

Survey of fully vaccinated anti-COVID 19 people from June to November 2021: Single Italian center study

The novel severe acute respiratory syndrome coronavirus (SARS-CoV-2) and the associated coronavirus disease 2019 (COVID-19) continue to spread throughout the world, with more than 265 million total confirmed cases. In Italy, the main strategy to prevent the SARS-CoV2 virus shedding is to focalize the attention and restriction against the unvaccinated people, suggesting that people who have been vaccinated are not relevant in the epidemiology of COVID-19. As today 55.2% of the world population has received at least one dose of a COVID-19 vaccine, 8.24 billion doses have been administered globally, and 33.99 million are now administered each day (<https://ourworldindata.org/covid-vaccinations>). However, the number of new COVID-19 cases continues to increase everywhere in Europe, in Italy as today December 13, 2021, 19 212 COVID-19 positive cases were detected (<https://covid19.who.int/>). Suggesting that vaccinated individuals continue to have a relevant role in viruses transmission. By July 2021, a total of 866 COVID-19 cases were detected at the Altamedica Laboratory by real-time RT-PCR analysis, during laboratory routine, dates of positive specimen collection ranged from June through November 2021 (Figure 1).

Among the 866 positive cases, 623 (72%) of these cases were in people who were fully BioNTech/Pfizer BNT162b2, Moderna, and AstraZeneca vaccinated, and 243 (28%) were people unvaccinated (Table 1). Among the vaccinated cases, 59% (368/623) occurred in females and 255 occurred in males 41% (255/623). Based on collected data, 31% (191/623) vaccine breakthrough

infections were asymptomatic, 69% (432/623) were symptomatic, 7% (43/623) patients were known to be hospitalized, and 1% (7/623) patients died (Table 1). Among people who were unvaccinated 67% (162/243) were symptomatic and 12.7% (31/243) patients were known to be hospitalized, and 2% (5/243) patients died (Table 1). In Italy, the National Institute of Health reported similar data (<https://www.epicentro.iss.it/en/coronavirus/sars-cov-2-integrated-surveillance-data>) were vaccinated people affected by COVID-19 are increasing remarkably, likewise data come from the United States, and Germany confirmed this trend.^{1,2} People who are vaccinated have a lower risk of severe disease, but are still a relevant part of the pandemic. There is increasing evidence that vaccinated individuals continue to have a relevant role in transmission. It is therefore wrong and dangerous to speak of a pandemic of the unvaccinated and to emanate new restrictions only to strike the unvaccinated people.

Our data, as many prestigious authors claim,³ support the evidence that vaccinated people are now a significant part of the pandemic (Table 1). Choosing to use a nontraditional vaccine that does not produce immunity toward the entire virus but only toward a small part of it, extremely variable, such as the spike protein, which obviously has been profoundly modified several times, makes these vaccines rapidly ineffective and contribute to the spread of the pandemic, causing a false sense of security for those who are vaccinated repeatedly. In fact, no protection can be guaranteed by repeating the vaccination at a short distance. Which vaccine can be considered effective if it needs to be repeated in short distance over

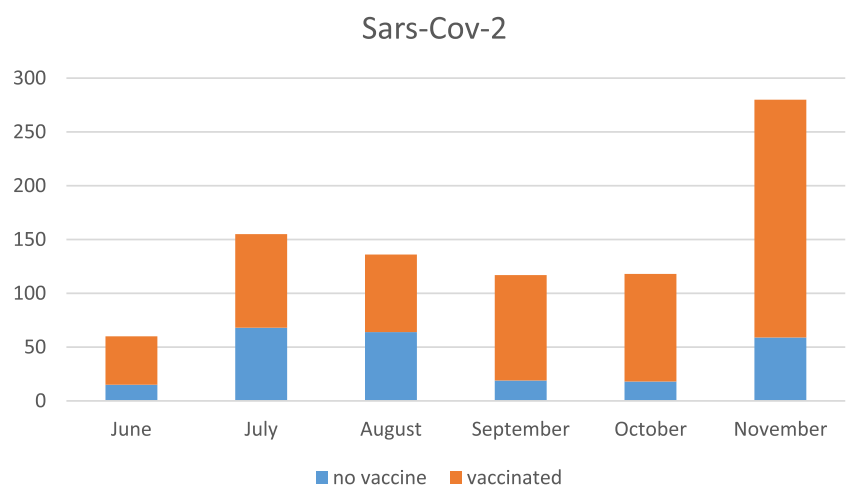


FIGURE 1 SARS-CoV-2 infected (N = 866), by date of specimen collection and vaccination status

TABLE 1 Number of cases with diagnosed COVID-19, hospitalized, and deceased (from June to November 2021) according to the vaccination status and age class in the Italian population (aged > 12 years)

Vaccine status	Outcome	Age distribution				Total
		12–39	40–59	60–79	80+	
Vaccinated	SARS-CoV-2 infected	218	167	137	101	623
	Hospitalized	3 (1.4%)	8 (4.8%)	15 (11%)	17 (16.8%)	43 (7%)
	Deceased	–	–	2 (1.5%)	5 (5%)	7 (1.0%)
Unvaccinated	SARS-CoV-2 infected	78	76	56	33	243
	Hospitalized	2 (2.6%)	8 (10.5%)	11 (19.6%)	10 (30%)	31 (12.7%)
	Deceased	–	–	2 (3.5%)	3 (9%)	5 (2%)

and over again? At this point, since we did not want to use a traditional vaccine, the only salvation will be to rely, as always for all pandemics, on herd immunity which fortunately, in Italy, is close.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

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