



Equity in health and access to vaccination: reflections about the distribution of vaccines to individuals deprived of liberty during the COVID-19 pandemic

Equidade em saúde e acesso a vacinas: reflexões Sobre a distribuição de imunizantes para Indivíduos Privados de liberdade durante a pandemia de COVID-19

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ABSTRACT

To analyze content distributed in social media platforms, from 2020 to 2023, regarding access and allocation of vaccines against COVID-19 for people deprived of liberty (PDL), describing it and discussing the interface between published materials and health equality. To reach this goal, we used a qualitative approach, based on netnography methodological precepts. In addition, we employed Bardin's content analysis method. During analysis, two main categories emerged. The first, called "Health of the person deprived of liberty", was divided in two subcategories: "Prison as an epicenter of infectious diseases such as COVID-19" and "State civil responsibility for the health of the person deprived of liberty". The second category, "Is health really universal?", was divided in "Inequalities in the access to health services", and, to a lesser extent, "Health as a right for all". Both thematic categories contribute to understand the availability of COVID-19 vaccines for PDL, according to the perspective of specialists in the field and the population as a whole. This study emphasizes the importance of science communication to discuss issues that entail intense polarization, especially those related to health care in prison environments. Exploring the perceptions and discussions in social media platforms, we seek to increase understanding and promote a more inclusive conversation about the health of people deprived of liberty, particularly in the context of the COVID-19 pandemic.

Keywords: Coronavirus Infections. Vaccination. Prisons. Social media.

RESUMO

Analisar os conteúdos sobre acesso e alocação de vacinas contra a COVID-19 para indivíduos privados de liberdade (IPL), veiculados nas plataformas de mídia social, no período de 2020-2023, descrevendo-os e discutindo as interfaces existentes entre os materiais publicados e a equidade em saúde. Para atingir esse objetivo, utilizamos uma abordagem qualitativa com base nos preceitos metodológicos da netnografia. Além disso, empregamos o método de análise de conteúdo proposto por Bardin. Durante a análise, emergiram duas categorias principais. A primeira foi dividida em duas subcategorias: "O presídio enquanto epicentro de doenças infectocontagiosas como a COVID-19" e "Responsabilidade civil do Estado diante da saúde do indivíduo privado de liberdade". A segunda categoria foi subdividida em "Iniquidades no acesso aos serviços de saúde" e, em menor grau, "Saúde como um direito de todos". Ambas as categorias temáticas contribuem para a compreensão da disponibilidade da vacinação contra a COVID-19 para os IPL, considerando as perspectivas de especialistas da área e da população em geral. Este estudo ressalta a importância da divulgação científica para a discussão de questões polarizadas em nossa sociedade, especialmente aquelas relacionadas ao atendimento à saúde em ambientes prisionais. Ao explorar as percepções e discussões presentes nas plataformas de mídia social, buscamos ampliar o entendimento e promover um diálogo mais inclusivo sobre a saúde de indivíduos privados de liberdade, particularmente no contexto da pandemia de COVID-19.

Palavras-chave: Infecções por Coronavírus; Vacinação; Prisões; Mídias sociais.

INTRODUCTION

In January 2020, the World Health Organization (WHO), immediately after the beginning of isolation due to the new coronavirus (SARS-CoV-2), the etiological agent of the COVID-19, declared a public health emergency of international interest. This led to an unprecedented sanitary situation, which caused all areas of society to hope for the development of a vaccine^{1,2}.

In this context, the development of COVID-19 vaccines was faster than any had ever been, considering financial and technological investments and the public health emergency^{1,3}. Due to the scientific and biotechnological advancements in the production of vaccines, and not including vaccines that have already been licensed, there are records of 183 vaccines in the clinical trial stage, and 199 in the pre-clinical testing stage⁴.

Considering the pandemic context, we find that media outlets, such as the news and virtual means of communication, have been important sources of information and disinformation (a phenomenon also known as an "infodemic"⁵.

Despite enormous advances regarding vaccines against COVID-19, there are still multifaceted challenges for government managers and scientists around the world⁴. The obstacles that stand out in this regard are the insufficient amount of supplies and human resources, vaccine hesitancy, the infodemic, accessibility problems, questions about responses to the vaccine, and, more concerning, the low demand for health services, resulting in low vaccination coverage^{3,5}.

In addition, there were discussions involving ethical values and considerations about criteria to access and allocate vaccines throughout priority groups, a problem that was particularly relevant at the time the vaccine was approved, since, then, its supply was extremely limited⁶.

Mathematical models showed that, for vaccine allocation, one must consider the

cumulative incidence of infection, mortality rates, and years of life lost, as well as the ability to access and maintain the vaccine supply chain⁷. To the detriment of these mathematical models, in order to guarantee equal access to vaccines, the WHO secretariat has defined rigorous general principles to promote equal access and distribution of essential health products against COVID-19, based on equity and justice.

In this context, marginalized groups, excluded from society, but who live in epicenters of respiratory infections, such as people deprived of liberty (PDL),^{2,3,8,} were considered to be priority groups⁹ This conduct, in addition to ideological and political partisan decisions, contributed for the infodemic to spread even faster than the pandemic itself¹⁰. Several studies showed that technology and social media platforms allowed leaders and scientists to directly provide people with important information during the pandemic. However, they were also criticized as they propagated misinformation and excluded public health communication^{11,12,13,14}.

In Brazil and around the world, as the pandemic advanced, it showed the limited knowledge and social and ethical challenges for scientists, members of different government agencies, health agencies, and society in general, regarding the potential impact of these platforms in health¹². Therefore, netnographic studies have been recommended to mitigate the worldwide impact of this infodemic, regardless of the health context^{11,13,14}.

Although this study design has become more common, there is only one study in the world that addressed PDL vaccination¹⁵. In this regard, this research is supported by the need to fill in this gap of knowledge, to contribute for a reflection about the Unified Health System, involving humanitarian and ethical issues, and to subsidize public health policies to combat vaccination against COVID-19 in prisons.

This article aims to analyze content distributed in social media platforms, from

2020 to 2023, regarding access and allocation of vaccines against COVID-19 for people deprived of liberty (PDL), describing it and discussing the interface between material published and health equality.

METHODS

This is a cross-sectional exploratory-descriptive study, with netnography methodological precepts, carried out from May 2020 to May 2023¹⁷. The research was developed based on the guiding question: "How does society perceive the vaccination against COVID-19 for people deprived of liberty?" Furthermore, due to the multifaceted nature of the topic, we decided to employ a qualitative approach, since it allows for a deeper perception of the meanings attributed to the study object¹⁸.

We chose netnography¹⁹ because it allows researchers to insert themselves, in real time, in the observed environment, in order to extract information about the phenomenon investigated and dive deeper into it. This method is characterized, mostly, by a reading of public texts; a posterior analysis, based on communication files saved from the virtual environment; observation of interactions among people—as opposed to observing the individuals in isolation; and analysis of a peculiar form of interaction that takes place in the public arena²⁰.

In order to answer the guiding question, at first we identified and mapped the main platforms of virtual communication and interaction. Then, we followed the stages of Kozinets's¹⁶ theoretical framework, that is: virtual space recognition; data collection; data interpretation; guarantee of ethical standards; and research representation — we carried out data collection based on an online field work that addressed health and social justice.

Data collection, in turn, was carried out through visits to digital communication platforms and virtual interaction, including social networks, forums, websites that addressed COVID-19 vaccination in people deprived of liberty, and visits in Google Trends to ascertain how often searches on the topic were carried out. Data collected were input into an Excel spreadsheet, created by researchers themselves.

To measure the number of searches, we used the Google Trends tool, which makes available estimates of data, such as how often words are searched for on Google. We searched the terms "covid, vacina, preso", in Portuguese; and "vaccine, covid, prison" in English. Data was presented in graphs and figures.

To refine the data found, we also used Bardin's content analysis ¹⁸, defined as a set of analytical techniques for communication, which, at first, performs a pre-analysis of the materials using skimming, in order to elaborate the text corpus. Then, researchers explored the material collected searching for the main expressions and their meanings and the main grammatical subjects of the statements, while also selecting theoretical/analytical categories. Finally, results were treated and interpreted.

Two new thematic categories emerged from this movement, which dialogues with the perception of the supply of COVID-19 vaccines for PDLs, from the perspective of specialists in the field and the population in general. The first category, "Health of the person deprived of liberty", was divided in "Prison as an epicenter of infectious diseases such as COVID-19" and "State civil responsibility for the health of the person deprived of liberty". In turn, the second category, "Is health really universal?", was divided in "Inequalities in the access to health services", and, to a lesser extent, "Health as a right for all".

The statements collected were grouped in two tables, where the letter "S" was used to identify specialists and "P" for the general population, followed by the respondent educational level.

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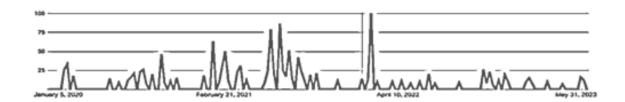
RESULTS

A relevant review of literature shows that, for decades, the exponential capacity of social media platforms to disseminate information has been strategically used with a positive impact on public health²⁰.

In the context of the pandemic, where there was search for fast news, social networks and news media were some of the main sources of the information searched by society. However, this incessant search helped foster the infodemic, which harmed (and still does) the struggle against COVID-19 and other vaccine-preventable diseases^{5,20}.

In this regard, the evaluation of visits and articles in news websites and of the virtual interactions represent an important thermometer for the elaboration and evaluation of public policies, since they have the potential to address the most relevant specificities of the more assertive discussions, in order to minimize the infodemic.

The findings presented in Graph 1 are essential, since they show that, globally, the peaks in the search for the terms "vaccine, covid, prison" took place in the exact periods when the WHO disclosed which were the priority groups for allocation of the first stages of vaccination, among which groups PDLs were included. This was also the moment when each country could determine their vaccine schedules, with the approval of emergency use vaccines^{3,4}.



Graph 1. Frequency of searches for the term "vaccine covid prison" worldwide between March 2020 and May 2023. Goiânia, Brazil.

Source: Google trends.

Figure 1 shows that the countries where the search was higher were the first ones that made the vaccine available for their general population, which allows inferring how society was worried by the process of vaccination in prison units^{3,4}. However, when we trace an association between the transmissibility and pathogenicity of the infection, we find that marginalized groups, with low access to health services, who live in degrading sanitary conditions, are more likely to become infected. This corroborates the need to encourage

broad vaccination, so vulnerable groups, such as those of people deprived of liberty, are vaccinated as early as possible, given their social context and programmatic vulnerability.



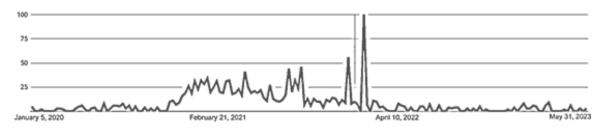
| 1 Reino Unido | 100 |
|------------------|-----|
| 2 Estados Unidos | 60 |
| 3 Canadá | 58 |
| 4 Índia | 3 |
| | |

Figure 1. Frequency of searches for the term "vaccine covid prison" by region across the planet between the months of March 2020 and May 2023. Goiânia, Brazil.

Fonte: Google trends.

In Brazil and around the world, the search also reached its peak when priority groups for vaccination were published, and the vaccination was opened for emergency use — this was carried out by the Brazilian Ministry of Health. However, around the world, the search for information

continues to be consistent, as opposed to Brazil, where there was an abrupt decrease, with a significantly lower number of searches since March 2021 and another downward turn in April 2022 (Graph 2).



Graph 2. Search frequency for the term "covid vaccine prisoner" in Brazil between March 2020 and May 2023. Goiânia, Brazil Source: Google trends.

The first drop in searches may be related to the refusal of the Ministry of Health to consider PDL as a priority group for vaccination and to the wide dissemination by the country's rulers that this population segment would be among the last groups to be vaccinated. The second drop in search frequency is most likely due to the broad offer and low demand for vaccination in the country⁶.

The search for information by the population at large was directly associated to an increase in discussions and publications by the scientific class. However, while the position of researchers was based on arguments focused on morbidity and mortality data, epidemiological

weeks, and the vulnerability profile of people deprived of liberty²⁰, narratives in society formed around preconceived ideas²¹, including some associated with human rights violations and criminal postures.

There was a widespread narrative in respected news outlets, means of communication and virtual interaction, with posts with more than one hundred comments; however, in general, they were quite similar. Therefore, from this framework of information, thematic categories emerged whose focused were, on one side, the opinion of specialists, and, on the other, the opinion of society, as Tables 1 and 2 show, respectively.

Chart 1. Opinion of Public Health and Safety Specialists on vaccination of prisoners against COVID-19, published on news websites and virtual interaction pages between the months of March 2020 and May 2023. Goiânia, Brazil

| CATEGORIES | OPINION OF EXPERTS |
|---|---|
| | "Prisons are incubators of diseases, including covid-19" E1- Specialist in bioethics. |
| | "You don't want to have a place in your area that is spreading the disease. Guards, cleaning staff, food vendors, visitors, a lot of people come in and out of prisons. You have to control the spread of the disease in prisons" E2- Specialist in public health. |
| | "Like any confined population living in constant crowding, as is the reality of our prisons, the risk of outbreaks is very high. Penitentiaries do not have hygiene and distancing conditions, and there is a much more pronounced proliferation of Covid-19. Prison populations are always more vulnerable to any transmissible disease, putting not only their health at risk, but also that of prison system employees" E3- Specialist in infectology. |
| "Health of the person deprived of liberty" | "We still have a small amount of vaccines But I think it's perfect to prioritize groups that are highly exposed, and prisoners are still an exposed group due to the crowds that exist in prisons" E4- PhD in epidemiology. "It is not possible to do isolation inside the prisons, as they are overcrowded. How is one prisoner going to stay two meters away from the other in a cell where there is not even room to lie down and sleep? How are prisoners going to clean themselves if there is constant water rationing in many units? How are they going to get immunity if the food they get is sour?" E5- National coordinator of the Pastoral Prison. |
| "Prison as an epicenter of infectious diseases such as COVID-19" | "It is particularly important to protect these groups also among prisoners, such as the elderly (about 1% of people arrested in RJ) and people of any age with comorbidities, such as diabetes, HIV, tuberculosis, who could have been part of the prisons. prisoners benefiting from house arrest The first major challenge is the effective inclusion of this population in public policies and in the SUS, which would allow access to inputs such as Personal Protective Equipment (PPE) and diagnostic tests, access to extramural health network with definition of the flow of patients to public hospitals in case of aggravation and mainly, the planning, with scientific basis, together with the health secretariats, of effective measures to prevent transmission and adequate epidemiological surveillance. Another important aspect is the need for rapid identification, among inmates and in the already incarcerated population, of people with clinical suspicion of COVID-19 and provision of a suitable place for their isolation and testing for laboratory confirmation" E6- Researcher at the National School of Public Health . |
| | "The most important thing was the reduction of the prison population, with a massive policy of appreciating the requests for freedom from these people who were part of the risk group" E7- Researcher at the Racial Justice Center of the Getúlio Vargas Foundation in São Paulo. |
| | "We recorded the occurrence of manifestations of relatives in more than 17 states of the country, more than 60% affirming the existence of people with all the symptoms, in serious condition They had not been tested, or had only taken the quick test. There is underreporting and there is a large number of deaths. Many of them are unregistered" E7- Researcher at the Racial Justice Center of the Getúlio Vargas Foundation in São Paulo. |
| | they do not have the autonomy to seek immunization, precisely because they are under state supervision and, therefore, imposing equity in the treatment provided, also receiving the vaccine". E8- Public Defender. |
| "State civil responsibility for the health of the person depri- ved of liberty" | "Here, the principle of equivalence of care, which should provide prisoners with access to health services free of charge and at similar standards to the non-prison population, is not ensured in many nations Prison management and services are a weakness in criminal justice in several countries. Prisoners are a segment of society that is generally overlooked when formulating public policies and among public opinion" E9- Strategic Management and Decision Making at ESCP. |

(Conclusão)

Chart 2. Society's opinion related to vaccination of the prison population and the fight against COVID-19, published on news websites and virtual interaction pages between the months of March 2020 and May 2023. Goiânia, Brazil

| CATEGORIES | OPINION OF THE POPULATION |
|--|--|
| | "The press has defended bandits all their lives. The prisoner has food on his plate inside the prison. Even the menu is not repeated during the week. Now no one in the press is seeing fathers of families on street corners selling barbecue to earn a few bucks. This one has to have the vaccine much earlier than these thugs. Regardless of age" P1. |
| "Is health really universal?" | "Leave it to vaccinate prisoners around 2025. Suddenly a good part dies and solves several problems such as: high prison population, prisoner scamming via cell phone inside the prison, high violence in cities"P2. |
| | "First the normal population, paying high taxes. Vaccination in prisoner, only afterwards and if left over" P3. |
| | "The situation of the prisoners is very easy to solve: isolation for 15 days and cancellation of visits during this period. Simple" P4. |
| Inequalities in access to health services | "He told me that it was only one or two that had not caught Covid inside his pavilion. There must have been 30, 40 people in his cell, more or less. How could he, sick, share a pack of dipyrone with the whole cell?", he asks, saying that the drugs should be delivered by the penitentiary. "And we call them and they pretend that nothing happened" P5. |
| | "You can't even tell if what he had was Covid, because they don't talk, and that's worrying me because he never stayed long without talking to me. After the call I didn't get a letter, I didn't get anything from him. So, imagine how my head is. He's sick, we call them, they say everything's fine and they don't provide more information" P6 |
| | but when faced with the question of whether prisoners should be vaccinated, people shouldn't think that they are all serial killers. This is simply not true"P7. |
| | "Secondly, people in prison have not received a death sentence. They have the right to receive health care" P8. |
| | "They forgot that within these spaces there are also health professionals, social assistance, occupational therapy, etc. It is worth noting whether professionals can be included in the initial groups. Readers, the incarcerated population has the same or higher incidence of illnesses in the population" P9. |
| Health as a right for all | "You have to think that because of the very close interaction with prisoners, prison officers, health workers and other professionals in prisons are at greater risk of contamination. There is no doubt that prisons are high-risk environments for transmitting Covid-19 for everyone who lives and works there" P10. |

The first category, "Health of the person deprived of liberty", was divided in "Prison as an epicenter of infectious diseases such as COVID-19" and "State civil responsibility for the health of the person deprived of liberty" (Table 1) The second category, ""Is health really universal?", was divided in "Inequalities in the access to health services", and, to a lesser extent, "Health as a right for all" (Table 2).

Several specialists, both in scientific articles and in gray literature, suggested that prisons are epicenters of COVID-19. The constant flow of PDL and workers, as well as the precariousness of the facilities, make viral transmission easier, since measures to deal with infection, such as sanitation, isolation, and social distancing, are difficult or impossible to implement^{22,23,24}. Additionally, PDLs have

high rates of chronic health conditions, such as hypertension, diabetes, and cardiovascular disease, which are known risk factors for severe forms of COVID-19 and mortality²⁵.

DISCUSSION

Although studies in prisons are limited, estimates suggest that individuals deprived of liberty are up to 5.5 times more likely to be infected by SARS-CoV-2, and three times more likely to die than the general population, which confirms the need for vaccination programs²⁶. However, most countries neglected, in their plans, the vaccination of PDL, and did not prioritize this group in their programs of access and allocation, especially in the first stage of vaccination.

In this regard, the WHO recently published a specific document for prison units, strongly guiding vaccine allocation procedures for those deprived of liberty. Despite there being robust evidence of the need to vaccinate PDL, ratified in the statements of specialists in Table 1 and in official documents (e.g. the aforementioned WHO document)⁴, Brazil still slowly advances vaccination of this portion of the population.

Based on the statements of specialists, the supply of COVID-19 vaccine meets the constitutional principles of equality and universality of access to health. It is worth noting that PDL are under the tutelage of the State, but it seems to be common, in political discussion, not to base decisions about vaccine allocation on sanitary and ethical principles.⁶

Even if PDL are a proven part of the priority groups for vaccination, their inclusion, even in lower-risk groups, only took place after countless scientific discussions, through academic and media publications²⁶. On the other hand, certain population segments, such as prison workers, were included without reservations, which confirms there is a prejudiced view toward PDL.

It must be understood that health is a collective good, especially when it comes to highly-transmissible viral agents, which can easily be disseminated, both in and out of prisons, which substantially contributes for the collapse of the health system and to the high number of deaths^{23,25}.

We expect our findings to collaborate for the late allocation of COVID-19 vaccines not to be a catalyst for the worsening of the health of PDL, as it was during the outbreaks of H3N2 in 1968, and of H1N1 in 2009²⁷. We believe that vaccination in this pandemic context should be a mechanism to reverse the inequalities experienced by this group. Furthermore, we must consider balance with equality, since, among those deprived of liberty, there is an extremely large number of people who, if out of the prison system, would have received basic vaccination and booster shots, as did the elderly, people with comorbidities, and others⁶.

The phenomenon in which scholars presented data in websites that foster discussion about vaccination in the prison system showed itself crucial for dealing with COVID-19, since it allows for assertive reflections from managers and society about community prevention^{12,17,28}.

Curiously, data from this study showed that society started to manifest opposition to PDL vaccination after the scientific position was expressed, as if, up to that point, this population group had been invisible in the pandemic context. The narratives presented in Table 2 are full of meanings of exclusion and marginalization of the prison population.

Understanding how the COVID-19 vaccination presents itself socially is essential, since public policies are often elaborated according to the interests of dominant groups, which have the potential to divide society and maintain stereotypes that stimulate the structural perpetuation of health inequalities⁶.

In this regard, digital literacy in health is an essential tool to deal with public health

challenges, such as the COVID-19 pandemic. We must provide digital abilities to individuals so they can access precise information and make informed decisions about their health, in order to contribute for disease prevention and control in their communities⁴.

Also, an observation of certain opinions from Brazilian citizens, regarding the vaccination of PDL against the new coronavirus disease, shows clear indignation. We believe they do not understand the architectural, social, and political limitations of prisons — limitations which favor the transmission of the pathogen. Much less do they know about the challenge of controlling COVID-19 outbreaks to prevent viral spread outside prisons. This misinformation allow for viral transmission, requiring vaccination measures of this population group^{7,20,22,28}.

The data presented in Table 2 are marked by hate speech, and narratives that naturalize lack of empathy, segregation, and inhumanity. Simultaneously, we can see an abrupt increase in the support and encouragement of human rights violations, including violent postures based on the social imaginary, enhanced by the infodemic, in statements such as "a good criminal is a dead criminal".

It seems evident that communication via website is *the main* articulating element for the repercussion of prejudice rooted in an excluding society, contributing for the social imaginary that individuals deprived of liberty do not deserve health care. Still, the denial coming from government representatives enhances inequalities in the access to vaccination and the feelings of rejection of these citizens deprived of liberty, but not of the civil rights of any other individual^{15,17}.

That said, managers must elaborate tools to minimize this perception of disregard for PDL and the infodemic, seeing that this information has an influence on public opinion at times of crisis, especially during sanitary emergencies. Several scholars advocate that communication

means, in addition to having the potential to select which events stand out and which are forgotten, also mold the way in which information is presented according to their interests and ethical, social, political, and sanitary biases, in a similar way to that which has been taking place with the vaccination of individuals deprived of liberty^{20,21,23}.

Although timid, certain narratives were found in favor of the right of health of PDL, using ethical, legal, and epidemiological arguments, showing that there is a portion of society which is attentive to social minorities. Thus, it is paramount to encourage discussions with society, so this type of information is disseminated to stimulate health equity.

Furthermore, we must emphasize, in the findings from Table 2, the statements of citizens whose ideas seek to guarantee that the rights of PDL are respected, with a more reasonable perspective about their vaccination process, to deal with the struggle against the pandemic.

It should also be noted that, among the social understanding regarding PDL vaccination, there are broad perceptions about the lack of personal protective equipment and reflections regarding biosafety in the process of care, focusing on the professionals that work in prison health care.

These social perceptions are in agreement with principles supported by Brazilian legislation, especially Law 8.080/9029. This law provides for the necessary conditions to promote, protect, and recover health, in addition to the organization and functioning of corresponding services. These goods and services are performed and managed by trained professionals, whose absence make care unsuccessful, thus showing how necessary it is to provide assistance for professionals who provide health care services in unsanitary environments, such as the Brazilian prisons³⁰.

While society's concern with prison system workers is relevant and necessary, it leads to reflections on the equality between these actors.

There is robust evidence regarding the role of health workers in the insertion and dissemination of SARS-CoV-2 in the prison environment^{30,31}—after all, the individuals deprived of liberty, at this pandemic time, have no access to their social networks. The workers, on the other hand, are continuously going from the inside to the outside of prisons, with broad viral circulation.

A qualitative study explored the experience of individuals that contracted COVID-19, in an attempt to understand their perceptions, challenges, and personal impact during the course of the disease. Participants shared their narratives, highlighting symptoms, emotional impact, difficulties faced throughout isolation, and post-COVID recovery³². Based on the narratives of patients and the reflection on health equality, it was possible to ascertain the complexities and challenges faced by those affected by COVID-19, especially considering the specific conditions of people deprived of liberty.

The study highlights the need for more inclusive and equal approaches to guarantee a fair access to health interventions, such as vaccine distribution, during public health crises.

As a result, including PDL and workers from the prison systems in priority groups for vaccination against COVID-19, as well as taking steps to ensure the necessary logistic to guarantee that vaccination is carried out as soon as doses become available, should be carried simultaneous actions.

This study has certain limitations, such as the fact that its sample derives from a secondary source that may not represent the whole of the information published on websites. On the other hand, it can subsidize public policies to combat the online infodemic and deal with socially constructed stereotypes, since the Internet has been increasingly used by the population and has the ability to change behaviors.

We found that the peaks in the search for PDL vaccination against COVID-19 in Brazil and around world took place when governors disclosed which segments would be vaccinated in the first stages, and when the countries became the epicenters of COVID-19; they also peaked when vaccines were released for emergency use.

Manifestations from the general population were proportional to the number of specialist discussions, ratifying the need to translate and popularize scientific knowledge. Nonetheless, while specialist narratives were focused on sanitary, ethical, and legal data, social discourse was mostly based on support to stereotypes that violated human rights, encouraging the structural perpetuation of the health inequities of individuals deprived of liberty.

CONCLUSION

We believe that this study shows that popularizing science is essential to discuss polarized topics in our society, such as those related to prison health care. We hope our findings will be elements useful for decision making regarding the allocation of COVID-19 vaccines, so the principles of SUS are respected and there is balance between the availability of vaccines, sanitary data, and the socially constructed position regarding the exclusion of the rights of people deprived of liberty.

By exposing the potentially harmful effects of the COVID-19 infodemic over the prison population, this article seeks to motivate and give support to executive and legislative decision-makers in the elaboration of policies to prevent and neutralize this damage — since this disease is still ongoing — and to avoid future public health crises.

The findings of this study help map the online landscape of vaccine misinformation and can guide the design of intervention strategies to contain its dissemination. In short, we believe this work can provide useful insights to deal with the vaccine infodemic.

This research contributes for understanding the challenges faced when promoting equity during the COVID-19 pandemic, emphasizing the importance of considering the specific needs of vulnerable populations.

As a suggestion for future research, there must be more comprehensive studies, that incorporate a larger variety of data sources and perspectives, including government and health agency data, in order to gain a more complete understanding of the implementation of vaccination policies for vulnerable populations, such as people deprived of liberty.

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