigation conducted in Los Angeles County found that unvaccinated individuals were 4.9 times more likely to test positive and 29.2 times more likely to get hospitalized with COVID-19 than fully vaccinated individuals.[10] Recent data published by the CDC suggested that the risk of dying from COVID-19 in the United States is 11.3 times greater in unvaccinated individuals compared to their vaccinated counterparts.[11] Consequently, it is evident that those who opt-out of vaccination are at a much greater risk of serious COVID-19 infection that those who do not.

Overall, although one might experience negative health effects after vaccination, refusal to get vaccinated puts one at greater risk of contracting, being hospitalized with, and dying from COVID-19. Thus, vaccination is the safer option.

Next, one supporting the decision not to get vaccinated may state that COVID-19 death rates are low—for example, as of November 12th, 2021, the COVID-19 case-fatality ratio in the United States was about 1.6%[12] — and most of these deaths are in individuals with comorbidities. Therefore, these individuals may conclude that it is not necessary for healthy individuals to get vaccinated.

Although it may be true that COVID-19 death rates are higher in vulnerable populations but normally lower in the general population, getting vaccinated protects communities and the vulnerable populations in them.[13] Having high proportions of vaccinated individuals relative to unvaccinated individuals in communities help establish herd immunity, where the virus is unlikely to spread in communities because most people are immune to it.[13] Although herd immunity has not quite yet been reached in most communities,[14] communities with high vaccination rates such as the Peel Region in Ontario, Canada have seen lower rates of COVID-19 infection.[15] Conversely, as a province with one of the lowest vaccination rates in Canada, Saskatchewan's COVID-19 death rate as of October 2021 was three times higher than the national death rate.[16]

Furthermore, some individuals with pre-existing health conditions are medically exempt from getting vaccinated against COVID-19 but are still susceptible to the virus and adverse health effects of infection.[17]

Getting vaccinated protects all individuals in the community, proving it to be the better option.

Lastly, those who oppose the administration of COVID-19 vaccines may say that COVID-19 rates are decreasing in

certain communities, so vaccination is not needed. Although it is true that infection rates are decreasing in some provinces like Ontario, Canada,[18] it is also true that getting vaccinated prevents future outbreaks.[13]

The New York City outbreak of measles from 2018-2019 is a good example to demonstrate why vaccination against COVID-19 is still essential, even with decreasing infection rates. In 2000, the United States declared that measles was eliminated, and with antivaccination on the rise, fewer Americans were getting vaccinated against measles.[19] With an imported case of measles in 2018, New York City experienced a measles outbreak.19 One study in the New England Journal of Medicine found the outbreak to be a consequence of under-vaccination as patient records revealed that 85.8% of the infected patients were unvaccinated.[19]

In the case of COVID-19, as restrictions on international travel continue to loosen, it is possible that COVID-19 cases are imported. However, vaccination prevents outbreaks in such situations as when more people in the population are vaccinated, the infection is less likely to spread when introduced

Therefore, even though COVID-19 cases are dropping in some areas, getting vaccinated protects communities from future outbreaks, proving that getting vaccinated is the safer choice.

Overall, because of the short period of time between the first known case of COVID-19 in 2019 and now, there are a lot of existing research gaps. To fill in these gaps, ill-informed opinions and misinformation continue to spread across communities. Those opposing vaccination may focus on possible adverse effects, low rates of infection and death, and the downward trend of infection rates and claim that not getting vaccinated against COVID-19 is safer than getting vaccinated.

To get or not to get vaccinated: that is the question. Current data makes it apparent that although rare health effects may be followed by vaccination, getting vaccinated is the safer option as it protects individuals and communities from the even more detrimental health effects of COVID-19.

Nevertheless, amid this tumult of opinions, this field would benefit from phase IV trials and other studies assessing the effects of vaccination in individuals and communities.

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