The COVID-19 pandemic defined the year 2020 with its immense impact on quality of life and economics at a global scale. However, the year ended with a glimmer of hope when the Food and Drug Administration (FDA) approved the use of the COVID-19 vaccine in individuals over the age of 16 years. The vaccine campaign was a success in countries with high rate of vaccination, as the number of new infections declined rapidly despite the easing of lockdown restrictions. However, limitation of activities both in and out of school were still needed due to unvaccinated populations, including teenagers and children. Epidemiological data show that the susceptibility and transmission of COVID-19 in children decrease as age decreases. Children tend to develop asymptomatic disease and generally present with more favorable outcomes compared to adults. Although, recent emergence of new variants increases the risk of disease transmission and the disease severity among children [1-3].

In May 2021, the FDA and Committee for Medicinal Products for Human Use (CHMP) approved the use of the COVID-19 vaccine in individuals over the age of 12 years. Some countries considered extending the vaccinated population to children between the ages of 12 to 16 years. They expected that this step would assist in controlling the pandemic, especially with the emergence of novel pandemic variants. Increasing the vaccination rate would not only boost herd immunity, but also aid in the recovery of the global economy. However, in order to implement such a strategy, it is important to understand the hesitation of parents in vaccinating their children, since parents usually determine whether or not their child is vaccinated.

In Israel, the vaccination campaign started in mid-December of 2020, and by June 3rd of 2021, 59.35% of the population was fully vaccinated. The highest average of new infections per day within a moving 7-day window was 8,624 cases recorded on January 17th of 2021. This number gradually declined as the vaccinated population increased and eventually reached 15 new cases per day at the beginning of June of 2021. The emergence of the Delta variant resulted in the weekly average of new cases increasing to 450 at the beginning of July. Based on the Israel nationwide observational study, vaccine effectiveness against symptomatic COVID-19 infection, COVID-19-related hospitalization and death exceeded 96% across all age groups. There was also a positive correlation between vaccination rate and age, as individuals aged 70 years and above exceeded 95% vaccination. This decreased to approximately 90% in those between the ages of 50-70 years , and further decreased to 80% in individuals aged 20-40 years. However, the percentage of people who received the first vaccine in Israel reached a plateau over the previous two months. The vaccination rate increased by only 2.3% between the months of April (60.7%) and June (63%) of 2021 [4-6].

This phenomenon exists in other countries as well and is likely driven by vaccine hesitancy, which is defined by the World Health Organization (WHO) as a delay in acceptance or refusal of vaccination despite the availability of vaccination services [7]. The causes of vaccine hesitancy vary by country and are vaccine-specific, indicating a need to strengthen the capacity of national programs to identify local casual factors and develop appropriate strategies [8-9].