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## Inclusiveness of prisons in COVID-19 vaccination deployment: Evidence from Jordan



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As the availability of COVID-19 vaccines has increased in a number of countries, advocacy for equitable access to vaccines among people living and working in detention centers has been continuing [1]. Specifically, in the WHO European Region, many Member States have been working to increase the vaccine coverage among people living in detention centers with this coverage varying between less than 15% to above 60% coverage, and others not reporting on vaccination rollout in detention centers [2].

Since the onset of the COVID-19 pandemic, the Government of Jordan (GoJ) adopted a whole-of-society approach targeting Jordanians and non-Jordanians irrespective of nationality, citizenship, and legal status. This was reflected in the National COVID-19 Preparedness and Response Plan and followed in the Jordan COVID-19 National Deployment and Vaccination Plan, which extended free-of-charge equitable access of all individuals in Jordan. Considering this inclusiveness principle, refugees (it is estimated that around 1.3 million Syrian and more than 2 million registered Palestine refugees live in Jordan) [3,4] started receiving their first dose of COVID-19 vaccine on 14th January 2021, [5] next day after launching the national COVID-19 immunization drive making Jordan an example of equitable access to life-saving healthcare. Access to COVID-19 immunization was also promptly offered to all inmates in the Jordanian prisons and as of June 13, 4,288 detainees have received at least one dose of the vaccine (25% of the detained population); [6] such a proportion was even higher than the percentage of the general population having received at least one dose in the same time-period (around 2 million individuals, equal to about 20% of the general Jordanian population). While no data are publicly available on uptake of vaccines among prison staff, they are considered in the overall population who has free access to COVID-19 vaccines since the onset of the vaccination campaign in Jordan.

Outbreaks of COVID-19 have been reported in prisons of at least 122 countries across the world [7]. Prisons indeed represent a very high risk environment for the transmission of pathogens like respiratory viruses due to overcrowding, high population density, and close contacts among detainees and guards. Specifically, it has been found that when prison capacity exceeds 85%, there is an increased risk of SARS-CoV-2 infection and death [8].

In an effort to reduce overcrowding, 109 countries took measures such as decarceration of non-violent offenders, resulting in an average reduction of the prison population by 6% [9]. Prisons are also considered incubation areas that facilitate rapid viral transmission. In mid-March 2020, the first case of novel COVID-19 was diagnosed at Riker's Island, the main jail complex in New York City. Within 2 weeks, greater than 200 cases were diagnosed within the facility, despite efforts to curb the spread [10].

Data on morbidity and mortality in prisons around the world are sparse and summarized in the 53rd edition of the WHO epidemiological update on COVID-19 (17 August 2021) [2]: in the United States of America (USA) 42 107 cases of SARS-CoV-2 infection and 510 deaths have been detected among nearly 1.3 million people living in prisons, representing a 5.5 times higher incidence rate than that in people of the same age and sex in the general population across the same time period [11]. Similarly, the incidence rate among prison staff in USA reported up to November 2020 was 3.2 times higher than in community settings [12].

On the other hand, the estimated mortality rate among people in prisons was 39 per 100 000 compared to 29 per 100 000 for the general population of the USA [11]. England and Wales have observed a mortality rate 3.3 times higher in detention centers compared to people of the same age and sex in the general population between March 2020 and February 2021 [13]. In this regard, Braithwaite et al., have highlighted how early whole-institution vaccination can prevent outbreaks, ensure the basic rights of people in prisons, and protect staff and the wider community [13].

The implementation of intensive epidemiological surveillance and contact tracing has been an effective measure used to control transmission of SARS-CoV-2 in detention centers. Increasing testing efforts has, in particular, been indicated as a potential strategy to ensure more representative COVID-19 case and death identification.

Almost 18,000 people are in detention centres in Jordan and 2,224 confirmed positive cases for COVID-19 in detention centres nationwide were reported by the Public Security Directorate in March 2021, with only one recorded death due to the virus [14]. Safety protocol during the pandemic to cut down the numbers of cases in the detention centres were applied by the government, which ensured regular PCR tests, in addition to regular disinfection procedures [14].

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In line with the published on 8 February 2021 *WHO Health In Prisons Programme* revision of the guidance to support countries in preparedness, prevention and control of COVID-19 in prisons and other places of detention, that addressed issues of vaccine availability and allocation, Jordan is setting an example for equity in access to life-saving health actions.

Such an approach is well summarized by Dr Ferreira-Borges, who in a recent *Lancet* publication stated that “People living in prisons should be included in national COVID-19 vaccination plans on the basis of their increased vulnerability, the principle of equivalence, and the duty of governments to protect those deprived of their liberty, leaving no one behind” [15].

### Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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