

The pandemic in prison: interventions and overisolation

A pandemia no cárcere: intervenções no superisolamento

Sérgio Garófalo de Carvalho (<https://orcid.org/0000-0001-5936-9601>)¹

Andreia Beatriz Silva dos Santos (<https://orcid.org/0000-0003-3755-021X>)²

Ivete Maria Santos (<https://orcid.org/0000-0001-8630-0503>)¹

Abstract *Prisonal health is, in its essence, public health. The COVID-19 pandemic poses a great threat to the world and has shown that preventing the disease escalation in prisons integrates the novel corona virus clash in society in general. Up to this moment, the most effective known measure to curb the disease spread is social isolation. Nevertheless, in penal institutions, often overcrowded, social isolation becomes difficult to carry out and, when it happens, it takes the enclosed population to overisolation, with consequences to their mental health. Besides, prisoners suffer with clogged up environment, lack of materials for personal hygiene, poor basic sanitary conditions and difficulties in accessing health services. This paper deals with a narrative review on the pandemic effects in prisons and how government and civil society have organized themselves in order to reduce the disease consequences at those places. The text has been divided into three sections: the first with literature review on the current health theme; the second discusses how different countries have been dealing with the prison situation in the pandemic context, and, the last part focuses on how the Brazilian Penal System has reacted to the new disease.*

Key words *Prisons, Prisoners, SARS-CoV-2, COVID-19 pandemic*

Resumo *Saúde prisional é, em sua essência, saúde pública. A pandemia de COVID-19 representa uma grande ameaça para o mundo e tem demonstrado que prevenir a escalada da doença em prisões faz parte do combate ao novo coronavírus na sociedade em geral. Sabe-se, até o momento, que a mais efetiva medida de contenção ao avanço da doença é o isolamento social. No entanto, em instituições penais, muitas vezes superlotadas, tal medida torna-se de difícil implementação e, quando acontece, leva a população privada de liberdade a um superisolamento, tendo consequências em sua saúde mental. Além disso, indivíduos presos sofrem com ambientes sem ventilação, falta de materiais de higiene pessoal, condições sanitárias básicas precárias e dificuldade de acesso a serviços de saúde. O presente artigo objetiva ser uma revisão narrativa sobre os efeitos da pandemia em presídios e como governos e sociedade civil têm se organizado a fim de reduzir as consequências sobre esses locais. A publicação foi dividida em três seções: na primeira, há uma revisão da literatura em saúde sobre a temática; na segunda, é tratado o modo como diferentes países estão lidando com a situação carcerária no contexto da pandemia; na terceira e última parte, é abordado o modo como o Sistema Penal brasileiro tem reagido à nova doença.*

Palavras-chave *Prisões, Prisioneiros, SARS-CoV-2, Pandemia por COVID-19*

¹ Universidade Federal da Bahia. R. Augusto Viana s/n, Palácio da Reitoria. 40110-909 Canela Salvador BA Brasil. sergiogarofalo@hotmail.com

² Secretaria de Administração Penitenciária e Ressocialização. Salvador BA Brasil.

Introduction

The outbreak of the disease (COVID-19) caused by the novel coronavirus (SARS-CoV-2) in China gained global prominence and was declared a pandemic by the World Health Organization (WHO) on March 11, 2020. As there are no specific treatments and vaccines available to control the disease, the COVID-19 pandemic represents a major threat to public health worldwide, requiring prevention actions, such as social isolation and strengthening hygiene measures¹.

The potential for transmission of the virus is already known when indoors and with agglomerations. Mizumoto and Chowell² described the epidemiological evolution within an Asian cruise, in which the average number of reproduction in the confined environment reached values close to 11, which is higher than the estimates reported in the dynamics of community transmission in China and Singapore, ranging from 1.1 to 7. On this ship, cases went from 1 to 454 in just 16 days. The Spanish flu affected about a quarter of all prisoners, a much higher prevalence compared to data from the general population³.

Criminal institutions confer a confinement imposed by a judicial authority and are surrounded by stigma and vulnerability⁴. Confinement within a prison unit is distinct from other types, such as cruises, schools, quarantine, which are voluntary isolations, while in prison freedom is unwittingly curtailed. In this sense, when applied to the prison context, the isolation measure results in a superposition of confinements, which we call *overisolation*.

Many prisons in Brazil and in the world are overcrowded, offering little space in relation to what is recommended for adequate distancing. Of the countries, 59% have prison occupancy rates that exceed the reported capacity⁵. With this, the possibility is high that the corona virus is rapidly transmitted within the criminal institutions. In a single day in February, China recorded 200 contaminated in one of its prisons, when the curve of infections was already falling in the country⁶.

In addition to being a great risk for people deprived of liberty, a high prevalence of viral respiratory infections in prison populations can serve as a potential source of infection for the general population. This is because prisons are porous institutions, such as the borders of countries in the globalized world⁷. Through prison officers, workers, visitors, prisoners released and transferred, corona virus can pass through the

bars of the prison system and be transmitted to local communities⁸.

By definition, prison health is public health and should be treated as such by governments and the scientific community. Thus, this article is a narrative review on the SARS-CoV-2 and the prison population, in order to gather what has been published on the subject in health journals and elucidate the theme, with the aim of reinforcing the need to guarantee fundamental human rights to people deprived of liberty and safeguarding the health of the population in general.

For better reading and understanding of the subject, this publication is divided into the following topics: the state of the art on COVID-19 and the prison population; covid-19 prevention measures in prisons worldwide; coping with the novel coronavirus in the Brazilian prison system and final considerations.

The state of art about COVID-19 and prison population

To carry out this narrative review, articles published until April 25, 2020 in health journals were researched. Texts in English, Spanish and Portuguese and in any formats, such as editorials, comments, correspondence, opinions, empirical studies and others were included.

The search took place in two databases, PubMed and Google Scholar, the search strategy is in Chart 1. A total of 605 results were found and, after reading the title and/or abstract, 13 articles remained for complete reading. No formal quality assessment was performed, but the important methodological characteristics were considered when interpreting the results presented here narratively.

In PubMed, 3,710 articles were found in the search for the descriptor "COVID-19", but only six publications (0.16%) addressing the pandemic in the prison context. Of the 13 articles included in this review, only one is an original study. In Chart 2, you can see the description of these works.

Social distancing is practically impossible in correctional facilities, where individuals live in confinement in overcrowded and poorly ventilated environments, share bathrooms and showers, as well as common areas such as cafeterias, patios and classrooms¹⁰. Hand hygiene is hampered by policies that limit access to soap, and many prisons restrict alcohol intake, fearing that people have ingested it¹⁴.

Populations deprived of liberty have an increased prevalence of infectious diseases, such

Chart 1. Database search strategy.

| PubMed | Google Scholar |
|--|---|
| ((((((((((((((((((((prison[Title/Abstract]) OR (prisons[Title/Abstract])) OR (jail[Title/Abstract])) OR (emprisonment[Title/Abstract])) OR (in jail[Title/Abstract])) OR (arrest[Title/Abstract])) OR (arrested[Title/Abstract])) OR (detention[Title/Abstract])) OR (custody[Title/Abstract])) OR (confinement[Title/Abstract])) OR (cage[Title/Abstract])) OR (in cage[Title/Abstract])) OR (quod[Title/Abstract])) OR (chokey[Title/Abstract])) OR (choky[Title/Abstract])) OR (gaol[Title/Abstract])) OR (entanglement[Title/Abstract])) OR (accouchement[Title/Abstract])) OR (constrain[Title/Abstract])) OR (ewer[Title/Abstract])) OR (captivity[Title/Abstract])) AND (((((coronavirus[Title/Abstract]) OR (SARS-COV-2[Title/Abstract])) OR (coronaviruses[Title/Abstract])) OR (covid-19[Title/Abstract])) OR (pandemy[Title/Abstract])) | - Coronavirus AND prisons - COVID-19 AND prisons |

Chart 2. Publications included in the review.

| Title | Authors | Publication type | Journal |
|---|---|--|--|
| Covid-19, prison crowding, and release policies | Simpson and Butler ⁹ | Editorial | BMJ |
| COVID-19 and the coming epidemic in US immigration detention centres | Meyer et al. ¹⁰ | Comment | Lancet Infect Dis |
| Fighting covid-19 outbreaks in prisons | Yang and Thompson ¹¹ | Letter | BMJ |
| Flattening the Curve for Incarcerated Populations — Covid-19 in Jails and Prisons | Akiyama et al. ⁷ | Perspective | N Engl J Med. |
| Prisons and custodial settings are part of a comprehensive response to COVID-19 | Kinner et al. ¹² | Comment | Lancet Public Health |
| COVID-19 and Immigration Detention in the USA: Time to Act | Keller and Wagner ¹³ | Comment | Lancet Public Health |
| Spotlight on Jails: COVID-19 Mitigation Policies Needed Now | Wurcel et al. ¹⁴ | Correspondence | Clin Infect Dis. |
| COVID-19 Pandemic Poses Challenge for Jails and Prisons | Stephenson ¹⁵ | Comment | JAMA Health Forum |
| Detained during a pandemic: A postcard from the Midwest | Gorman and Ramaswamy ¹⁶ | Editorial | Public Health Nurs. |
| The challenge of preventing COVID-19 spread in correctional facilities | Rubin ¹⁷ | Perspective | JAMA |
| Preparedness, prevention and control of COVID-19 in prisons and other places of detention | World Health Organization ¹⁸ | Technical document | World Health Organization |
| Caring for persons in detention suffering with mental illness during the Covid-19 outbreak | Liebrenz et al. ¹⁹ | Comment | Forensic science international. Mind and law |
| The Epidemiological Implications of Incarceration Dynamics in Jails for Community, Corrections Officer, and Incarcerated Population Risks from COVID-19 | Lofgren et al. ²⁰ | <i>Preprint:</i> Mathematical Modelagem | medRxiv |

as HIV infections and hepatitis C virus (HCV)⁷. Inequities in social determinants of health that affect groups that are disproportionately liable to incarceration – racial and sexual minorities, people with mental disorders or psychoactive

substance use, individuals without access to the health system or education – lead to higher concentrations of some diseases in incarcerated populations⁷. The risk for a person deprived of liberty to develop tuberculosis in Brazil is 30 times

higher than the general Brazilian population²¹. Infectious diseases account for about 17.5% of deaths in prisons¹¹.

In addition to the difficulties related to the physical and social structures mentioned above, there are administrative challenges – largely caused by the lack or mismanagement of financial resources¹⁴, which may hinder the access of possible prisoners with COVID-19 to adequate health care in case of need for advanced support. The rights of all affected persons must be respected and all public health measures should be implemented without discrimination of any kind¹⁸.

All the revised publications highlight the urgent need to take measures to prevent SARS-CoV-2 in prison environments, it is necessary to consider chains as reservoirs that can lead to the resurgence of the epidemic, if it is not adequately treated in these facilities⁷. Therefore, three premises must be fulfilled: the entry of the virus into penitentiaries should be postponed as much as possible; if it is already in circulation, it must be checked and, finally, prisons must prepare to deal with those who develop COVID-19⁷.

Given the epidemiological dynamics of COVID-19, in the absence of any intervention, among inmates, the outbreak is considerably more severe than in the general population, requiring more hospitalization and leading to more deaths. The peak of the epidemic within a penal institution, according to mathematical modeling²⁰, is considerably earlier, occurring 63 days earlier than the peak of infections in the community. The same study²⁰ showed that postponing the arrest of 90% of individuals from groups at risk to COVID-19 would reduce the mortality of the disease in prisons by 56.1%. Although only 1.5% of the prison population is elderly in Brazil²², incarceration itself degrades people's health, leaving them more vulnerable to infection and severe infection results.

There is consensus that an effective action to mitigate the evolution of the pandemic in correctional environments is the release, temporary or definitive, of prisoners. For example, Iran has released 70,000 individuals so far incarcerated⁷. Two articles^{10,13} that discuss the current situation of immigrants imprisoned in the United States advocate releasing all individuals who do not pose a threat to local security, and to momentarily cease the policy of incarceration against illegal immigration adopted in recent years. Yang and Thompson¹¹ suggest that sentences for people tried with misdemeanors are alternatives to deprivation of liberty.

The WHO¹⁸ recommends that individuals who make up the risk group for COVID-19 leave prisons if they do not pose a danger to society. An important argument for this measure is raised by the assumption²⁰ that the interruption of the arrest of individuals for minor crimes, with the overall reduction of arrests by approximately 83%, would result in 71.8% fewer infections in the incarcerated population. This strategy²⁰ would also lead to 2.4% fewer infections among employees and 12.1% in the community in general.

Public policies to mitigate inequality must follow the judicial decisions of release of these people, since many graduates of the prison system do not have family and social support. This can lead to the desired opposite effect with the release of these individuals and they become carriers and transmitters of SARS-CoV-2 while searching for income, housing, or even, to compose the population in street situation¹⁶. Stephenson¹⁵ recalls that in California and New York, the government is renting hotel rooms to some of those prisoners released. Thus, freeing imprisoned individuals should be an intersectoral action, involving public power, social assistance, NGOs, health services and the judiciary.

If, however, the only measure is to reduce the size of the prison population, there will be a neglect of countless other things that must be done¹⁷. Mitigation strategies in detention centers should be complemented by routine screening and containment procedures. This involves screening all people entering the facility, including new inmates, employees, visitors and suppliers, quarantined those who are positive for exposure to the novel coronavirus¹⁰.

Other measures are suggested in the revised bibliography. Yang and Thompson¹¹ suggest intensifying health education for inmates and prison workers. Everyone should receive training on how to identify signs of COVID-19 and ways to prevent the disease. Suspension of visits from family and lawyers and reduction of transfers are proposed by Akiyama, Spaulding and Rich⁷, also suggesting that teleconference be applied in these cases in order to reduce emotional isolation. Cleaning and disinfection of the environments, as well as purchase of toiletries and masks must be carried out by the government^{12,14}.

In the revised publications, it was also said that the measures should take and account that the psychological reactions of people deprived of liberty may differ from those observed in people who observe social distancing in the community,

since, in prison, there will be a *overisolation*. The unintended consequences of these mitigation policies should be considered.

The recent rebellions in Italian prisons have revealed the potential for negative psychological impact of emergency policies aimed at reducing the spread of SARS-CoV-2 in criminal institutions¹⁴. Therefore, the growing need for emotional and psychological support, transparent awareness and sharing of information about the disease and the guarantee that continuous contact with family will be maintained¹⁸, so that people deprived of liberty can collaborate in pandemic mitigation strategies.

COVID-19 in prisons in the world

This review aims to show that, despite what has been done by people deprived of liberty in the current pandemic, it is still insufficient and marginalizing. In 2018, there were more than 10 million people deprived of liberty worldwide²³, largely in poor sanitary conditions, with little access to health services and in overcrowded institutions. The prison population of several countries, as well as graduates of the penal system, suffers from stigma⁴, abandonment of public power and what the philosopher Mbembe calls necropolitics²⁴, based on a State of Exception, in which it has the power to dictate who should live and who should die, desizing from the subject his political status and, if not actively taking his life, exposing him to death.

For information on how different countries are dealing with the pandemic in the prison context, information contained in the Prison Insider initiative²⁵, created by the founder of the International Observatory of Prisons, has been reviewed and summarized. The site gathers up-to-date information on various aspects of prisons in the world and currently has an area focused on the novel coronavirus. It should be noted, however, that there is a limitation of this information, since not all countries or organizations make the data available and, when they do, it is not in real time.

As of May 5, 2020, there were 145 countries with data presented and a total of 23,019 records of SARS-CoV-2 infections, with the United States being the first, with more than 17,000 people deprived of their freedom infected²⁵. On the other hand, there are complaints in several countries of lack of transparency in data^{26,27}. The supervision by activists, international organizations and parliamentarians has been compromised^{27,28}

under the pretext of reducing access to prisons due to COVID-19. Concern stemmed from concern that in Syria the regime may be using the pandemic to get rid of prisoners, hardening repression against them²⁹, and similarly, Palestinian prisoners have been more exposed to the new virus in Israeli prisons³⁰.

Figure 1 shows the measures practiced by several countries, summarized through our review of the Prison Insider initiative²⁴.

Something that could be effective was reported only 5 of the 145 countries reviewed²⁵: mass testing of trapped individuals. The two most practiced measures are the suspension or reduction of visits and the release of prisoners. It should be noted, however, that even though there are large numbers of prisoners being released, the institutions still fall short of holding so many people.

There are reports that the excess of prisoners, coupled with the fear of falling ill and the suspension of visits in various locations has caused rebellions in various penal institutions around the world. To exemplify: in Luxembourg, there were reports of a hunger strike³¹. In Italy, rebellions have been reported in several areas of the country³². In Argentina, there have been at least one death and several injured as a result of riots³³.

The effervescence that occurred in prisons may be associated with the little health quality information passed on to inmates. Few countries reported having invested in health education, given the context of the pandemic. WHO¹⁸ stresses the importance of providing adequate information and legal guarantees to people deprived of liberty in order to reassure them and their families.

If, on the one hand, prisoners must be protected by efficient public health policies, on the other, they actively participate in the fight against SARS-CoV-2. Several countries have reported that the prison population is voluntarily working on the making of masks to be distributed in health services and in the community. In Guatemala, a young prisoner reported to the report while wearing masks: "If I was able to harm Guatemala in the past, today I want to make up for my mistakes"³⁴.

Coping with coronavirus in the Brazilian prison system

In Brazil, the health needs of people deprived of liberty are under the responsibility of the State, as provided for by the Criminal Execution Law

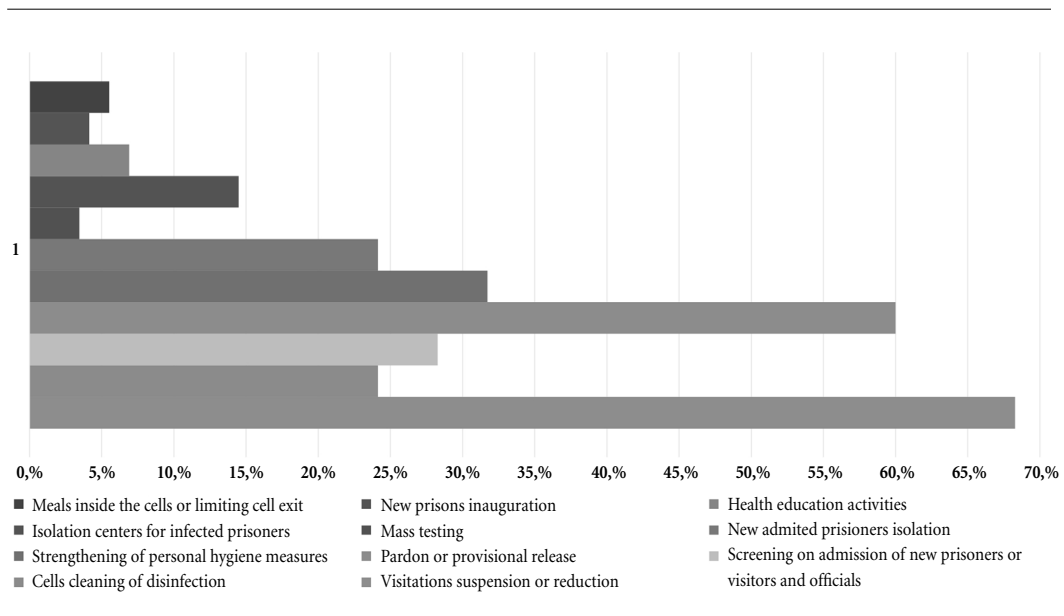


Figure 1. Measures to combat the new coronavirus in prisons worldwide.

(LEP)³⁵, but policies have also been implemented for the inclusion of the prison population within the SUS. In 2014, the National Policy for Integral Health Care of the Private Person of Liberty (PNAISP)³⁶ was instituted, whose objective is focused on ensuring the care of people deprived of liberty at all levels of complexity, expanding and organizing from the forms of financing of prison health teams to the main health actions for people arrested.

A challenge for prison systems around the world, COVID-19, whose most effective treatment is in the prevention of their transmission, individual hygiene and collective spaces, ventilated environments and social isolation¹, exposes the precariousness of prisons in Brazil. This challenges managers to ensure the effectiveness of the actions foreseen in the PNAISP, as well as for health professionals who are on the front line in prisons to organize themselves in the face of the risks of an explosion of cases and deaths.

In 2019, there were 1,422 prisons in Brazil, of which 49% are destined for the detention of provisional prisoners and 79% are overcrowded²². Half of the prison institutions do not have a doctor's office. According to the National Penitentiary Department²², in the same year, there were 755,274 people deprived of liberty in the country, of which 31% are provisional prisoners.

Brazil complied with the measures proposed by WHO¹⁸ in relation to the population deprived of liberty through Recommendation 62/2020 of the National Council of Justice (CNJ)³⁷. This involves incarceration and non-imprisonment measures, in addition to other sanitary actions, detailed in Chart 3. Recommendation 62/2020³⁷ considers as belonging to the risk group: elderly; pregnant women; people with chronic, respiratory or immunosuppressive conditions.

In addition to the above recommendations, the Brazilian Society of Family and Community Medicine issued a document stressing the need for other measures: educational actions, combating fake news, individual and collective hygiene, hygiene of environments, providing information to family members and hygiene of hygiene material of safety professionals, involving actions for prisoners and various prison professionals³⁸.

As of May 11, 2020, there were 603 cases of COVID-19 confirmed in Brazilian prisons, resulting in 23 deaths²². With only 20 days, the numbers jumped from 1 to more than 100 in Brazil³⁹. Despite the recommendations and efforts of civil society, much remains to be done. A religious entity working in prisons disclosed the data that 65.9% of food and hygiene materials sent by family members were not entering prisons⁴⁰. The same religious organization cites the

Chart 3. Measures to combat the novel coronavirus in the Brazilian Penal System

| Extrication |
|---|
| <p>Reassessment of socio-educational measures for adolescents with: progression from hospitalization to semi-freedom; temporary suspension or remission of the measure. Preference given to: pregnant, lactating, indigenous or disabled; hospitalized in units with reduced capacity or in units without health care.</p> <p>Reassessment of sentences of provisional prisons that have exceeded 90 days or that are related to crime without violence or serious threat to the person.</p> <p>Reassessment of provisional arrests of people in the risk group or prisoners in units without medical assistance. Consider regime progression for people in a at-risk group or who are in overcrowded prisons or without health care.</p> <p>In the absence of space for adequate isolation, placing the person arrested with suspicion or confirmation of COVID-19 under house arrest.</p> |
| No entrapment |
| <p>Alternative socio-educational measures and suspension of provisional hospitalizations for adolescents whose offense did not incur violence. Preference given to: pregnant, lactating, indigenous or disabled; hospitalized in units with reduced capacity or in units without health care.</p> <p>House arrest for people arrested for child support debt.</p> <p>Maximum exceptionality of new pretrial detention orders, observing the protocol of the health authorities.</p> |
| Other measures |
| <p>Suspension of the duty of periodic submission to the court of persons on provisional release.</p> <p>Extension of the period of return or postponement of the granting of the temporary exit benefit.</p> <p>Restriction or reduction of visits to prisoners.</p> <p>Temporary replacement of prison officers who are part of the risk group.</p> <p>Education campaigns on the novel coronavirus.</p> <p>Increased frequency of cleaning of cells and common spaces.</p> <p>Avoid shared transportation of people deprived of liberty.</p> <p>Screening of prisoners, staff and visitors.</p> <p>Supply of personal protective equipment (PPE) to employees.</p> <p>Uninterrupted supply of water to persons deprived of liberty and public servants of the units.</p> <p>Isolation of suspected or confirmed cases in prison.</p> |

lack of transparency and PPE, in addition to poor hygiene conditions, such as the report that 35 prisoners would be using the same toothbrush⁴¹.

It is noteworthy that of the 603 cases of COVID-19 in Brazilian prisons, 444 (74%) are in the Penitentiary Complex of Papuda⁴², in the Federal District, an institution that houses many imprisoned politicians and criminals with greater purchasing power. The data may evidence an inequality in the Penitentiary System that reproduces that of society in general, in which there is more access to tests for the novel coronavirus when it occupies a position of social or financial privilege.

Final considerations

The PNAISP and the recommendations of the CNJ, adapted to the reality of each place are significant initiatives in the health care of peo-

ple deprived of liberty and give visibility to this problem sensitive and relevant to public health, considering that, because they are porous institutions, the injuries that affect prisons are not restricted to it.

Coping with COVID-19 in Brazilian prison institutions, as in much of the world, is a challenge, in view of the precariousness that characterizes them, the result of chronic disregard of public authorities and civil society, which give prisoners an illegitimate worsening of the formal sentence, such as the denial of basic sanitary conditions, such as access to drinking water.

In this sense, in times of pandemic, the prison scenario is aggravated by the overlapping of problems, pre-existing and new, that require more aggressive sanitary measures, such as the suspension of visits and others, which result in *overisolation*, which, in addition, can affect the mental health of people deprived of liberty.

Pandemic containment measures taken around the world reveal that there is a consensus on releasing prisoners and suspending visits, but other actions are put aside, such as health education and mass testing in the prison population, which could help in epidemiological projections, given that they are closed and controlled groups. Another consensus is that the lack of health data available on this population prevents the adoption of more effective measures.

Scientific publications related to COVID-19, as well as other infectious diseases, in the prison

population are scarce, pointing to a possible lack of interest in this theme by the scientific community, which may result from the stigma and difficulty of access to this group.

Given the above, the pandemic for the novel corona virus has been playing a revealing role in the unhealthy and inhuman conditions aimed at the recovery of human beings. May the public authorities, civil society and the scientific community take something positive from the current public health crisis in order to change the fate of vulnerable populations!

Collaborations

SG Carvalho, ABS Santos and IM Santos participated in conception, literature and data review, writing, critical reviewings and final approval of the manuscript.

Acknowledgments

Thanks to Professor Hélio Marques da Silva, for translating the article, and to Richard Luiz Eduardo and Antônio Teixeira, for their contributions.

References

1. Jin Y, Yang H, Ji W, Wu W, Chen S, Zhang W, Duan G. Virology, Epidemiology, Pathogenesis, and Control of COVID-19. *Viruses* 2020; 12(4):E372.
2. Mizumoto K, Chowell G. Transmission potential of the novel coronavirus (COVID-19) onboard the diamond Princess Cruises Ship, 2020. *Infect Dis Model* 2020; 5:264-270.
3. Finnie TJ, Copley VR, Hall IM, Leach S. An analysis of influenza outbreaks in institutions and enclosed societies. *Epidemiol Infect* 2014; 142(1):107-113.
4. Goffman E. *Estigma: notas sobre a manipulação da identidade deteriorada*. Rio de Janeiro: Zahar; 1982.
5. World Prison Brief (WPB). *Highest to Lowest - Occupancy level (based on official capacity)* [Internet]. 2020 [cited 2020 Apr 30]. Available from: https://www.prisonstudies.org/highest-to-lowest/occupancy-level?-field_region_taxonomy_tid=All
6. NPR. *Coronavirus Found In China Prisons, As Cases Spike In South Korea* [Internet]. 2020 [cited 2020 Apr 30]. Available from: <https://www.npr.org/2020/02/21/808002924/coronavirus-found-in-china-prisons-as-cases-spike-in-south-korea>
7. Akiyama MJ, Spaulding AC, Rich JD. Flattening the Curve for Incarcerated Populations - Covid-19 in Jails and Prisons. *N Engl J Med* 2020; 382:2075-2077.
8. Sylverken A, El-Duah P, Owusu M, Yeboah R, Kwarteng A, Ofori L, Gorman R, Obiri-Danso K, Owusu-Dabo E. Burden of respiratory viral infections among inmates of a Ghanaian prison. 2019 [preprint].
9. Simpson PL, Butler TG. Covid-19, prison crowding, and release policies. *BMJ* 2020; 369:m1551.
10. Meyer JP, Franco-Paredes C, Parmar P, Yasin F, Gartland M. COVID-19 and the coming epidemic in US immigration detention centres. *Lancet Infect Dis* 2020; 20(6):646-648.
11. Yang H, Thompson JR. Fighting covid-19 outbreaks in prisons. *BMJ* 2020; 369:m1362.
12. Kinner SA, Young JT, Snow K, Southalan L, Lopez-Acuña D, Ferreira-Borges C, O'Moore É. Prisons and custodial settings are part of a comprehensive response to COVID-19. *Lancet Public Health* 2020; 5(4):e188-e189.
13. Keller AS, Wagner BD. COVID-19 and immigration detention in the USA: time to act. *Lancet Public Health* 2020; 5(5):e245-e246.
14. Wurcel AG, Dauria E, Zaller N, Nijhawan A, Beckwith C, Nowotny K, Brinkley-Rubinstein L. Spotlight on Jails: COVID-19 Mitigation Policies Needed Now. *Clin Infect Dis* 2020:ciaa346.
15. Stephenson J. COVID-19 Pandemic Poses Challenge for Jails and Prisons. *InJAMA Health Forum* 2020; 1(4):e200422-e200422b.
16. Gorman A, Ramaswamy M. Detained during a pandemic: A postcard from the Midwest. *Public Health Nurs* 2020; 37(3):325-326.
17. Rubin R. The challenge of preventing COVID-19 spread in correctional facilities. *JAMA* 2020; 323(18):1760-1761.
18. World Health Organization (WHO). *Preparedness, prevention and control of COVID-19 in prisons and other places of detention. Interim guidance 15 March 2020*. Copenhagen: WHO; 2020.
19. Liebrez M, Bhugra D, Buadze A, Schleifer R. Caring for persons in detention suffering with mental illness during the Covid-19 outbreak. *Forensic Science International: Mind and Law* 2020; 1:100013.
20. Lofgren E, Lum K, Horowitz A, Madubuowu B, Feferman N. The Epidemiological Implications of Incarceration Dynamics in Jails for Community, Corrections Officer, and Incarcerated Population Risks from COVID-19. *medRxiv* 2020 [preprint].
21. Mabud TS, Alves MD, Ko AI, Basu S, Walter KS, Cohen T, Mathema B, Colijn C, Lemos E, Croda J, Andrews JR. Evaluating strategies for control of tuberculosis in prisons and prevention of spillover into communities: An observational and modeling study from Brazil. *PLoS Med* 2019; 16(1):e1002737.
22. Brasil. Departamento Penitenciário Nacional (DEPEN). *INFOPEN* [Internet]. 2017 [cited 2020 May 11]. Available from: <http://depen.gov.br/DEPEN/depen/sisdepen/infopen>
23. Walmsley R. *International World Prison Population List*. Birkbeck, University of London: ICPR; 2018.
24. Mbembe A. *Necropolitics*. Durham: Duke University Press; 2019.
25. Prison Insider. *Coronavirus: la fièvre des prisons* [Internet]. 2020 [cited 2020 May 5]. Available from: <https://www.prison-insider.com/articles/coronavirus-la-fievre-des-prisons>
26. The Marshall Project. *As COVID-19 Measures Grow, Prison Oversight Falls* [Internet]. 2020 [cited 2020 May 1]. Available from: <https://www.themarshallproject.org/2020/03/17/as-covid-19-measures-grow-prison-oversight-falls>
27. Sobesednik. *Vladimir Osechkin: I'm afraid that prison statistics on COVID-19 are falsified* [Internet]. 2020 [cited 2020 May 1]. Available from: https://sobesednik.ru/obshchestvo/20200331-vladimir-osechkin-boyus-cto-t-fbclid=IwAR3Bi0kBBpFujMihl1XnyFFXqsuD9rXBg5iH_1ppwE3Ry8bjmLBZULCENYwvid-19-measures-grow-prison-oversight-falls
28. France 3. *Coronavirus: le député LFI Ugo Bernalicis conteste son interdiction de visiter la prison de Sequedin* [Internet]. 2020 [cited 2020 May 1]. Available from: <https://france3-regions.francetvinfo.fr/hauts-de-france/coronavirus-depute-lfi-ugo-bernalicis-conteste-son-interdiction-visiter-prison-sequedin-1817236.html>
29. Syria Direct. *Coronavirus: The Syrian regime's novel weapon against detainees* [Internet]. 2020 [cited 2020 May 4]. Available from: <https://syriadirect.org/news/coronavirus-the-syrian-regime%E2%80%99s-novel-weapon-against-detainees/>
30. Middle East Monitor. *Israel's jail conditions will kill Palestinian prisoners before coronavirus does* [Internet]. 2020 [cited 2020 May 4]. Available from: <https://www.middleeastmonitor.com/20200414-israels-jail-conditions-will-kill-palestinian-prisoners-before-coronavirus-does/#comment-4876974513>
31. RTL. *30 inmates embark on hunger strike following protests* [Internet]. 2020 [cited 2020 May 2]. Available from: <https://today.rtl.lu/news/luxembourg/a/1493481.html>

32. Prison Insider. *Italie: révoltes dues au coronavirus, douze prisonniers décédés* [Internet]. 2020 [cited 2020 May 2]. Available from: <https://www.prison-insider.com/articles/italie-revoltes-dues-au-coronavirus-douze-prisonniers-decedes?referrer=%2Fpreview.php%2Farticles%2Fcoronavirus-la-fievre-des-prisons>
33. Clarín. *Un muerto en un motín en dos cárceles de Santa Fe: reclaman medidas de seguridad por el coronavirus* [Internet]. 2020 [cited 2020 May 7]. Available from: https://www.clarin.com/policiales/graves-disturbios-carceles-santa-fe-reclaman-medidas-seguridad-coronavirus_0_z6ZWKbGfp.html
34. CNN. *Coronavirus en Guatemala: Jóvenes fabrican al menos 5.000 mascarillas desde la prisión* [Internet]. 2020 [cited 2020 May 6]. Available from: <https://cnnespanol.cnn.com/video/coronavirus-mascarillas-jovenes-prision-ciudad-guatemala-pandemia-pkg-digital-orig-michelle-mendoza/>
35. Brasil. Lei nº 7.210, de 11 de julho de 1984. Institui a Lei de Execução penal. *Diário Oficial da União* 1984; 13 jul.
36. Brasil. Portaria Interministerial nº 1, de 02 de janeiro de 2014. Institui a Política Nacional de Atenção Integral à Saúde das Pessoas Privadas de Liberdade no Sistema Prisional (PNAISP) no âmbito do Sistema Único de Saúde (SUS). *Diário Oficial da União*; 2014.
37. Conselho Nacional de Justiça (CNJ). Recomendação nº 62, de 17 de março de 2020. Recomenda aos Tribunais e magistrados a adoção de medidas preventivas à propagação da infecção pelo novo coronavírus - Covid-19 no âmbito dos sistemas de justiça penal e socioeducativo. *Diário Oficial da União*; 2020.
38. SBMFC. *Medidas e orientações para o enfrentamento da COVID-19 nas prisões* [Internet]. 2020 [cited 2020 Apr 29]. Available from: <https://www.sbmfc.org.br/wp-content/uploads/2020/03/Medidas-e-orientac%CC%A7o%CC%83es-para-o-enfrentamento-a-COVID-%E2%80%93-19-nas-priso%C%83es.pdf>
39. Ponte. *Casos de coronavírus em prisões vão de 1 a 107 em 20 dias, com 7 mortes* [Internet]. 2020 [cited 2020 Apr 8]. Available from: <https://ponte.org/casos-de-covid-19-em-prisoas-vaio-de-1-a-107-em-20-dias-com-7-mortes/>
40. Pastoral Carcerária. *Pastoral Carcerária divulga dados de questionário sobre coronavírus nas prisões* [Internet]. 2020 [cited 2020 May 6]. Available from: <https://carceraria.org.br/combate-e-prevencao-a-tortura/pastoral-carceraria-divulga-dados-de-questionario-sobre-coronavirus-nas-prisoas>
41. Pastoral Carcerária. *Pastoral Carcerária divulga relatos e denúncias sobre o sistema carcerário em tempos de pandemia* [Internet]. 2020 [cited 2020 May 6]. Available from: <https://carceraria.org.br/combate-e-prevencao-a-tortura/pastoral-carceraria-divulga-relatos-e-denuncias-sobre-o-sistema-carcerario-em-tempos-de-pandemia>
42. Correio Braziliense. *Número de presos infectados pelo coronavírus na Papuda chega a 444* [Internet]. 2020 [cited 2020 May 14]. Available from: https://www.correiobraziliense.com.br/app/noticia/cidades/2020/05/11/interna_cidadesdf,853723/numero-de-presos-infectados-pelo-coronavirus-na-papuda-chega-a-444.shtml

Article submitted 21/05/2020

Approved 24/05/2020

Final version submitted 26/05/2020