**REVIEW** 



# Health care for people deprived of liberty during the pandemic: an integrative review

Assistência em saúde para pessoas privadas de liberdade durante a pandemia: uma revisão integrativa

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#### **ARSTRACT**

The objective of this study was to analyze how health care for people deprived of liberty was provided in the emergency of the Covid 19 pandemic. An integrative review was carried out, with the guiding question "How was health care given to people deprived of liberty in the emergency of the Covid 19 pandemic?". A search was performed in PubMed, Scielo and LILACS ("Latin American and Caribbean Literature on Health Sciences") databases for articles published until June 2021. The following keywords were used for the search: SARS-CoV-2; Coronavirus; Coronavirus Infections; Covid-19; prisoners; coronavirus; prisoners. 116 articles were found related to the main theme of the article, and after analysis, only 26 publications remained, since 90 articles did not fit the guiding question or did not meet the inclusion criteria. After analyzing the selected articles, the discussion was divided into fronts related to the context of coping with the pandemic, among them: public policies, vaccination against covid, access to care for other comorbidities and mental health of the prison population. It was observed that the prison population is quite neglected in relation to health policies, which was confirmed during the period of Covid 19. In this way, it is necessary to formulate public policies and more studies in health care to face this situation. of Covid 19 within correctional settings in Brazil and other countries.

#### **RESUMO**

O objetivo deste trabalho foi analisar como se deu a assistência à saúde das pessoas privadas de liberdade na emergência da pandemia da Covid 19. Realizou-se uma revisão integrativa, com a pergunta norteadora "Como se deu a assistência à saúde das pessoas privadas de liberdade na emergência da pandemia da Covid 19?". Foi realizada uma busca nas bases de dados *PubMed, Scielo e LILACS* ("Literatura Latino-Americana e do Caribe em Ciências em Saúde") dos artigos publicados até junho de 2021. Foram utilizadas como palavras chaves para busca: SARS-CoV-2; Coronavirus; Coronavirus Infections; Covid 19; Prisoners; coronavirus; Prisioneiros. Foram encontrados 116 artigos relacionados ao tema principal do artigo, sendo que após análises restaram apenas 26 publicações, já que 90 artigos não se adequaram à pergunta norteadora ou não atenderam os critérios de inclusão. Após a análise dos artigos selecionados, dividiu-se a discussão em frentes relacionadas ao quadro de enfrentamento da pandemia, dentre elas: políticas públicas, vacinação contra a covid, acesso ao cuidado de outras comorbidades e saúde mental da população carcerária. Observou-se que a população prisional é bastante negligenciada em relação a políticas de saúde, o que foi confirmado durante o período da Covid 19. Desse modo, faz-se necessária a formulação de políticas públicas e mais estudos em assistência em saúde para o enfrentamento da Covid 19 dentro de ambientes correcionais no Brasil e em outros países.

## ARTICLE HISTORY

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### **KEYWORDS**

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## Introduction

Worldwide, the coronavirus has proven to be a challenge for humanity in the field of health, especially in underdeveloped and emerging countries, causing the death of millions of people <sup>1</sup>. However, some countries have a public health service, as is the case with Brazil, through the Unified Health System (SUS), which provides health assistance to all citizens, including the Prison Population (PPL), considered at-risk populations for coronavirus infection <sup>2</sup>.

The National Policy of Comprehensive Health Care for People Deprived of Liberty in the Prison System (PNAISP) foresees the provision of health assistance, prevention, and promotion for the PPL, covering not only prisoners but also staff and all those involved in the prison system. In addition to various legal guarantees for the incarcerated population, such as quality treatment for various comorbidities, such as diabetes and hypertension, care and prevention for Sexually Transmitted Infections (STIs), providing good mental health for inmates, PNAISP also ensures the rehabilitation of drug and alcohol users, as well as guaranteeing a clean,

sanitized, and appropriate environment to avoid infections <sup>3</sup>. However, the reality revealed with the onset of the global pandemic exposed pre-existing deficiencies in the Brazilian prison system, which were further aggravated <sup>4</sup>.

The situation in Brazilian prison facilities is one of overcrowding and poor sanitary conditions, which facilitates the spread of COVID-19 in these places. Given these chronic characteristics of our prison system and how the influenza flu spread rapidly in the past, it was essential to create a protocol to contain the dissemination. However, practicing social distancing and applying basic hygiene protocols proved unfeasible within the cramped, poorly ventilated, and lacking potable water cells 5. As the pandemic began to advance in Brazil, the initial action taken to protect the Prison Population (PPL) was to impose strict isolation from the outside community, but without any protocols on how to continue monitoring this population. It was only after almost a year into the pandemic that technical guidelines on handling the PPL during the COVID-19 pandemic started to emerge <sup>6</sup>.

Considering all the existing challenges in caring for individuals within the prison system worldwide, this integrative review aimed to analyze how health care was provided for the incarcerated population during the emergence of the COVID-19 pandemic.

## **Methods**

This is an integrative review that aimed to identify the current knowledge on a specific topic, conducted in a way to analyze and synthesize results from independent studies on the same subject <sup>7</sup>.

The authors describe a systematic process involving six steps: (1) identification of the topic and formulation of the guiding question; (2) literature search or sampling; (3) data collection; (4) critical analysis of included studies; (5) interpretation of results; and (6) presentation of the review/synthesis of knowledge <sup>7</sup>.

For the first step, the following guiding question was established: "How was the healthcare assistance provided to incarcerated individuals during the COVID-19 pandemic?".

A search was conducted in databases including PubMed, Scielo, and LILACS (Latin American and Caribbean Health Sciences Literature) for articles published up to June 2021. The bibliographic research was performed using electronic searches with the following descriptors: Prisoners combined with SARS-CoV-2, Coronavirus, Coronavirus Infections, or COVID-19, all in the relevant language of the respective database. Official descriptors were used, consulting MeSH (Medical Subject Headings) and Health Sciences Descriptors (Decs).

The search terms used in PubMed were (((("SARS-CoV-2"[Mesh]) OR "Coronavirus"[Mesh]) OR "Coronavirus Infections"[Mesh]) OR "COVID-19"[Mesh]) AND "Prisoners"[Mesh], resulting in 99 articles. In Lilacs, the search terms were coronavirus [Keywords] and Prisioneiros [Keywords], yielding 10 articles, and in Scielo, the terms were prisioneiros and coronavirus, resulting in 3 articles.

The inclusion criteria consisted of full-text articles and ordinances discussing healthcare assistance for incarcerated individuals during the pandemic in the years 2020 and 2021, in English, Portuguese, or Spanish languages. Articles not freely available and not relevant to the guiding question were excluded, as well as opinion articles or editorials.

For the critical analysis and interpretation of results, all publications were read in full, and the data were classified into a table. Information was analyzed based on authors, journal used for publication, year, study location, main result, and thematic category. Simple frequency calculations were performed to describe the characterization of the articles.

Four thematic categories were defined based on the most frequent topics in the publications, comprising access to care for other comorbidities, public policies for

incarcerated individuals, COVID-19 vaccination, and mental health.

The access to care for other comorbidities was understood as the functionality of access to services, equipment, and healthcare professionals for incarcerated individuals (PPL) to diagnose, treat, and rehabilitate comorbidities not caused by the coronavirus.

In the category of public policies for PPL, all technical notes or government guidelines from countries, states, districts, and municipalities that reported directives on how to prevent and control the virus spread in a prison facility, excluding vaccination, were included. Directives on managing infected individuals, both PPL and/or staff members working in the facility, as well as recommendations from international organizations such as the World Health Organization (WHO) or the Pan American Health Organization (PAHO), were also considered.

Regarding the COVID-19 vaccination category, the classified texts studied the policies that would be adopted for implementing vaccination in prisons. Furthermore, the impacts/benefits that these policies would bring to the incarcerated population were measured.

Finally, in the mental health thematic category, studies mentioning mental health issues resulting from increased isolation of PPL due to COVID-19 and pre-existing mental health issues were selected.

## **Results**

In total, 116 articles were found, 103 in PubMed, 10 in LILACS, and 3 in Scielo. After reading titles and abstracts, 48 articles were excluded (five due to duplication, five for being in different languages than defined, and 38 for not fitting the guiding question), leaving 68 articles. Out of the 68 articles selected for full-text reading, 42 were excluded for not meeting the inclusion criteria, leaving 26 articles for discussion (**Figure 1**).

Among the 26 included articles, 14 (53.8%) were published in the year 2021, and 12 (46.1%) in the year 2020. There were 23 articles from international scientific journals, one manual from PAHO, and two technical notes from Brazilian states. Among the 11 countries where the studies were conducted, the United States of America stands out with 13 publications. As for the thematic axes, four articles were related to comorbidities, four to mental health, five to vaccines, and 13 to public policies (**Table 1**).

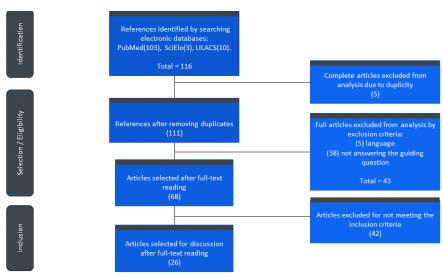


Figure 1. Selection flow of integrative review articles.

**Table 1.** Characterization of publications according to journal, year, location, thematic category and main result.

Author	Journal	Year	Setting	Thematic category	Main result
Zielinski, Hinton, Bull.	Journal of Substance Abuse Treatment	2021	USA	Access to care for other morbidities	Due to covid 19, care for chemical dependents, which was already precarious, has become inefficient
Vest, Johnson, Nowotny, Brinkley-Rubinstein	Journal of Urban Health: Bulletin of the New York Academy of Medicine	2021	USA	Public policies for people deprived of liberty	Classification of the profile of inmates into low outbreak, high outbreak and high mortality, providing better decision making. Cell recommendation with a maximum of 85% capacity
Stern, Piasecki, Strick, Rajeshwar, Tyagi, Dolovich, Furukawa	MMWR. Morbidity and mortality weekly report	2021	USA	covid-19 vaccination	The willingness to receive the vaccine is lower for black and young prisoners due to the history of lack of trust in institutions and the government
Stephenson, Leaman, O'Moore, Tran, Plugge	International Journal of Prisoner Health	2021	United Kingdom	Mental health	The absence of time out of cell and purposeful activity can worsen the mental health of prisoners, including increasing suicide cases in times of a pandemic
Gonçalves, Baggio, Weber, Gétaz , Wolff, Singh, Endrass	Swiss Medical Weekly	2021	Germany and Switzerland	Public policies for people deprived of liberty	The use of the application provides better screening efficiency, supporting decisions and prioritizing actions in prison environments. The app identifies detainees at increased risk for Covid 19
Servick	Science	2020	USA	Public policies for people deprived of liberty	Reduction of the prison population after the start of the pandemic as a measure to combat the spread of the virus
Jacobsen, Epstein	Mayo Clinic Proceedings	2020	USA	Access to care for other morbidities	The pandemic has affected the health system in general and influenced access to health services by uninfected individuals.
Hewson, Shepherd, Hard, Shaw	The Lance Psychiatry	2020	United Kingdom	Mental health	The mental health consequences of measures to prevent and combat the coronavirus should be reduced wherever possible
Stewart, Cossar, Stoové.	Australian and New Zealand Journal Psychiatry	2020	Australia, New Zealand	Mental health	Balancing strategies are needed to protect mental health and well-being in the incarcerated community alongside Covid 19 control imperatives
Shepherd, Spivack.	The Medical Journal of Australia	2020	Austrália	Public policies for people deprived of liberty	The release of selected prisoners, after evaluation, is a measure to contain the spread of Covid 19 in prisons
Kothari, Forrester, Greenberg, Sarkissian, Tracy	Medicine, Science and The Law	2020	USA	Mental health	Both prisoners and prison staff are increasingly vulnerable to mental health damage caused by prevention and containment measures imposed in the pandemic
BRASIL	NOTA TÉCNICA - TO	2020	Tocantins	Public policies for people deprived of liberty	Technical note from the health department of the state of Tocantins, containing guidelines to be followed in the case of prevention and management of PPL in case of contamination by covid-19
ORGANIZAÇÃO PANAMERICANA DE SAÚDE	CARTILHA OPS	2020	Latin America	Public policies for people deprived of liberty	Booklet of mechanisms that WHO and PAHO recommend to prevent the introduction, transmission and spread of covid 19 in Pan American prisons
BRASIL	NOTA TÉCNICA - SC	2020	Santa Catarina	Public policies for people deprived of liberty	Technical note from the health department of the state of Santa Catarina, containing guidelines to be followed in the case of prevention and management of PPL in case of contamination by covid 19
Barnert, Ahalt, Williams	American Journal of Public Health	2020	USA	Public policies for people deprived of liberty	In times of a pandemic, the prison system must: enact social distancing measures, educate residents and staff in custodial environments, promote hygiene and disinfection practices, test and isolate
Akiyama, Spaulding, Rich	The New England journal of medicine	2020	USA	Public policies for people deprived of liberty	The entry of the virus into the prison system should be postponed as much as possible. If they already are, their circulation must be prevented and the prison health teams prepared to receive and treat those infected. It is important to extricate as many as possible, in order to flatten the curve of covid-19 cases
Rowell-Cunsolo, Bellerose, Hart	Health Security	2021	USA	Access to care for other morbidities	The treatment of pre-existing comorbidities during the covid 19 pandemic was impaired and gives some suggestions on how not to abandon

					treatments
Wisse, Burke-Shyne, Chang, Southwell	The International Journal on Drug Policy	2021	France	Access to care for other morbidities	Treatments for the use of opioids and their changes due to the outbreak of covid-19
THE LANCET	Lancet	2021	USA	covid-19 vaccination	Prisoner vaccine policies in the USA: discussion with a social nature, racial justice, public health and human rights
Strodel, Dayton, Garrison-Desany, Eber, Beyrer, Arscott et al	PloS One	2021	USA	covid-19 vaccination	Vaccination protocols that do not prioritize USA inmates
Reiter	The Hastings Center Report	2021	USA	covid-19 vaccination	Defense by researchers to carry out vaccine tests in prisoners and in the face of legal ethical issues
Pereira	Travel Medicine and Infectious Disease	2021	Brazil	Public policies for people deprived of liberty	National Penitentiary Department (Brazil) suspended all social visits and requested personal protective equipment for prisoners
Marco, Guerrero, Turu	Epidemiology and Infection	2021	Spain	Public policies for people deprived of liberty	Strong widespread screening, isolation of confirmed cases, and symptom- based surveillance have yielded good results.
CORDEIRO-RODRIGUES	Bioethics	2021	Portugal	Public policies for people deprived of liberty	Public policy in Portugal promotes parole for prisoners with sentences of up to two years or who are two years short of release.
BARSKY ET AL	The New England Journal of Medicine	2021	USA	covid-19 vaccination	Omission by agencies and the government on the priority need for vaccination for PPL
TAVOSCHI ET AL	Frontiers in Public Health	2020	Italy	Public policies for people deprived of liberty	Health authorities and the Ministry of Justice have proposed measures to prevent the spread of covid 19

## **Discussion**

Considering the theme of incarcerated individuals' health during the pandemic, the discussion was divided into relevant topics chosen according to the article's objectives. In this way, to facilitate comprehension and flow of the subjects, the approach started by presenting the problem, followed by the information on how the situation was altered, if it was altered, and the current scenario. Additionally, it is noteworthy that the majority of studies were conducted in the United States of America (USA), which not only has the largest incarcerated population in the world, both public and private, but also demonstrates its strength as a scientific development hub.

Thirteen articles were classified under the thematic axis of public policies <sup>6, 8-19</sup>, and the majority of them were published in 2020 with the objective of intervening in prison facilities in the USA, due to its status as the country with the largest incarcerated population worldwide, including both public and private facilities. Currently, there are approximately 2.3 million incarcerated individuals in the USA, and due to the large population and high mobility, especially in juvenile facilities, three levels of response to this problem were defined.

The first level aims to prevent the virus from entering the facilities by releasing inmates above the age of sixty or with comorbidities, as well as reducing the number of imprisonments for minor offenses <sup>8, 11, 17</sup>. The second action involves isolating infected inmates, contact tracing, reducing facility capacity to 85%, using surgical masks, promoting hygiene habits, and implementing social distancing in dining areas <sup>8, 13</sup>. The third action is in case of a COVID-19 outbreak in a prison facility, and it requires categorizing the level of contagion. Vest (2021) proposes dividing it into low outbreak, high outbreak, and high mortality levels. In such cases, rapid isolation and contact tracing should be done, resolving milder cases within the prison facility, and referring severe cases to

specialized hospitals 13.

In this perspective, Brazil, representing the world's third-largest incarcerated population, had two government technical notes published, along with a continental-level manual. The state of Tocantins, through a technical note, established that inmates with respiratory symptoms should be placed in separate cells, wearing surgical masks at all times, and the cell should be thoroughly sanitized with changes of contaminated bedding and uniform. After a set period of seven days and/or more than 72 hours without flu-like symptoms, the individual could return to the communal cell. In cases of more severe respiratory symptoms, transfer to preselected hospitals was mandated. However, there were no specific protocols for incarcerated individuals at higher risk 9.

In contrast, the state of Santa Catarina, in its technical note, mandated the use of surgical masks for all incarcerated individuals and adolescents in socioeducational measures. They also relocated incarcerated individuals belonging to high-risk groups, isolated any inmate with flu-like symptoms from others, and in cases of Acute Respiratory Syndrome, they were referred to a designated hospital unit <sup>10</sup>.

On the other hand, the Pan American Health Organization (PAHO) issued a manual for all of Latin America with guidelines and suggestions on how to deal with COVID-19 outbreaks in prison facilities, considering the high vulnerability of this group. This included the proper use of personal protective equipment, isolation of high-risk groups, sanitation of facilities, and community equipment. Unlike the protocols of some Brazilian governments that recommended isolating symptomatic individuals for five to seven days, PAHO recommended a 14-day isolation period, along with contact tracing for individuals who had been in contact with the incarcerated person. Additionally, the manual proposed training for professionals working in the facilities and

temporary suspension of visits in cases of contamination or suspected respiratory symptoms in visitors <sup>6</sup>.

Unlike the previous examples, European countries had more publications in the year 2021. Since the onset of the COVID-19 pandemic was in this region, there was no immediate action at the beginning. However, after the peak of cases, the search for protocols to contain potential new outbreaks among the incarcerated population began. Following the WHO's suggestion to release incarcerated individuals to reduce the risks of COVID-19 in correctional facilities, several European and Oceanian countries used this approach to avoid outbreaks and further deaths.

In Switzerland, a system called CIRA was developed to identify the risk of an incarcerated individual dying from COVID-19. CIRA has the ability to discriminate individuals most vulnerable based on their clinical conditions, considering age and any comorbidities they may have. Each incarcerated person receives an index, classifying them as medium, high, or very high risk. Depending on their level, they may be isolated with other high-risk individuals in a more controlled environment or simply continue in a less controlled setting <sup>14</sup>.

In Spain, visits were prohibited, and a 14-day quarantine period was defined for new inmates to ensure they do not enter the institution contaminated <sup>15</sup>. In Portugal, all inmates with two years remaining for minor crimes were released, and inmates with comorbidities were released and monitored <sup>12</sup>. In Italy, measures included blocking visitor access, rigorous screening of staff and new inmates, isolation of infected individuals, and house arrest for drug-related crimes <sup>19</sup>.

In the Oceania region, Australia proposed the release of inmates with minor offenses but faced significant resistance from the population. However, some districts maintained basic protocols such as temperature testing for everyone before entering the facilities, the use of surgical masks, isolating inmates with cold or flu symptoms, and allowing video call visits<sup>18</sup>. Ainda que vários países tenham ideias e propostas diferentes para lidar com a população prisional, todos sabem da importância que esse grupo tem para saúde pública dos libertos. Controlar os surtos dentro das instalações foi fundamental em países em todo mundo e principalmente no Brasil. Benetti (2021) acompanhou uma experiência em uma unidade prisional no Rio Grande do Sul, onde foi feito uso de medidas protetivas como: triagem e fluxos de atendimento dos detentos ingressantes e para os que já estavam na unidade e apresentavam algum sintoma respiratório, atenção para servidor com sintomas. Tais ações trouxeram bons resultados, mas evidenciaram a necessidade de um esforço coletivo enorme e como a pandemia de Covid 19 requer não só ações, mas também mudanças nas leis prisionais brasileiras, para evitar surtos e novas variantes<sup>16</sup>.

In the vaccination topic, five articles were selected<sup>20</sup>-

<sup>24</sup>. All the selected articles were published in the USA, and they were all produced in the year 2021. Three out of the five articles discuss the ethical issue of vaccinating the incarcerated population.

Regarding this theme, there is a close relationship between a higher risk of COVID-19 and people living in correctional or detention facilities <sup>25</sup>. COVID-19 behaves dangerously differently within prisons, jails, and immigration detention centers. The virus spreads more rapidly within closed institutions: prisons and jails account for 39 out of the 50 largest disease outbreaks in the USA <sup>20</sup>. Adding to this situation, among incarcerated or detained participants in correctional and detention facilities, only 45% were willing to be vaccinated against COVID-19 for emergency use <sup>24</sup>. It is worth noting that the reduction in willingness to participate was higher among younger participants identified as Black/African-American and those living in correctional facilities <sup>24</sup>. Therefore, the lack of adherence to vaccination in this population may have implications for public health practice.

This data becomes even more alarming considering the reality of closed institutions, which have a general mortality rate from COVID-19 three times higher than that of non-incarcerated individuals, along with an infection rate five and a half times higher 28. Furthermore, this reality increases the danger to the entire community and is not contained within institutional walls, as jails and prisons have been associated with increased rates of COVID-19 cases and hospitalizations in neighboring cities and states <sup>21, 29</sup>. However, some researchers do not see a public health problem but a medical opportunity in our prisons devastated by the pandemic.

From this perspective, coronavirus infection in a carceral setting triggers COVID-19 outbreaks and contributes to community transmission <sup>24</sup>. This is due to the rapid viral spread and high contagion power, which, combined with overcrowding and lack of vaccination, exacerbates the inequality among incarcerated or detained individuals <sup>21, 25</sup>. Thus, there is a need for interventions to reinforce trust in the vaccine, facilitating adherence and spreading this mindset among incarcerated or detained individuals.

Considering the higher risk of incarcerated individuals and correctional staff to coronavirus infection, federal regulations have been established to protect incarcerated populations from future mistreatment. However, jails and prisons have become an epicenter of the current pandemic <sup>20, 22</sup>. Therefore, the responsible authorities must be vigilant regarding COVID-19 vaccine trials and prioritize ethical practices, especially among this group. Moreover, correctional settings present an opportunity to determine the vaccine's efficacy when trials are conducted ethically, potentially benefiting the health of people living and working in these facilities <sup>27</sup>.

However, Strodel et al. (2021) reinforces that state

plans for COVID-19 vaccine rollout did not prioritize this group when compared to individuals with similar levels of risk for acquiring COVID-19 and experiencing morbidity and mortality due to SARS-CoV-2 infection. Thus, the willingness to receive the COVID-19 vaccination was lower in this analysis<sup>24</sup> compared to the results of national surveys of the general population during the same period (45% versus 56%-67%) <sup>30, 31</sup>. It is also noteworthy that the prevalence was significantly lower among younger or Black individuals, consistent with similar research in the general population <sup>22, 24</sup>.

This finding is highly concerning, although not unexpected, given the historical legacy of mistreatment and distrust in healthcare services 32. Therefore, the higher risk of severe illness and death from COVID-19 among Black participants, who still constitute the majority in the criminal justice system <sup>33</sup>, is understood. Research indicates that over three-quarters of participants who reported hesitancy in receiving the COVID-19 vaccination cited concerns about efficacy or safety 24. From this perspective, there is a need for democratizing access to information about the processes and the vaccine itself, which should be culturally relevant and appropriate for individuals of all health literacy levels, conveyed through various formats and languages, including video messages, brochures, posters, presentations, peer interactions, and discussions with experts.

Added to this issue, Strodel et al. (2021) reported significant variation by state in prioritizing incarcerated individuals and other vulnerable populations for COVID-19 vaccination. Furthermore, it was demonstrated that correctional and law enforcement officers are often prioritized ahead of incarcerated individuals <sup>22</sup>. While this prioritization is justified, it is concerning that only a few states explicitly planned vaccine distribution for older or clinically vulnerable incarcerated individuals in the same phase as their non-incarcerated peers. This discrepancy between groups at higher risk of severe COVID-19 highlights a potential violation of human rights principles regarding equitable access to care for incarcerated individuals <sup>22, 24</sup>.

Various studies have evidenced the precarious position of incarcerated individuals in vaccination distribution strategies. As of December 31, 2020, only half of the states had specified vaccination priority for incarcerated individuals compared to the general population <sup>22</sup>. Furthermore, this disregard extends to not providing the same level of healthcare services to this group, indicating a violation of human rights. According to the United Nations Standard Minimum Rules for the Treatment of Prisoners, Rule 24: "The provision of health care for prisoners is a State responsibility. Prisoners shall enjoy the same standards of health care that are available in the community and shall have access to necessary services free of charge, discrimination on the grounds of their legal status" 34.

In this issue, incarcerated elderly individuals stand out as a particularly vulnerable population, often experiencing delays in routine and specialized medical care, including treatment for COVID-19, while elderly individuals residing in the community may receive care earlier through emergency medical service providers <sup>22</sup>. States that do not prioritize incarcerated individuals deny them access to basic healthcare and put them at risk of morbidity, long-term sequelae, and mortality, which is not in accordance with the rights offered by the public health system (SUS).

Thus, it is evident that state plans for the rollout of the COVID-19 vaccine do not prioritize incarcerated individuals to the same extent as other groups with similar levels of risk for acquiring COVID-19 and experiencing morbidity and mortality due to this virus. Considering that current vaccination plans are still subject to changes, it is important to highlight this reality and take appropriate measures. It would be possible to redistribute incarcerated individuals to priority levels proportional to their risk. This would require transparent communication with the affected individuals as well as greater coordination with correctional facilities, correctional departments, and other stakeholders.

Within the theme of access to care for other comorbidities, four articles were selected <sup>35-38</sup>. Among these four, three are from 2021 and one from 2020. The studies were mostly conducted in the USA, totaling three articles, along with one conducted in France. Additionally, within the context of access to different types of healthcare unrelated to coronavirus, three articles focus on the care of incarcerated individuals who use opioids and other addictive substances, confirming the high relevance of discussing this topic.

In this context, it is essential to highlight that incarcerated individuals are in a state of high vulnerability, both socially, due to their isolation from their families in prison, and in terms of health, due to the dire reality of Brazilian prisons facing problems such as overcrowding, poor ventilation, and limited access to healthcare services. Thus, this vulnerability creates an environment conducive to the development of substance addictions, including illicit drugs, opioids, alcohol, and other addictions. Therefore, individuals with such dependencies require specific treatments to achieve remission <sup>38</sup>. Access to these treatments was already limited before the COVID-19 pandemic and has now been further restricted, mainly due to the implementation of measures to contain the spread of the virus <sup>37</sup>.

In addition, during these periods when the healthcare system is overwhelmed, reports emerged with information and content involving restrictions on healthcare services and prevention for drug users, such as the temporary closure of harm reduction services and restrictions on new services for opioid agonist treatment and/or HCV and needle and syringe exchange programs. This strongly contrasts with international

recommendations to maintain access to opioid agonist treatment and provide needles and syringes as basic public health measures for drug users <sup>35</sup>.

Within this context, as a pandemic control measure, the United States released many inmates to contain the virus spread. However, reentry services were limited or eliminated due to the pandemic, leaving formerly incarcerated individuals who are drug users without support to reintegrate into the community. This created a conducive environment that led many individuals who were making progress to relapse into drug abuse, further exacerbated by uncertainties and fears they now face while being released, such as unstable housing, a fragile social support system, limited access to substance use disorder treatment, and distance from family. Thus, this group of individuals who already face multiple challenges upon release from incarceration had their situation worsened due to the circumstances created by the pandemic scenario <sup>36</sup>.

Regarding mental health, four articles <sup>39-42</sup> were selected as relevant to the thematic axis. In terms of temporal characteristics, one article is from 2021 (United Kingdom), and the other three are from 2020 (two from the United Kingdom, one from New Zealand, and Australia). In general, the articles by STEPHENSON and HEWSON point out that the incarcerated population in the United Kingdom, when compared to the free population, has higher rates of mental health problems, which lead to suicides (men 3 to 7 times more cases compared to the general population, and women 20 times higher), self-harm (up to 6% in men, up to 24% in women), and violence. The public policy in the United Kingdom for incarcerated individuals focuses on a rehabilitation culture, aiming to address holistic health promotion, including mental health, through nutrition, routine, engagement in intentional activities, and improved interpersonal relationships.

In Brazil and the vast majority of countries, even before the coronavirus pandemic, suicidal ideation converges with mental disturbances, presenting symptoms or behaviors of anxiety, depression, psychosis, and hostility <sup>43</sup>. In the context of COVID-19, mental health-related disorders have become more frequent, as out-of-cell activities were excluded or reduced, and visitations were prohibited, creating triggering environments for the exacerbation or emergence of mental illnesses, as well as facilitating the virus spread in overcrowded cells in the case of Brazil.

It is worth noting that in addition to the alarming situation of incarcerated individuals amid the coronavirus, the dire reality of Brazilian prisons (structural precariousness, high infection rates including other communicable diseases, high levels of psychological and psychiatric diseases, and lack of effective public policies) contributes significantly to the detriment of incarcerated individuals' mental health, clearly demonstrating the need for the development of

policies focused on prevention and health promotion for prisoners <sup>44</sup>.

Thus, according to KHOTARI and STEWART; COSSAR, R.; STOOVÉ, M., the ideal approach would be to mitigate excessive preventive measures whenever possible to ensure a minimum level of sociability, using secure phones and video calls to contact family members, and even encouraging other means of communication, such as using letters, which considerably reduces additional stressors. However, the applicability of such methods in the UK and the Brazilian reality would require structural and governmental support, which sometimes renders incarcerated individuals invisible to broader social issues<sup>41, 42</sup>.

### **Final considerations**

The adversities caused by Covid-19 in the reality of international and national prisons are quite specific in the majority of cases. Healthcare assistance for incarcerated individuals is visibly neglected in many countries compared to the free population, and with the atypical situation of the new coronavirus, it has become even inadequate, thus demonstrating ineffectiveness of many public health policies for healthcare in the prison environment, along with limited government involvement. There is a need for the formulation of public health policies and further studies in healthcare assistance to address Covid-19 within prison settings in Brazil and other countries, aiming to provide effective healthcare services while implementing preventive measures.

## **Conflict of interests**

The authors declare that there is no potential conflict of interest.

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There was no funding or supply of equipment and materials.

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