The year 2020 will be remembered by the coronavirus disease 2019 (COVID-19) pandemic and its worldwide huge effects on the quality of life and economy. This year ended with a glimmer of hope when the Food and Drug Administration (FDA) approved the use of the COVID-19 vaccination for ages ≥16. Despite the relaxation of lockdown restrictions in countries with a high vaccination rate, the vaccine campaign was a success, with the number of new infections rapidly declining. However, limitations concerning the activities of the unvaccinated population (mainly teenagers and children) both in school and outside are still needed. Epidemiological data show that the susceptibility and transmission of COVID-19 decrease in children with a decline in age. Children tend to develop asymptomatic disease and present a more favorable outcome than adults. However, the recent emergence of new variants increases the risk of disease transmission and disease severity in children [1], [2], [3].

In May 2021, the FDA and the Committee for Medicinal Products for Human Use (CHMP) approved the use of the COVID-19 vaccine for teenagers aged ≥12 years. Some countries are considering extending the vaccine population to children from 12 years to 16 years. They expect that this step will contribute to the control of the pandemic, which is extremely important after the spread of the new pandemic variants. Increasing the vaccination rate will help to achieve herd immunity and to recover the global economy. In order to imply such a strategy, it is important to understand the hesitation of parents towards vaccination for their children, since parents are usually the decision-makers.

In Israel, the vaccination campaign started in mid-December 2020. By June 3rd, 2021, around 59.35%of the population was fully vaccinated. The highest level of the seven-day moving average of new infections per day was 8,624 on January 17th, 2021. This number gradually declined as the percentage of the vaccinated population increased and reached 15 new cases per day at the beginning of June 2021. Due to the delta variant, the number of weekly averages of new cases increased to 450 at the beginning of July. Based on Israel’s nationwide observational study, vaccine effectiveness against symptomatic severe acute respiratory syndrome coronavirus 2 infection, COVID-19-related hospitalization, and COVID-19-related death exceeded 96% across all age groups. There was a positive correlation between age and the vaccination rate (%) as follows: ≥ 70 years (>95%), 50–70 years (around 90%) and 20–40 years (around 80%). The percentage of people who were vaccinated in Israel reached a plateau over the previous two months; it (the first vaccine) increased only by 2.3% from 60.7% on April 1st, 2021 to 63% on June 1st, 2021 [4], [5], [6]. This phenomenon exists in other countries as well and is probably caused by vaccine hesitancy. Vaccine hesitancy is defined by the World Health Organization 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 causal factors and develop appropriate strategies [8], [9].