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COVID-19 vaccine mandates in Europe



As the COVID-19 situation worsens across Europe, many countries are considering vaccine mandates and reintroduction of interventions. Talha Burki reports.

On Dec 1, the President of the European Commission Ursula von der Leyen advised the member states of the EU to consider mandatory vaccination against COVID-19. "How we can encourage and potentially think about mandatory vaccination within the EU, this needs discussion", said von der Leyen, in a press conference in Brussels, Belgium. "This needs a common approach, but it is a discussion that I think has to be led."

SARS-CoV-2 infections are surging in Europe. The European Centre for Disease Prevention and Control classifies the situation in 22 countries as being of high or very high concern. The Czech Republic and neighbouring Slovakia have declared states of emergency. In the 2 weeks until Dec 5, some 3.8 million new cases of COVID-19 were reported in the EU and European Economic Area, with around 27 000 deaths. As of Dec 6, the same region had detected 182 infections with the omicron variant (B.1.1.529), with a further 336 infections registered in the UK. As The Lancet Infectious Diseases went to press, there were insufficient data to calculate the COVID-19 vaccines' effectiveness against the omicron variant, or to gauge its transmissibility or potential for causing severe disease. But by the end of the first week of December. there had been no confirmed deaths associated with the new variant.

A few days before von der Leyen's remarks, UK Secretary of State for Health Sajid Javed stated that "taking a vaccine should be a positive choice". He added that mandatory vaccination was not "something [the British Government] would ever look at". 81% of British people aged 12 years and older have received both doses

of the COVID-19 vaccine and 36% have received a booster dose. SARS-CoV-2 infections are running high in the country, with 50 000 new infections recorded on 3 separate days in the first week of December. During the entire pandemic, there have only been 19 days in which the UK has seen more than 50 000 new infections with SARS-CoV-2. But daily deaths from COVID-19 have been stable since September, typically averaging somewhere between 100 and 150.

Lawrence Young, professor of molecular oncology at the University of Warwick (Coventry, UK), attributes Europe's spiking infection rate to the colder weather forcing people indoors, the easing of restrictions such as limits on the number of people permitted to gather together, and waning immunity among those who have received the vaccine. The UK was one of the first countries to roll out COVID-19 vaccines, which means it is likely to have a sizeable pool of vaccinated but susceptible adults. "We know that SARS-CoV-2 spreads rapidly within and beyond people aged 12-15 years", said Young. "It would really make a difference if we could get good coverage with the COVID-19 vaccines in this age group." Ostensibly, in response to the advent of the omicron variant, but probably with an eye on the surging delta (B.1.617.2) variant, the UK Government has once again mandated mask-wearing for users of public transport and shops in England.

Austria is preparing to begin compulsory vaccination against COVID-19 in February, 2022, with fines for those who refuse to comply (individuals who cannot receive the jab for medical reasons would be exempt). "For a long time, maybe too long, I

and others assumed that it must be possible to convince people in Austria to get vaccinated voluntarily", stated Chancellor Alexander Schallenberg, in explanation of what he described as the "very difficult decision to introduce a national vaccine mandate".

In November, Austria enforced a lockdown on unvaccinated citizens, before going into full lockdown a few days later. Around two-thirds of Austrians are fully vaccinated against COVID-19, which is roughly the average for the EU and European Economic Area, but not as high as most western European nations. Protests in Vienna against the lockdown and the planned vaccine mandate have attracted more than 40 000 people.

Polling suggests widespread support among the German public for mandatory vaccination. Incoming Chancellor Olaf Scholz has indicated that he would back such a move. The country is currently averaging well over 50 000 new cases of COVID-19 every day, second only to the USA. Intensive care units in Germany are under enormous strain, particularly in southern and eastern regions. Restrictions have been announced for unvaccinated citizens, including a ban from restaurants and bars. 69% of Germans have been fully vaccinated against COVID-19, but the booster campaign has reached only 18% of the population.

Greece will require people older than 60 years to be vaccinated against COVID-19 from January, 2022. Those who refuse will be fined €100 every month. Around 520 000 Greek people older than 60 years are unvaccinated. Within 24 h of the announcement of the mandate, more than 17 500 Greek people in the targeted age group had registered to receive their first

dose of the COVID-19 vaccine. Italian people working in health care, law enforcement, the military, or in schools are legally required to be vaccinated against COVID-19. The UK plans similar rules for frontline health-care and social-care workers. Heidi Larson, director of the Vaccine Confidence Project at the London School of Hygiene & Tropical Medicine (London, UK), believes vaccine requirements should be tied to specific settings. Several European countries have introduced some kind of vaccine passport. The Swiss Government, for example, has launched a COVID-19 certificate, without which it is not possible to enter indoor venues such as bars. cinemas, and museums.

"People want to feel that they have some kind of choice in whether or not they are vaccinated; they get angry if they are left out of the conversation", Larson told *The Lancet*

Infectious Diseases. "It is one thing to say 'you cannot attend a rock concert unless you are vaccinated, or work with vulnerable people'. But you have to be very careful about saying 'you absolutely must receive the vaccine, or the government will fine you'". She pointed out that vaccine mandates could prove counterproductive if they alienate unvaccinated individuals who had been considering getting the vaccine. "We risk losing some people", said Larson.

There are high levels of vaccine hesitancy in Bulgaria, where less than a third of the population are fully vaccinated against COVID-19, and Romania, where less than half of the population is fully vaccinated. "Several of the eastern European and Balkan nations, which are struggling to roll-out the vaccines, have long histories of vaccine hesitancy; the issues there are not specific to COVID-19", said Larson. "There are also

some countries which have emerged from dictatorships, where people say 'we are past the era where government can tell us what to do'".

It is unclear how any potential mandate would affect take-up of COVID-19 vaccines in countries with significant rates of hesitancy, or whether it would exacerbate the situation. "There are places where you have a combination of low levels of trust in the vaccines themselves and in government", Young told The Lancet Infectious Diseases. "I think we would be better served by improving the messaging to tackle these issues, than demanding people receive an intervention they do not have faith in." But if the surge worsens as families across Europe gather for the Christmas holidays, governments may feel compelled to take action.

Talha Burki



Infectious disease surveillance update

For more on yellow fever in Ghana see https://www.who.int/ emergencies/disease-outbreaknews/item/yellow-fever---qhana

For more on COVID-19 in South Africa see https://www. nicd.ac.za/latest-confirmedcases-of-covid-19-in-southafrica-4-december-2021/

and

https://www.theguardian.com/ world/2021/dec/02/omicronvariant-fuelling-exponentialrise-in-covid-cases-say-southafrica-officials

For more on Legionnaires' disease in Indiana see https:// www.journalreview.com/stories/ indiana-inmate-dies-amidprison-legionnaires-diseasecases,176106

Yellow fever in Ghana

202 suspected cases of yellow fever were reported in four regions in Ghana (Savannah, Upper West, Bono, and Oti regions) between Oct 15 and Nov 27, including 70 confirmed cases and 35 deaths. Those infected were aged between 4 months and 70 years. Most cases were reported from nomadic populations who had moved from Nigeria into a forest reserve in Ghana's Savannah region. The outbreak was confirmed after three samples tested positive for yellow fever by PCR at Institute Pasteur Dakar in Senegal. As of Nov 27, 70 of 196 samples collected had tested positive for yellow fever by antibody testing or PCR: results are pending for a further 68 samples. Since Nov 6, a focused vaccination programme targeting 54 964 people aged 6 months to 60 years (excluding pregnant women) has been held

in over 80 communities in West and North Gonja districts, Savannah region.

COVID-19 in South Africa

On Nov 23, a new variant of SARS-CoV-2, omicron (B.1.1.529), was identified in South Africa. By Nov 26, WHO had declared omicron a variant of concern because of the numerous mutations in its spike protein that could be associated with increased transmissibility, severity, and capacity for immune evasion. On Dec 4, the National Institute for Communicable Diseases of South Africa reported 16366 new COVID-19 cases and 21 deaths in the country, bringing the total number of laboratory-confirmed cases to 3020569, and the number of deaths to 89 965. 183 (73%) of 249 virus genomes sequenced since Nov 8 have been confirmed to be of the new variant.

Legionnaires' in Indiana, USA

On Dec 1, an outbreak of Legionnaires' disease was confirmed at the Pendleton Correctional Facility by the Indiana Department of Correction. Three inmates were confirmed to have the bacterial lung infection, while two others were probable cases. All five were taken to a nearby hospital for treatment. On Dec 3, it was reported that a man aged 38 years had died at a hospital after being confirmed ill. Legionnaires' disease is a severe type of pneumonia caused by legionella bacteria. Outbreaks are often associated with large or complex water systems, such as showers, fountains, and hot tubs. The Indiana Department of Health and the Indiana Department of Correction are working to determine the source of the outbreak. In the meantime, the hot water at the prison has been turned off.

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