

COVID-19 control measures in correctional facilities of selected countries - A literature overview

Anna Augustynowicz^{1,2,A-D®}, Janusz Opolski^{3,A-C®}, Mariola Borowska^{1,D-E⊠®}, Dariusz Malczyk^{4,A-B®}, Artur Kotwas^{5,E-F®}, Dagmara Bartczak-Szermer^{4,E-F®}, Aleksandra Czerw^{1,6,E-F®}

- ¹ Department of Health Economics and Medical Law, Medical University, Warsaw, Poland
- ² School of Public Health, Centre of Postgraduate Medical Education, Warsaw, Poland
- ³ Faculty of Engineering and Management, University of Ecology and Management, Warsaw, Poland
- ⁴ Medical Faculty, Lazarski University, Warsaw, Poland
- ⁵ Subdepartment of Social Medicine and Public Health, Department of Social Medicine, Pomeranian Medical University, Szczecin, Poland
- ⁶ National Institute of Public Health National Institute of Hygiene, Warsaw, Poland
- A Research concept and design, B Collection and/or assembly of data, C Data analysis and interpretation,
- D Writing the article, E Critical revision of the article, F Final approval of the article

Augustynowicz A, Opolski J, Borowska M, Malczyk D, Kotwas A, Bartczak-Szermer D, Czerw A. COVID-19 control measures in correctional facilities of selected countries - A literature overview. Ann Agric Environ Med. 2022; 29(4): 471-476. doi: 10.26444/aaem/151882

Abstract

Introduction. The COVID-19 pandemic is one of the most significant public health challenges for this generation. Governments have been forced to undertake different measures to constrain the spread of the virus and protect the people. Restrictive and other measures have also been taken in correctional facilities to control the epidemiological situation.

Objective. The aims of this review are: 1) to contribute to knowledge by providing an overview of anti-COVID-19 measures that have been undertaken by the proper authorities in a few selected countries to control the epidemiological situation in prison; 2) to demonstrate proposals made in this respect by international organizations and scientific institutions and 3) to complete the most important bibliographical items for further studies.

Review methods. A literature review was carried out of international scientific and grey literature published between 30.01.2020 and 30.07.2021 (with some exemptions). In every correctional system in the countries under scrutiny, the proper authorities introduced many measures to control the epidemiological situation from the very beginning of the pandemic. Summary. The COVD - pandemic impacts almost all aspects of social and individual life. Governments were forced to undertake different measures to constrain the spread of the virus. Restrictive and other measures also had to be taken in correctional systems, where more than ten million people are held worldwide. The measures introduced differed regarding details such as time, scope and range, but were generally similar to solutions proposed by organisations such as the WHO or CDC. In most countries, the discussion regarding the reform of the legal system have been observed. One of the most discussed issues was the problem of decarceration.

Key words

prison, epidemiological situation, COVID-19, restriction, incarcerated people

INTRODUCTION

The COVID-19 pandemic impacts almost all aspects of societal and individual life, being one of the most significant health challenges for this generation. COVID-19 is a highly infectious disease spread mainly by aerosols resulting from vigorous exhalatory effort. Hence, the epidemiological situation is closely dependent on human behaviour and people's interactions [1, 2].

Governments have been forced to undertake different measures to constrain the spread of the virus and protect the people, including organizational changes in health systems as well as reducing individual rights and freedom when necessary [3]. Restrictive and other measures have also been taken in correctional facilities where more than ten million people are held worldwide [4]. People confined in prison are especially vulnerable to infectious diseases. Overcrowding, restricted movement, close living conditions, limited opportunities for physical distancing, and often inadequate ventilation systems – make the prison environment nearly impossible or extremely difficult and costly to control the infection. Moreover, incarcerated people can also experience complex health problems: non-communicable diseases, mental disorders, substance dependence, TBC, HIV and many others. Their general health condition is quite bad; therefore, they are more susceptible to different germs.

Social isolation, physical idleness, sensory deprivation and a weaker immune defence to stress could lead to psychological trauma, often resulting in self-harm, violence and even suicide [5, 6].

Daily staff movement and prisons, for different reasons (court related, medical), and visitors - have also impacted the epidemiological situation.

oxtimes Address for correspondence: Mariola Borowska, Department of Health Economics and Medical Law, Medical University, Jana Nielubowicza, 02-097 Warsaw, Poland E-mail: mariola.borowska@wum.edu.pl

OBJECTIVE

The aims of this review were: 1) to contribute to knowledge by providing an overview of anti- COVID-19 measures that have been undertaken by the proper authorities in a few selected countries to control the COVID-19 epidemiological situation in prisons; 2) to demonstrate proposals made in this respect by international organizations and scientific institutions and 3) to complete the essential available bibliographical items for further studies.

MATERIALS AND METHOD

An overview of scientific papers and grey literature published between 30.01.2020 and 30.07.2021 was carried out, excluding Poland, which is the subject of another article. [7]. A search was performed in June 2021 in electronic databases: Web of Science, Google-Scholar, Scopus, Pub-Med and Academia. edu. The search keywords were: prisons and COVID-19. No structured formal quality assessment was used as in a systematic review. Inclusion was restricted to peerreview papers and official reports, governmental or proper organizations, e.g., dealing with the problem in a broader scope [8]. Boundaries of this review were restricted to organizational anti-virus measures.

RESULTS

WHO and international organizations. On 30 January 2020, according to Emergency Committee recommendations, the Director-General of the WHO announced that COVID-19 constitutes a Public Health Emergency of International Concern. Besides guidance, proposals and opinions issued for the general public, measures and responses were prepared to address COVID-9 in prisons. In March 2020, the World Health Organization published guidelines to prevent and take hold of control COVID-19 in different detention centres [9]. Several organizations of the UN system – UNODC, UNAIDS and OHCHR – prepared joint statements and guidance notes regarding these facilities, also considering the human rights side of the issue [10, 11].

Amnesty International identified several control and prevention measures, such as testing, screening and treatment, tackling overcrowding, isolation, restrictions on visit, as well as access to vaccines. However, the organization also realized that isolation and quarantine measures should only be introduced when no alternative protection is possible. If such action were to be introduced, they should only serve as temporary measures [12]. Penal Reform International [13] also tackled the issue of human violation and harm prevention in the scope of COVID-19.

It is possible to place these international guidelines, proposals and comments into four categories, the first being the release of prisoners. But some questions remain unanswered. Who could be released? Perhaps those who were nearing the end of their prison sentence? Or maybe those with special health conditions (e.g., pregnant women, those with children?). Or perhaps very sick prisoners? Maybe elderly prisoners with short sentences? Secondly, there were ideas to limit the number of new prisoners. As a first step, it would be necessary to ascertain the reduction of those arrested,

particularly in the case of petty offences. Also, it could be possible to move sentences forward or convert sentences into fines [14]. The third category of recommendations strictly related to the relatively simple but essential measures of the prevention and mitigation of the virus spread in the prison environment: broad access to hygienic products, personal protective equipment, limitation of movement, suspension of visits, better health care, increase in cleaning, testing, sanitary inspection control and education, as well as the medical isolation of suspected cases. And finally, the fourth group of propositions were the human rights aspects of the whole situation.

USA and Canada. The United States of America holds more than two million people in involuntary confinement. There is common opinion that US gaols function at or even above the specified capacity of a gaol. They are also constantly understaffed [15, 16].

Centers for Disease Control and Prevention were set up at the beginning of the pandemic outbreakof COVID-19 with Guidance for Convectional Facilities [17]. The guidelines consist of three parts: management, prevention and operational preparation. The latter advises what to do when COVID-19 cases appear in a detention centre. At the same time, the former constitutes advice on what to do with those suspected of carrying the virus or those with confirmed positive results, and how such individuals need to be under medical control, when to place under quarantine, or how and when to administer medication. Each section has a dozen detailed suggestions. For example, the first section details the concept of restricting in-person visits, promoting non-contact visits, decreasing the expense of phone calls, making them free of charge, or even offering other telephone privileges.

On 26 March 2020, in Health Affairs, Brie A. Wiliams, Cyrus Ahalt, David Cloud et al., insisted that coordinated action overcoming time is critical, and considering the circumstance, quite a challenge. Therefore, they proposed certain measures to control the current state of affairs, offering comments on why it is so difficult, and giving descriptions of the state of health care in such institutions. For example:

- 1) Testing and screening for Covid-19 cases is vital, and prevention may be implemented by introducing the idea of contact tracing.
- 2) Medical supplies in prisons should be the same as in an outpatient clinic.
- 3) Individualized access to soap, sanitizer, and other materials that enable protection against infection is necessary. Lack of it is conducive to the rapid spread of cases.
- 4) Isolation is fundamental, but not to be used as an extra punitive measure.
- 5) Staffing shortage could create grave danger to the ability to work.
- 6) An efficient response to the pandemic involves a good rapport between medical staff and custody leadership.
- 7) The release of some people should be considered.
- 8) It is vital to give correctional medical officials the authority to decide on some organizational aspects from a medical point of view, for example, organization and functioning of cohorts.
- 9) It is a prerequisite to maintain the idea of testing and tracing. It is also vital to implement the concept of restricting all

non-essential movement of a patient. Entering the prison should be limited to essential staff and visits. I, it is also advisable to set up operational contacts with the local health system, especially hospitals, as a place of treatment and a source of personnel in case of an emergency [18].

Decarceration was the subject of a broad discussion in the USA. In most papers there were 'pro' proposals but some rules should be discussed and put into legal documents [19, 20, 21]. It is worthwhile stressing at this point that decarceration was generally a matter of concern in every country as one of the essential tools for controlling the epidemiological situation, and even the most effective COVID-19 mitigation strategy. Reducing the carceral population reduces overcrowding (as the most straightforward tool), allows for proper or even greater physical distancing and greater access to different services. How this is achieved and to what extent must involve considering the circumstances, as well as the needs of those people particularly concerning their own safety and wellbeing, while balancing this with social security. Once prisoners are released into society, they require support in once again becoming a part of society, and also need to join the health system [22, 23, 24, 25, 26]. On the other hand, when it comes to mass testing to stop the spread of the disease, regardless of whether symptoms are present or not, and systematic retesting, advice is not detailed in the guidelines. This may be because this overview deals with the initial phase of the epidemic [27].

The National Academy of Sciences, Engineering and Medicine came up with the idea of creating a committee consisting of specialists in detention center, as well as representatives from other scientific fields, to examine the best solutions for implementing decarceration and the efficient and safe reintroduction of prisoners released into society. It is noteworthy that the committee recognized that decarceration is not just a one-off event but a steady process requiring time.

Since the duration of the current crisis is unpredictable, some immediate action should be introduced. The critical issues are assessing the optimal population in a facility, eliminating the procedure for imprisoning an individual for failing to pay a fine or fee, as well as other petty offences), and introducing steps to possibly speed up the readiness for any other emergency of a public health nature [28].

In October 2020, the Centers for Health Security and Public Health and Human Rights of the Blooming School of Public Health at the Johns Hopkins University stated that the pandemic is a grave danger to those imprisoned, prison workers and, in general, the whole system of criminal justice. The present-day system cannot protect those imprisoned from catching the virus. Thus, it is vital to introduce swift modifications to reduce the spread of the virus. Thus, the guidelines presented many ideas and procedures for prisons and detention centers. They are similar to those constructed for the general population, yet differ in thathere we are dealing with inmates [29].

M. A. Novitsky, Ch. S. Narvey and D. C. Sementza have emphasized that, just as with many other matters, the reaction of the American system of criminal justice has failed in its uniformity. It has frequently significantly differed depending on the jurisdiction system. Moreover, even remotely competent Federal leadership was absent. Such a scenario requires further study, particularly regarding whether introducing stricter policies reflecting the evidence

based on the guidelines and CDC did decrease the toll of those infecte, or with health-related consequences in the context of prisons. COVID-19 has highlighted that the criminal justice system requires reform regarding decarceratio, also from a moral perspecti, when it comes to protecting the lives of prison staf, both on a health and safety level [30, 31].

In Canada, following the Coronavirus epidemic declaration, institutions on all levels undertook many steps to help control the situation. Among others, decreasing the prison population, suspending visits, distributing personal protective equipment and testing. Very detailed information was presented in 'Facets', especially regarding the whole problem of decarceration. It is not only of grave importance now, but also in the future, that a discussion be held on how and to what extent and in what form steps will be taken considering all social circumstances [32].

Central America. Prisons in Latin America are infamous for being overcrowded, endemic, dangerous and brutal, without any possibility of accessing the basic necessities of life and the provision of services, especially those regarding health hygiene, living conditions and funding. COVID-19 struck prisons in this region when there were already many problems to deal with, including internal security, which was far from perfect. However, the steps implemented to prevent the pandemic from spreading have been pretty much the same as in other regions. They included reducing the number of family visits, educational activities, meetings with social workers, in-person court appearances, using biosecurity equipment, reducing arrest and diverting pretrial detainees, and implementing strict sanitary rules. So far, the best preventative measure applied by governments in this part of the world involves reducing the number of individuals incarcerated. More specifically, Mexico was the first to declare an amnesty, maintaining a low number of those imprisoned as well as prisoners committing offences due to poverty. In Cuba, more than 6,500 people were released but no information on the principles was given [33]. At the same time, more than 300 people were jailed on charges of 'spreading the epidemic' [34].

Contact with family is significant here because prisoners receive food and other basic goods from family members. Hence, seeking other technical possibilities to contact relatives is crucial.

In general, governments and prison authorities chose to deal with the situation in the simplest way possible, which was by closing prisons and preventing any contact from taking place with those on the outside (e.g., reducing the number of visits, halting other activities and preventing inmates from being able to meet up with different specialists from the outside) [35].

Australia and New Zealand. Before the pandemic outbreak, there was a growth in the number of inmates incarcerated in Australia. A disproportionately growing number were females, and it was decided to construct new facilities and extend existing ones to cater for growing demand. To control the situation, a mixture of measures were introduced: a reduction of those incarcerated by reducing the number of new prisoners accepted, a commitment of those sentenced to parole which was supervised by the community, an introduction of unique quarantine principles, temperature testing, suspended social, as well as providing isolation hubs

and field hospitals within existing centres. Additionally, all institutions introduced new hygiene measures, such as hand washing. Furthermore, emphasis was placed on physically distancing inmates by placing them in special accommodation when in quarantine [36, 37].

The government of New Zealand was praised for its efficient prevention of the spread of COVID-19 The methods implemented to stop the prison pandemic involved isolating inmates, distancing them socially and following strict hygienic practices. Furthermore, what is noteworthy is that the New Zealanders placed great trust in their leaders and elite, trusting them to actively come up with the best action methods to protect citizens from the pandemic. The culture of trust and kindness is omnipresent among all free and incarcerated citizens [38].

Asia. The prison system in South Korea is on a relatively good level, particularly regarding the number of people imprisoned and the possibility of being provisioned with health care. The prisons were not a primary source of the pandemic infection, therefore it was unnecessary to decrease the number of imprisoned individuals. All institutions offered their inmates all the gear necessary for personal protection and introduced the idea of an educational programme concerning how it is best to reduce and stop the spread of the virus, educating about how the virus spreads and offering other vital information about COVID-19. Another factor contributing to the low level of cases is the fact that isolation steps were strict and newcomers were thoroughly examined upon admission. In a paper about South Korea's response to the pandemic, the strategy was acknowledged as highly efficient, as it concentrated on treating those within the institution, both inmates and staff, rather than just limiting or reducing the number of inmates [39].

Due to concern about risk management in the community, no decarceration of prisoners has taken place in Taiwan. The Taiwanese authority adopted several proactive measures to minimize the possibility of an outbreak COVID-19 in prison. In short, efforts included the establishment of a joint planning and central command with the Central Epidemic Command Center.

No decarceration was introduced because of the fact that there was concern about risk management. Instead, the government applied proactive steps to reduce the risk of the spread of COVID in prisons. Some of the measures introduced included establishing a joint and central command with the Central Epidemic Command Centre, focusing on stopping the outbreak, introducing masks, good personal hygiene habits, social distancing, isolation for new prisoners, etc. All this, in close cooperation with and the engagement of personnel. All workers were educated on the basic facts concerning COVID-19, environment sanitizing and disinfection procedures [40]. The Agency for Correction and the Ministry of Justice introduced general prevention measures, checking temperature, educating all staff and prisoners to wash their hands regularly, environmental cleaning and disinfection, investigating the travel history of new inmates, suspending all large gatherings and activitie, information for visitors, for example, how to behave during visits, and proposals for staff, for example, information on how not to be exposed to the coronavirus.

Pakistan has a range of prisons, from central to district, unique and sub-jails. Unfortunately, the prisons do not

adequately cater to proper hygiene and health behaviour. The system is also understaffed and overcrowded. Thus, it is practically impossible to introduce recommended measures to reduce the pandemic spread in these prisons. Therefore, many have called on the government to undertake measures to take control by decreasing the number of prisoners incarcerated, primarily by releasing inmates at most risk of infection. There have been orders given not to arrest people for petty crime. The Supreme Court also recommended releasing inmates who are on trial. Releasing inmates who were imprisoned for minor offences and crimes of a nonviolent nature was also activated [41].

In India, the government is solely responsible for prisons with both the management and administration of these institutions in their hands. The most significant problem for them is prison overcrowding. Some steps and ideas to introduce safety have been implemented, e.g., suspending family visits or releasing certain prisoners.

The prison systems both in India and Pakistan have almost the same problems, which include overcrowding, understaffing and problems with introducing hygiene measures and safety for their inmates. As J. R. Dmello and S. Ranjen emphasized, India and Pakistan decided to open up the countries before gaining complete control over the virus outbreak to reinstate economic security. It is interesting to note that the approach of these countries to releasing large numbers of inmates undergoing court cases or those with short sentences, is an experiment that should be closely observed. If it is the case that there is no growth in the crime rate, it is worth considering what acceptable policy is [41].

Africa. In Africa, the central challenge for the health situation, in general, depends mainly on overcrowding. Imprisonment is now the form used for banishing individuals, mostly used in the past to institute punishment [42]. What is paramount to the prison system is concentrating on the human rights of inmates and working on the level of violent activity, improving the awful sanitary conditions, reducing the level of disease transmission, and boosting the level of amenities [43]. To some extent, mitigation strategies were different in African countries, but generally, it is in the worst situation regarding public health and governmental obligations.

Europe. Europe – the Council of Europe member states – has the 10 most effective prison systems worldwide. At the beginning of the outbreak, the idea was to mirror the measures introduced in prisons in most countries, with the exception of Sweden. Thus, inmates were in lockdown, visiting rights were halted, and inmates' movement around the prison severely restricted. In certain prisons in the EU countries, to a certain extent it was possible to be released. The staff in most countries were required to wear protective gear, including a mask, a uniform and other elements of protection [44].

The British Institute for Crime and Justice Policy Research, in Birkbeck, University of London, launched a project examining the reduction of imprisonment across several countries, including South Africa, Brazil, the USA, Thailand, India, England, Kenya, Australia, Hungary and The Netherlands. Due to COVID-19, there is more pressure to reform the penal system with emphasis placed on decarceration to control the outbreak in prisons [45]. According to the above-mentioned Report, is difficult to

explain why the situation in prisons in different countries concerning the pandemic outbreak differed greatly. No uniform answer could be utilized to form an effective reform. However, it is necessary to address specific key priorities:

- 1) stating the purpose of incarceration and its limits;
- 2) decreasing the politicization of condemning an individual to a prison sentence;
- 3) decriminalizing petty crime and specific non-violent crime:
- 4) indicating and addressing specific groups in pretrial decision-makin;
- 5) drug policy reform;
- 6) ensuring that the detention of an individual before sentencing is not a widespread method and, if so, lasts a short time.
- 7) taking note of the repercussions of overusing imprisonment from a health perspective.

In England and Wales, the number of individuals incarcerated is more significant than in any other Western country. They, too, deal with overcrowding and have done so for many years [46]. In order to decrease the spread of the virus in prisons, personal protective gear (PPE) was offered to prison workers, all those within the prison were routinely tested, and confinement was applied to introduce social distancing, and additional facilities to boost hand washing. All prisons were in lockdown for 15 weeks, during which time, inmates were mostly confined to their cells [47].

Germany is a country with 16 regions, each with its own laws regarding prisons. All these Federal states undertook immediate action to ensure inmate and staff member protection. To exemplify the situation during COVID-19, prison leave was stopped, and work and recreational activities also partly reduced. But what was also essential, because one of the critical factors of attempted to find a balance between necessary restrictions and prisoners' feelings, as people in prisons are not only likely to be more vulnerable to infectious diseases but also to violations of human rights.

The pandemic introduced the problem of the necessity to modify criminal law and penitentiary law in social debate. The debate concerns the following questions: is reform in the criminal and penitentiary law necessary? For example, is it necessary to punish those who do not comply with the rules and regulations concerning pandemic restrictions? Should shorter terms of incarceration be applied? Should we imprison individuals, or chose the community to sanction such criminals instead? Soft drug abuse and offences should be decriminalized and so should petty offences, as a recidivist of such committed acts could end up in prison [48].

Belgium handled the pandemic by having prison workers instructed to deal with the coronavirus directly, but not by official statement. The implemented rules applied across the board and concerned internal affair, including the working conditions of the personnel. When it comes to the inmates, they were obliged to wear masks, distance themselves socially and adhere to isolation as a preventative measure. In the case of a certain category of releases, the head of the prison was able to release certain inmates at an earlier date [49].

The situation in Italy was difficult because of endemic overcrowding in prisons. Two ministries established two strategies: the Ministry of Justice and the Ministry of Health. According to these strategies, inmates were isolated from the outside world and certain measures were introduced

to identify infected cases and treat them appropriately. The details were as follows: to suspend contacts with the external community in every aspect, apply house arrest instead of prison in some cases and test with proper isolation. There is the opinion that Italy needs to instill all the guidelines suggested by the WHO in their guidance dated 15 March 2020. However, the efficiency of this approach was greatly dependent on a considerable decrease in the prison population, which proved to be incredibly difficult in Italy, despite other countries going in this direction [50].

In Russia, as of August 2020, more than.,2 million people were in some sort of institution within the penitentiary system. To deal with the outbreak, regional authorities took it upon themselves to deliver steps to prevent the spread of the epidemic: patients with disease symptoms were immediately isolated, a mask regime was introduced, and staff, when entering the facility, had to undergo a medical examination, special equipment to wash hands was installed and visits suspended [51].

CONCLUSIONS

- 1. In every correctional system in countries under scrutiny, the proper authorities introduced several measures to control the epidemiological situation from the very beginning of the pandemic.
- 2. There are differences in countries regarding detail, e.g., the measures' time, scope and range, although in general they were similar to solutions proposed by specific organizations like the World Health Organization and the US Centers for Disease Control.
- 3. In most countries, the significant discussed subject was decarceration just as a 'simple' procedure to control the epidemiological situation, or as part of a broader reform of the legal system.
- 4. The decision to introduce definitive control measures is an obvious country obligation, but international comparisons could be worthwhile as a tool for selecting the best solution.
- 5. Further studies could also be worthwhile to disseminate and evaluate the results of specific measures on morbidity and mortality of COVID 19 among incarcerated people and staff members in different countries.

REFERENCES

- 1. Dutkiewicz J, Mackiewicz B, Lemieszek MK. COVID-19 Possible interelations with respiratory comorbidities caused by occupational exposure to various hazardous bioeaerosols. Part I. Occurance, epidemiology and presumed origin of the pandemic. Ann Agric Environ Med. 2020;27(4):491–504.
- Goodwin L, Hayward T, Krishan P, et al. Which factors influence the extent of indoor transmission of SARS-CoV-2? A rapid evidence review. J Glob Health. 2021 Apr 3;11:10002. doi: 10.7189/jogh.11.10002
- Król Z, Szymański P, Bochnia A, et al. Transformation of a large multi-specialty hospital into na dedicated COVID-19 centre during the coronavirus pandemic. Ann Agric Environ Med. 2020;27(2):201–206.
- 4. Walmsley R, World prison population list. 12th Edition. World Prison Brief, Institute for Criminal Policy Research, 2015.
- Fazel S, Hayes AJ, Bartellas K, et al. Ment al health of prisoners, prevalence, adverse outcomes and interventions. Lancet Psychiatry. 2016;(3):871–878.
- Zhong S, Senior M, Yu R, et al. Risk factors for suicide in prison: a systematic review and meta-analysis, Lancet Public Health. 2020; (6):164–174.

- Augustynowicz A, Wójcik M, Bachurska B, et al. COVID-19 Infection prevention in prisons and jails in Poland. Ann Agric Environ Med. 2021;28(4):621–626.
- 8. Beaudry G, Zhong S, Whiting D, et al. Managing outbreaks of highly contagious diseases in prisons: a systematic review. BMJ Glob Health. 2020;5(e003201). doi:10.1136/bmjgh-2020-003201
- Word Health Organization region al Office for Europe, Preparedness, prevention and control of Covid – 19 in prison and other places of detention. Interim guidance. 15 March 2020.
- UNODC, WHO, UNAIDS and OHCHR join statement on COVID-19 in prisons and other closed settings. Geneva 13 May 2020.
- 11. Sanchez JA, Inter-American Commission on Human Rights Response to COVI-19. Human Rights Brief. 2020; 24(1): 2–4.
- 12. Amnesty International, Forgotten behind bars. Covid-19 and prisons. London 2021.
- 13. Penal Reform International, Coronavirus. Preventing harm and human rights violations in criminal justice systems. London, 14 July 2020.
- Burki T, Prisons are "in no way equipped" to deal with COVID-19.
 Lancet. 2020;395(10234):1411-1412. doi:10.1016/S0140-6736(20)30984-3
- Cloud DH, Ahalt C, Augustine D, et al. Medical isolation and solitary confinement. Balancing Health and Humanity in US Jails and Prisons during COVID-19. J Gen Intern Med. 2020;35(9):2538–2742.
- 16. Hawks L, Woolhandler S, Mc Cormick D, COVID-19 in Prison and Jails in the United States JAMA Intern Med. 2020;180(8): 1041–1042.
- Center for Disease Control and Prevention. COVID-19 Guidance for Correctional Facilities. https://www.cdc/community,2020.html (access: 19 August 2021).
- Williams BA, Ahalt C, Cloud D, et al. Correctional facilities in the shadow of Covid-19. Unique challenges and proposed solutions. Health Affairs, 16 March 2020; https://www.healthaffairs.org/do/10.1377/ hblog20200324.784502/full/ (access: 23 August 2021).
- Barsky BA, Reinhart E, Farmer P, et al. Vaccination plus Decarceration

 Stopping COVID-19 in Jails and Prisons. N Engl J Med. 2021;384(17):1583–1585.
- Barnet E, Ahalt C, Wiliams B. Prisons: Amplifiers of the COVID-19 Pandemic Hiding in Plain Sight. AJPH. 2020;110(7):964–966.
- 21. Akiyama MJ, Spaulding AC, Rich JD, Flattening the Curve for Incarcerated Populations-Covid-19 in Jails and Prisons. N Engl J Med. 2020;382(22):2075–2077.
- 22. Franco-Paredes C, Jankousky K, Schultz J, et al. COVID-19 in jails and prisons: A neglected infection in a marginalized population. PLoS Negl Trop Dis. 2020 Jun 22;14(6):e0008409. doi: 10.1371/journal.pntd.0008409
- 23. Macmadu A, Berk J, Kaplowitz E, et al. Covid-19 and mass incarceration: a call for urgent action. Lancet Public Health. 2020;5(11):e571–572.
- 24. Barnet E, Ahalt C, Williams B, Amplifiers of the Covid-19 pandemic Hiding in plain sight. AJPH. 2020;110(7):964–966.
- Sapers H, The case for prison depopulation: Prison health, public safety and the pandemic. J Community Health. 2020;5(2). doi: org/10.35502/ icswb.136
- Vest N, Johnson O, Nowotny K, et al. Prison Population Reductions and COVID-19: A Latent Profile Analysis Synthesizing Recent Evidence from the Texas State Prison System. J Urban Health. 2021; 98(1):53–58.
- 27. Hagan LM, Williams SP, Spaulding AC, et al. Testing for SARS-CoV-2 in 16 Prisons and Jails Six Jurisdictions, United States, April-May 2020. MMWR Morb Mortal Wkly Rep. 2020;69(33):1139–1143.
- Wang EA, Western B, Bacers EP, et al. Decarcerating Correctional Facilities during COVID-19. Advancing Health, Equity, and Safety. Washington, DC: National Academies Press; 2020.

- Watson C, Warmbrod K, Vahey RA, et al. COVID-19 the UN Criminal Justice System: Evidence for public Health Measures to Reduce Risk. Baltimore: Johns Hopkins University Center for Health Security; 2020.
- Novisky MA, Narvey CS, Semenza DC, Institutional Responses to the COVID-19 Pandemic in American Prisons. Victims Offenders. 2020; 15(7–8):1244–1261.
- 31. Nowotny KM, Seide K, Brinkley-Rubinstein L, Risk of COVID-19 infection among prison staff in the United States. BMC Public Health. 2021;21(1036). doi.org/10.1186/s12889-021-11077-0.
- Ricciardelli N, Bucerius S, Tetrault J, et al. Correctional services during and beyond COVID-19. Royal Society of Canada; 2021.
- 33. Rapisarda SS, Byrne J, Marmolejo L, North America and the Caribbean. Victims Offenders. 2020;15(7–8): 1234–43.
- 34. Nora Gomez Thorres, The Miami Voice, May 01, 2020.
- Marmolejo L, Barberi D, Bergman M, et al. Responding to COVID-19 in Latin America. The Cases of Argentina, Chile, Colombia and Mexico. Victims Offenders. 2020;15(7–8):1062–1085.
- 36. Payne JL, Hanley N, COVID-19 and Corrections in Australia: A Summary Review of the Available data and Literature. Victims Offenders. 2020;15(7–8):1367–1384.
- Stewart C, Tomossy GF, Lamont S, et al. COVID-19 and Australian Prisons: Human Rights, Risks, and Responses. J Bioethical Inq. 2020;17:663–667.
- Murray L, Kras KR. We must go hard and we must go early: How New Zealand Halted Coronavirus in the community and corrections. Victims Offenders. 2020;15(7–8):1385–1395.
- Seungeun Lee C. South Korea's Response regarding Mitigating the COVID-19 Crisis behind Bars. Victims Offenders. 2020;15(7–8):996– 1008.
- Goh KK, Lu ML, Jou S. Zero confirmed cases: The ways we curb COVID-19 in Taiwanese prisons. J Glob Health. 2020;10(2):020377. doi: 10.7189/jogh.10.020377
- Dmello JR, Ranjan S. Lock Unlock: The Impact of Covid-19 on Health Security in Pakistan and Indian Prisons. Victims Offenders. 2020;15(7– 8):970–987.
- 42. Le Marcis F. Epidemics and Covid-19 in African prisons: Toward an inclusive approach of health. In Sante Public. 2020;32(5–6):583–587.
- 43. Nweze VN, Anosike UG, Ogunwusi JF, et al. Prison health during the COVID-19 era in Africa. Public Health Pract (Oxf). 2021;2:100083. doi: 10.1016/j.puhip.2021.100083
- 44. Rapisarda SS, Byrne JM. The Impact of COVID-19 Outbreaks in the Prisons, Jails, and Community Correction Systems Throughout Europe. Victims Offenders. 2020;15(7–8):1105–1112.
- 45. Jacobson J, Heard C, Fair H. Understanding and reducing the use of imprisonment in ten countries. Institute of Criminal Policy Research. Birkbeck, University of London. June 2021.
- 46. Abei MF, Tiago MM. Prisons and prisoners in Europe in pandemic times: An evaluation of the short-term impact of the COVID-19 on prisons populations. University of Lausanne. http://www.antoniocasella.eu/nume/Aebi_Tiago_10nov20.pdf (access 23 August 2021).
- 47. Brennan PK, Response Taken to Mitigate COVID-19 in Prisons in England and Wales. Victims Offenders. 2020;15 (7–8):1215–1233.
- 48. Dunkel F. The Impact of Covid-19 on Prison and Penal Policy in Germany. Victims Offenders. 2020;15(7–8):1113–1123.
- 49. Gorgitano E, Martufi A. Belgium So far, so good? Health and prisons in Belgium during Covid-19 pandemic. Antigone. 2020;XV(1):17–22.
- Cingolani M, Caraceni L, Cannovo N. The COVID-19 Epidemic and the Prison System in Italy. J Correct Health Care. 2021;27(1):3–7.
- Ovchinnikov S. The Penitentiary System of Russia dewing the COVID-19 Pandemic. Victims Offenders. 2020;15(7–8):1148–1155.