

Letters to the editor

RESP

Transmission and prevention of SARS-CoV-2 (COVID-19) in prisons

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To the editor,

The potentially repressive Peruvian prison population has increased exponentially since the 90s, by 269%. At the end of 2019 Peru had more than 95,000 prison inmates. Furthermore, Spanish prisons have a critical level of overcrowding (over 20%)¹. Prison inmates are one of the most vulnerable groups in society, and this condition is exacerbated during imprisonment by confinement, restricted movement and limited medical services². Persons in the Peruvian prison system have already been affected by the coronavirus 2 of the severe acute respiratory syndrome (SARS-CoV-2), which gave origin to COVID-19 (the coronavirus disease of 2019), and it is necessary to minimise the impact of this pandemic with better prevention for inmates, prison staff and the surrounding community. The purpose of this letter is to make public the factors that predispose someone to COVID-19 and the possible measures to prevent and contain it.

Prison populations have a higher prevalence of infectious diseases, such as human immunodeficiency virus (HIV) and tuberculosis³. The social imbalances in health that affect groups that have a disproportionately high probability of being imprisoned (racial minorities, persons with disorders of drug abuse or mental diseases) lead to higher rates of incidence of such diseases in prison populations². Limitations brought about by the lack of economic and political resources make it difficult to implement measures.

While they are imprisoned, inmates run a higher risk of acquiring pathogens transmitted by blood, sexually transmitted diseases, infection from Methicillin-resistant *Staphylococcus aureus* and infection from airborne organisms such as *Mycobacterium tuberculosis*, influenza and the varicella-zoster virus⁴.

Dangerous diseases such as SARS can spread very quickly⁵. The new respiratory agents, such as SARS-CoV-2, are highly transmissible and represent a new challenge for imprisoned populations, due to the ease with which they spread in overcrowded environments⁶. The most important measures for dealing with the COVID-19 pandemic are “social distancing”, the aim of which is to reduce transmission, and “flattening the curve” of cases that enter the health system. Although prisons face similar risks to those in community health systems, social distancing is extremely difficult and is a major challenge in such environments². An added hazard is that 8.4% of persons in prison have a chronic lung disease, 0.4% have HIV, 0.9% have diabetes plus high blood pressure³ and 13.3% are 50 or more years old. These factors increase the risk of mortality. With a limited capacity to protect themselves and others by using self-isolation, hundreds of thousands of persons who may be infected run a greater risk of catching severe illnesses. To date, the Peruvian National Prisons Institute (INPE) has chosen to suspend visits from members of the community and new admissions by means of a health security cordon. Regardless of such intervention, infected persons, including members of staff, shall continue to enter correctional facilities. Some members of staff of the INPE had already given positive for SARS-CoV-2 on 5 April.

Three levels of preparation should be established to set in motion any response for imprisoned populations: the virus should be delayed as long as possible from entering prisons, if it already circulating, it should be controlled and prisons should prepare themselves to deal with a heavy burden of disease². Controlling transmission in prisons is essential for preventing major outbreaks of COVID-19. The basic

Table 1. Principal measures taken by prison administrations of different countries in response to the COVID-19 crisis⁷.

Country	Limitations on movement inside prison	Suspension or limitation of visits	Suspension of leave or other permits	Adoption or wider use of videoconferencing and other communication tools	Reduction of custodial sentences	Suspension of serving prison sentences	Extension of open-prison and parole systems	Pardons
Afghanistan								X
Albania		X		X			X	
Argentina		X		X			X	
Australia		X		X			X	
Azerbaijan								X
Bahrain						X		X
Brazil		X						
Belgium		X		X				
Belize		X						
Bolivia								X
Brasil		X						
Bulgaria		X						
Burkina Faso		X						X
Canada		X	X	X			X	
Chile						X		
Cyprus		X		X				
Colombia		X					X	
Denmark		X	X	X		X		
Slovakia		X						
Spain		X	X	X			X	
EEUU federal	X	X					X	
Estonia	X	X	X					
Ethiopia		X						X
Finland		X				X		
France	X	X		X			X	
Georgia		X	X	X				
Ghana		X	X					X
Guyana							X	
Honduras		X					X	
Hong Kong	X	X						
Hungary		X		X				
India		X			X		X	
Indonesia							X	
Italy		X		X				
Iran							X	
Ireland		X					X	
Israel		X					X	
Kenya		X			X		X	

(Continued)

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Kosovo		X	X	X		X		
Latvia		X						
Libya					X		X	
Lithuania		X		X				
Luxemburg		X						
Morocco		X						X
Mexico		X						
Moldova	X	X		X				
Nicaragua							X	
Norway		X		X			X	
N. Zelanda		X	X	X				
Netherlands	X	X	X	X		X	X	
Pakistan		X		X				X
Paraguay		X						
Poland	X	X		X				
UK	X	X	X	X			X	
Czech Republic		X		X		X		
Romania		X	X	X				
Russia		X						
Rwanda		X		X				
Singapore		X						
Somalia								X
Sri Lanka							X	
Sudan								X
Sweden		X	X	X		X		
Taiwan		X		X				
Trinity (TT)		X					X	
Tunisia								X
Turkey		X						
Uruguay		X						
Venezuela		X						
Zimbabwe								X

Note. Some of the measures are adopted by individual prisons or in some areas of the country.
 COVID-19: 2019 coronavirus disease.

aim should be one of protecting the health and well-being of all the people who live and work in such environments as well as that of the general public. There is a probability that prison inmates and those who live and work in nearby enclosed areas may be more vulnerable to COVID-19 than the general public. Some responses to prevent this are: freeing as many people as possible, such as those who are least likely to commit additional crimes, the old and the infirm, persons who have committed minor offences; isolating and separating infected inmates; hospitalising those who are severely ill; and identifying prison staff and healthcare providers who were infected early and who recovered and who can help in the work of custody and care once they have been authorised, since they may have a certain level of immunity and there may be a severe shortage of medical personnel².

Such interventions shall help to flatten the curve of the cases of COVID-19 amongst the prison population and to limit the impact of transmission, both within prisons and in the community, once the inmates are released or visited. The burden on the prison system in terms of stabilisation and transfer of critical patients shall likewise be reduced, as it shall on the community health to which the patients shall be sent. Every single person who is unnecessarily infected in a prison and who develops a severe disease is one person too many.

Iran, for example, organised the controlled release of more than 70,000 prisoners, which may help to flatten the curve of the epidemic in Iran. On the other hand, the general failure in calming the imprisoned populations in Italy caused a number of prison riots². In Peru, there were riots in the prisons of Piura and Trujillo.

To effectively tackle an outbreak of COVID-19 in prisons, government authorities should establish a coordination system that brings together the health and justice departments, that keeps INPE staff well-informed and guarantees that all the human rights in prison facilities are respected. As with the general preparations for the epidemic, the COVID-19 pandemic shall teach us valuable lessons in prison settings. As reforms of the criminal justice system continue to develop, emerging transmissible diseases and our capacity to combat them should be taken into consideration. To promote public health, we believe that an effort should be made to release prisoners; and the associated reductions of the released population should be maintained over time. The interrelations of the prison health system and public health are a reality not only in Peru but worldwide.

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REFERENCES

1. Dirección General de Política Criminal y Penitenciaria. Infraestructura Penitenciaria: Proyección de la capacidad de albergue (2015 - 2035). [Internet]. Lima: Ministerio de Justicia y Derechos Humanos; 2015. [citado 5 Abr 2020]. Disponible en: <https://www.minjus.gob.pe/wp-content/uploads/2016/03/Infraestructura-Penitenciaria.pdf>
2. Akiyama MJ, Spaulding AC, Rich JD. Flattening the Curve for Incarcerated Populations - Covid-19 in Jails and Prisons. [Internet]. N Engl J Med. Epub 2 Abr 2020. [citado 5 de abril de 2020]. Disponible en: <http://www.ncbi.nlm.nih.gov/pubmed/32240582>
3. Hernández-Vásquez A, Rojas-Roque C. Enfermedades y acceso a tratamiento de la población penitenciaria peruana: un análisis según el sexo. [Internet]. Rev Española Sanid Penit. 2020;22:9-15. [citado 5 Abr 2020]. Disponible en: <http://www.sanipe.es/OJS/index.php/RESP/article/view/582>
4. Bick JA. Infection Control in Jails and Prisons. [Internet]. Clin Infect Dis. 2007;45:1047-55. [citado 5 Abr 2020]. Disponible en: <https://academic.oup.com/cid/article-lookup/doi/10.1086/521910>
5. Ng WT, Turinici G, Danchin A. A double epidemic model for the SARS propagation. [Internet]. BMC Infect Dis. 2003;3:19. [citado 5 de abril de 2020]. Disponible en: <http://www.ncbi.nlm.nih.gov/pubmed/12964944>
6. Zhou T, Liu Q, Yang Z, Liao J, Yang K, Bai W, et al. Preliminary prediction of the basic reproduction number of the Wuhan novel coronavirus 2019-nCoV. [Internet]. J Evid Based Med. 2020;13:3-7. [citado 17 de abril de 2020]. Disponible en: <https://www.ncbi.nlm.nih.gov/pubmed/32048815>
7. Güerri C, Martí M, Pedrosa A. Medidas adoptadas por país. [Internet]. En: Las prisiones ante el COVID-19. 2020. [actualizado 10 Abr 2020]. Disponible en: <https://covid19prisons.wordpress.com/medidas/>