

# COVID-19 vaccination in Ukraine: An update on the status of vaccination and the challenges at hand

Dear Editor,

The first case of COVID-19 in Ukraine was confirmed on March 3, 2020.<sup>1</sup> At the time of this study (March 2021), the number of cases of COVID-19 in Ukraine was 1.4 million cases, with mortality calculated at 27 480.<sup>2</sup> Since March 12, 2020, Ukraine has experienced quarantine with varying levels of lockdown. Polls suggest that 90% of Ukrainians feel that the COVID-19 pandemic has changed their lives.<sup>3</sup> The authorization of COVID-19 vaccines has created hope for the restoration of normal life. However, COVID-19 vaccination efforts face several intrinsic and extrinsic issues in Ukraine. The Ukrainian parliament intended to pass legislation on rapid registrations of COVID-19 vaccines till the end of January 2021.<sup>4,5</sup>

On February 1, 2021, the Ministry of Health of Ukraine presented a SARS-CoV-2 vaccination plan for the population (Table 1). The plan consisted of five stages of vaccination, with medical workers and the military forces of Ukraine being the first to receive vaccines. Ukraine received the first deliveries of vaccines in February 2021.<sup>6</sup> The European Union has promised to provide Ukraine with vaccines, because Ukraine is a member of the GAVI alliance, a global vaccine alliance between international bodies such as the United Nations, the World Health Organization, governments, research institutions, private companies, charities, and civil society.<sup>7</sup> However, media reports in Ukraine claimed that the Government of Ukraine would buy COVID-19 vaccines at an inflated price, leading to public outrage and protests, which resulted in reduction in vaccine confidence.<sup>8-10</sup>

It seems that if Ukrainians wish to get vaccinated for free, they will have to wait for their turn or for the second half of 2021, and if Ukrainians wish to be vaccinated earlier, then they have to pay for it

personally.<sup>11</sup> According to a survey of the sociological group "Rating," 55% of Ukrainians are ready to take a SARS-CoV-2 vaccine, if it is provided for free. If the vaccine is paid out-of-pocket, then the number of Ukrainians ready for vaccination decreases to 35%.<sup>11</sup>

Currently, an active campaign is underway to educate the population about the safety of vaccines, with Ukraine being at the initial stage of vaccination against SARS CoV-2. Many contracts have been signed, and others are still in progress. The percentage of Ukrainians ready for vaccination is not high. Misinformation in the media and the promotion of the anti-vaccine movement aggravate the situation. In addition, the problem of vaccination can be associated with mistrust of the policy and issues of procurement of vaccines.

It is also noteworthy that the number of Ukrainians willing to take a flu vaccine in 2020 was also low. At the same time, not all Ukrainians adhere to the rules of adaptive quarantine, which contributes to a high level of infection rates. Perhaps, the first wave of vaccination will change the opinion of Ukrainians, when politicians and certain public figures will also be vaccinated, showing by their example the safety of the vaccine. The vaccination plans of Ukraine are influenced by the interplay of the economy and international relations.<sup>10</sup> At the national level, the implementation of a massive pan-Ukrainian vaccination plan is only achievable in the second half of 2021.<sup>12</sup> This is also a point to reflect on the unequal COVID-19 vaccine distribution in the WHO Europe region and compare it with the experience from Africa and the Middle East.<sup>13</sup>

This is in stark contrast to other Eastern European countries, where mass vaccination programs began as early as January 2021. Given the reports of breaching this right in other official and unofficial contexts of health care,<sup>14</sup> COVID-19 vaccination can serve as

February–April	367 000	Medical workers in hospitals and military personnel
April–May	1.9 million	People aged 80+ and primary medical care providers
May–June	363 000	Other medical and healthcare staff
June–July	2.9 million	People between 70 and 79 years of age
July–August	640 000	State Security Officers
August–September	2.3 million	People over 65–69 years of age
September–October	1.4 million	Education workers
October–November	2.8 million	People over 60–64 years of age
November–December	1.7 million	Other category

**TABLE 1** The Ukrainian vaccination plan per population group

a standstill to rethink this policy and either fully implement it or abolish it.

There is a high incidence of coronavirus infections in Ukraine. Vaccination is an urgent issue, especially among healthcare workers. It is expected that at least half of the Ukrainian population will be ready to be vaccinated against COVID-19, if vaccines become freely available in a timely manner.

### CONFLICT OF INTERESTS

The authors declare that there are no conflict of interests.

### AUTHOR CONTRIBUTIONS

Lolita Matiashova, Ganna Isayeva, Aparajeya Shanker, and Christos Tsagkaris conceptualized this letter. Christos Tsagkaris, Aparajeya Shanker, and Lolita Matiashova wrote the first draft. Abdullahi T. Aborode and Ganna Isayeva wrote the second draft. Mohammad Y. Essar and Shoaib Ahmad made the critical comments and revision. All authors revised and approved the final draft.


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