

Prioritizing COVID-19 vaccination for people with severe mental illness

In the global race for a safe and effective COVID-19 vaccine, there are still many challenges that need to be addressed. One of these will be the initial scarcity of doses and the associated ethical considerations as to whom they should be distributed first.

Recently, the National Academies of Sciences, Engineering, and Medicine have proposed an ethical framework for equitable allocation of COVID-19 vaccine in the US¹. The World Health Organization, as well as several other entities, have produced similar frameworks. In the prioritization of vaccines, these frameworks endorse three universal ethical principles. A first principle concerns minimizing harm and maximizing benefit: an effective vaccine should reduce deaths, disease burden, and societal and economic disruption, and have a minimal side effect profile. The second principle advocates prioritizing populations that may experience disproportionately greater health burdens as a result of the COVID-19 pandemic: some groups are at higher risk of being infected with, dying of or having lasting sequelae of COVID-19, due to their age, profession, medical status or socioeconomic factors. The third principle relates to equal respect for every person, and requires that, in allocation and priority-setting, individuals are considered and treated as having equal dignity and worth. Individuals who, because of vulnerability or structural inequalities, would face barriers to accessing a vaccine, should be offered an equal opportunity to be vaccinated as compared to more privileged groups².

People of all ages with comorbid and underlying physical conditions, such as cardiovascular diseases, chronic obstructive pulmonary disease, type 2 diabetes mellitus, chronic kidney disease, obesity, immunodeficiency and cancer, are particularly vulnerable to morbidity and mortality due to COVID-19. The risk of premature death or severe morbidity in these patients is significant enough for the US National Academies of Sciences, Engineering, and Medicine to prioritize these patients in the allocation of vaccines¹.

Even without factoring COVID-19 into the calculation, people with severe mental illness, including schizophrenia, major depressive disorder and bipolar disorder, have a two to three times higher mortality rate than the general population, resulting in a 10-20 years reduced life expectancy, that appears to be widening. This is mainly attributable to physical diseases. There exists a large body of evidence showing that these people are more likely to develop a wide variety of physical diseases, such as cardiovascular diseases, type 2 diabetes mellitus, and respiratory tract diseases³. The risk for obesity, which is an important associated factor for mortality in patients with COVID-19, can be more than four times higher in people with schizophrenia and about one and a half times higher in those with major depressive disorder or bipolar disorder, compared to the general population³.

Recent studies have shown that people with severe mental illness are at a heightened risk of morbidity and mortality from COVID-19. We therefore argue that they should also be prior-

itized in vaccine allocation. A recent case-control study with over 61 million patients found that people who were recently diagnosed with schizophrenia, bipolar disorder, major depressive disorder or attention-deficit/hyperactivity disorder showed very high odds ratios (5.7 to 7.6) of being infected with COVID-19, as compared to patients without mental disorders, even after adjustment for age, gender, ethnicity and the aforementioned medical conditions. These people are also at increased risk for COVID-19 complications, as reflected in higher rates of hospitalization and death⁴. Other recent studies^{5,6} have confirmed these data.

To put these findings into perspective with the example of the US: in 2017, there were an estimated 11.2 million adults aged 18 or older in the US with severe mental illness. Taking into account a mortality rate of 8.5% that has been found among COVID-19 patients recently diagnosed with a severe mental illness, this means that about 1 million of patients with severe mental illness in the US would die if all were affected by COVID-19.

Severe mental illness is known to be positively correlated with many environmental variables which are themselves risk factors for COVID-19 infection, such as socioeconomic deprivation, working in unsafe environments, living in overcrowded settings or being homeless, institutionalization and confinement. Furthermore, stigmatization, discrimination, erroneous beliefs and negative attitudes associated with severe mental illness, as well as system factors, act as barriers to the recognition and management of physical diseases in people with severe mental illness⁷. Finally, persons suffering from a severe mental illness have more difficulties in following and applying the confusing and constantly changing rules and obligations that are established in relation to the fight against COVID-19^{4,8}. It thus becomes clear why severe mental illness is a major risk factor for COVID infection and negative COVID-19 related outcomes.

In light of this knowledge, and taking into account the second and third ethical principles that should guide vaccine allocation, we consider it paramount that persons with severe mental illness should also be prioritized to guarantee that they receive a COVID-19 vaccine during the first phase of its distribution. It is our responsibility as psychiatrists in this global health crisis to advocate for the needs of our patients with governments and public health policy bodies, as a position paper by the World Psychiatric Association recently posited⁹. In addition, public health bodies should develop and implement targeted programs to ensure that these patients and their health care providers are made aware of these increased risks as well as of the benefits of vaccination.

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