SCCJR

The Scottish Centre for Crime & Justice Research

A Review of Interventions, Innovation, and the Impact of Covid-19 in the Scottish Prison System within a Comparative Analytical Framework

May 2023

Dr. Katrina Morrison; Dr. Kirstin Anderson; Emma Jardine; Dr. Matt Maycock; Prof. Richard Sparks

TABLE OF CONTENTS

EXECUTIVE SUMMARY

This is the final report from the project 'A Review of Interventions, Innovation, and the Impact of Covid-19 in the Scottish Prison System within a Comparative Analytical Framework' for the Scottish Government Coronavirus (Covid-19) Learning and Evaluation Oversight Group. This project was funded by the Scottish Government in 2022 with the aim of uncovering what occurred in prisons in Scotland and throughout the rest of the world during the Covid-19 pandemic. This project falls under the following three call themes:

Theme 2: international pandemic recovery strategies

Theme 3: learning from public service innovation and creativity

Theme 4: inequalities and human rights

The aims of the project are:
i) To review evidence from Scotland and beyond on experiences of Covid-19 in prisons and identify transferable learning to inform Scotland's Covid Recovery Strategy

ii) To focus on innovations in prison policy and practice that may prove valuable for the future of imprisonment in Scotland, as well as those that may have wider resonance across the public sector (e.g., those in other long-term confined spaces such as retirement complexes and care homes)

iii) To identify gaps in current evidence and develop plans for future comparative research on impacts of Covid-19 in prisons

This study was undertaken in accordance with the methodological framework outlined in the Joanna Briggs Institute's Manual for Evidence Synthesis[i,ii]. Academic and grey literature databases were searched between May and August 2022 with no new sources added after August 31st, 2022. It should be noted this report reflects the literature uncovered during searches using these criteria; it does not claim to uncover everything that happened in prisons across the world at this time.

The world-wide Covid-19 pandemic presented numerous challenges to penal policy and especially to people living and working in prisons. High prison populations, often limited healthcare, the proximity of many people living closely together in small spaces and the movement of people (staff and visitors) in and out of prisons which can also lead to the virus having the potential to spread to local communities[iii,iv] - all led to urgent challenges. Another key consideration when considering the impact of Covid-19 on people in custody is their 'increased prevalence of underlying health conditions'[v,vi] making them more vulnerable to Covid-19 than the general population[vii]. The health of people in prisons is a public health concern and six months before the first cases of Covid-19 were confirmed in China, it was argued that overcrowding in prisons and its subsequent health risks was a 'global time bomb.'[viii]

The rest of the Executive Summary will be formatted around the four research questions. This section summarises the research from the rest of the report, as such, the full references for what we discuss here can be found in the full report in Chapter 4.

How have prison systems in Scotland and internationally responded to the Covid-19 pandemic?

Prisons in Scotland responded to the pandemic by:

- implementing a limited early release of some (lower risk) prisoners
- implementing a restrictive lockdown in prisons leaving prisoners locked in their cells for up to 23 hours a day
- introducing technology to enable communication with families
- introducing testing and vaccines in line with community provision

Although the number of Covid-19 related deaths has not been published, we do know they were low[ix], and therefore that the mitigation strategies employed in

Scottish prisons were successful according to that metric. At the time of writing, there were no available data which met the standards required in this research, which showed the effects of the mitigation strategies on levels of infection or death in Scotland. Instead, the academic literature on Scotland highlighted the costs of this for prisoners, most specifically, the mental and physical isolation during the early stages of the pandemic for people in custody. This was due to their isolation in cells away from other people in custody; a cessation of visits from family members; and limited contact with all people, including prison and external staff, before alternatives such as the availability of mobile phones took effect. 'Progression' through sentence was made much more difficult as the pre-pandemic routes, such as the completion of particular courses, were not possible. The numbers of people on remand grew significantly due to trials not progressing, meaning that people not convicted of any crime spent months locked in their cells for up to 23 hours a day. There is no reported data for pre-pandemic time in cell for remand prisoners. However, in 2019-20 the median number of days spent on remand for those who moved into the sentenced population was 36 days; the figure for 2021-22 was 57 days[x].

The official inspectorate reports on Scottish prisons at this time initially welcomed the way in which Scottish prisons had responded to the pandemic, praising the 'proportionate response'; low levels of infections and deaths within prisons; and the good relationships between prisoners and staff. However, the Scottish Human Rights Commission (2020) has highlighted how restrictions in prisons could amount to inhuman and degrading treatment, in potential breach of Article 3 of the European Convention on Human Rights.

In this context, there remains much we still don't know about Covid-19 in Scottish prisons. For example, we don't know: the number of Covid-19 related deaths or vaccination rates in prisons in Scotland; infection rates; the time prisoners had out of cells in each prison at different periods of the pandemic (important due to the human rights implications); data on the use of segregation for medical, rather than disciplinary reasons; and exactly what 'hangover' conditions remain at the time of writing - in late 2022 early 2023 - even though officially restrictions have been lifted. Similarly, we don't yet know the long-term implications both of the Covid-19 pandemic and lockdown within prison settings, and the implications of the policy changes implemented within the context of the response to Covid-19. For example, the implications of prisoners being able to have video visits and having been given a mobile phone have not yet been independently analysed. Additionally, there is currently a relatively thin evidence base around the everyday experiences of people in custody and prison staff throughout the Covid-19 pandemic in Scotland and internationally, although this is beginning to shift with further studies regularly being published.

The international studies in our research indicate that testing was an effective approach to managing outbreaks in prison. However, the research demonstrated limits on the availability of, and ethical challenges for, testing in prison settings throughout the world. Vaccines were similarly very successful at controlling infections in prisons, and some research suggests that early provision and prioritisation helped to improve take-up.

Prisons globally responded along similar lines to Scotland. Steps widely taken included: limited early release of some prisoners; implementing prison lockdowns; introducing technology to enable visits; and testing and vaccines. Prison populations were reduced through 'front-end' (diverting people away from prison) and 'back-end' (releasing people already in prison) strategies using a wide range of interventions. There was evidence of both good, and less successful, throughcare from prison to the community during this time. However, within this wider picture, there were some important variations. For example, while many countries decreased their prison population, others in fact *increased* it over the same period (usually as the result of an increase in the pre-trial population). Overall, however, even though there were differences between the responses in prisons across the world, there was perhaps not as much variation as might be thought prior to reading the evidence, with diverse countries tending to follow similar policies as outlined above.

Similarly to the research discussed above, in relation to Scotland, a wide range of the international literature discussed the extent to which human rights, as

enshrined in the Nelson Mandela Rules, the ECHR, and the UNCRC, were at risk of not being upheld in prisons during the pandemic in respect of the length of time (hours per day, and duration overall) prisoners spent in isolation. The effects of isolation were profound in terms of adverse mental health and desires to self-harm. However, for a minority of prisoners for whom the prison environment had hitherto been marked by very difficult interactions, respite may have been found in prison lockdown. In some countries in the Global South, prison lockdown also meant a cessation of the provision of essential materials such as food, clothes, soap, and medicine, as these were previously provided by loved ones. Prison lockdowns meant the cessation, or much reduced availability, of activities in prison such as those required to progress through sentence, and those of therapeutic value. Many prison services sought to keep people in custody engaged with activities, during their long periods in their cells. However, these activities were often inadequate in offering stimulus or distraction.

A range of literature demonstrated the ways in which different groups experienced the pandemic in prisons across the world.

There was little evidence that healthcare or early release decisions were taken according to health vulnerabilities (e.g. Old age or serious underlying health conditions), as recommended by health authorities, with other influences such as that of public opinion in relation to the early release of prisoners being influential here.

Technology was rapidly developed in the provision of 'telehealth' to some success. Technology was also rolled out to enable communication between prisoners and their families and friends, although neither of these were by any means universal across all prison jurisdictions. Importantly, this is an area within which the which the SPS introduced an internationally leading policy, with all people in custody across Scotland receiving mobile phones in order to stay in touch with friends and family.

Sps introduced an internationally leading policy, with all people in custody across scotland receiving mobile phones in order to stay in touch with friends and family.

While research did confirm the value for people in custody of being able to communicate with families in these ways, this was by no means unproblematic with problems with access to, or the use of, technology reported, especially for young children.

The initial lockdowns in prison resulted in mass violence and disorder in some prisons across the world (Italy in particular), which was attributed to the speed of lockdowns; poor communication; fear and mistrust; and the unavailability of drugs (as the channels used previously to bring in illicit drugs e.g. via visitors, were disrupted). Although most forms of violence appear to have decreased during lockdown, such expressions of violence may have taken 'other forms', such as bullying or intimidation taking place in other locations, or verbal and psychological, rather than physical, violence.

How have prison authorities innovated in response to the Covid-19 pandemic?

We found some examples of innovation in relation to partnership working, for example, where the involvement of health authorities in prison decision-making was shown to be effective, including finding innovative ways of supporting people after release.

Similarly, the rapid roll-out of technology, including the provision of tele-medical services, in an environment often resistant to data connectivity, can be considered innovative. Some other areas of innovation include the involvement of prisoners in promoting public

health messages within prisons, and innovative ways of continuing the provision of activities for prisoners during lockdown.

However, it would be fair to say that examples of innovation were limited, despite the wide searches undertaken. This could be because there are good practices which were not captured in published research which met the JBI criteria; or, because prisons operated in such a way as to inhibit innovative responses at this time.

What are the medium and long-term effects of the pandemic on prison systems?

As in wider society, the medium and long-term impact of lockdown in prisons may not yet be fully realised. However, the available research suggests these may include the following.

Firstly, there are impacts that spring from the experiences of being in prison during the pandemic (e.g. the psychological burden on prisoners of surviving prison in this time, compounded by a simultaneous diminished access to services that may mitigate these burdens). Secondly, prisons internationally encountered problems in moving people through 'the system'. This meant, among other difficulties, the increase in those on remand because of backlogs in courts, and delays in accessing rehabilitation services due to backlogs, made worse by the pandemic. The effects of these blockages are likely to include worse mental and possibly physical health for people in custody; increased frustration of people in custody; the injustice of being in prison for long periods of time without having been found guilty of the crimes for which they are accused; or having to spend more time in prison for administrative reasons.

One of the most concerning hangovers of the pandemic is the ongoing presence of reduced regimes in prisons, despite restrictions no longer being in place in the community. The 2021/22 HMIPS report states that this is because prison staff and prisoners feel safer in smaller groups within the prison, even if that means more time locked in their cells [our italics]. More positively, among the medium and longer-term effects of the pandemic on prison systems is the introduction of communication technology to enable contact with loved ones, and the provision of health and other services.

How can the recovery be supported in post pandemic prisons across the world?

This research suggests that prison systems with better pre-existing conditions (those that were well managed and not overcrowded), were better able to weather the storms of the pandemic. The question then is as much about having a better and more resilient system *before* an emergency arises as it is about what measures to take when the crisis occurs.

It's not clear from the research what prison systems, governments and third sector organisations have put in place should a worldwide pandemic occur again, with the possible exception of improved technology to enable communication with loved ones and healthcare and support services.

However, it's not clear from the research what prison systems, governments and third sector organisations have put in place should a worldwide pandemic occur again, with the possible exception of improved technology to enable communication with loved ones and healthcare and support services.

Some evidence also highlights the importance of building trust within prisons. These studies highlighted the value of co-operation and a degree of shared decision-making between prisoners and staff, and the involvement of prisoners in the dissemination of important information. The latter seems to have been successful because of the greater trust that exists towards peers than prison authorities. This therefore suggests that involving prisoners themselves in different aspects of prison governance might yield better results for everyone in

prison. Trust between prisoners and officials was also found to be an important determinant in vaccine take-up and public health supporting behaviours in prisons.

There are also potential lessons about the ways in which public support for infection mitigation strategies in prisons can be increased and supported from research, highlighting factors such as how the message is communicated (using first-hand narratives works best) and who is perceived to be at risk from Covid-19 outbreaks in prisons (if the risks are framed around prison staff and the wider community, rather than people in prison, they are more likely to persuade the public).

Although research in this area was limited, studies suggested that having views of green spaces from prison cells, and means of promoting feelings of hope and gratitude, will alleviate prisoners' isolation.

The studies discussed here illustrate findings at a particular period during the pandemic. However, it is difficult to assess the longer-term *impacts* of particular policies from the available evidence base in this research (see further, 'limitations' in the methods chapter, below).

A final point in relation to recovery, is that the transparency of information helps assess policy success and those to avoid in the future. This involves both the collection, publication and sharing of official data, as well as a receptiveness to external researchers at times of emergency. This isn't so much a lesson for the past three years as it is for the present and future. Data and experiences are still held in prison systems across the world and capturing these will strengthen the evidence base further to allow for recovery to occur and better decisions to be taken in the next emergency.

INTRODUCTION

The response to the Covid-19 pandemic placed severe limitations on all aspects of prison life across the world, Scotland not excepted. However, how far such limitations mirrored or exceeded those experienced in the wider population, varied greatly. Such variations in ways of handling the impact of Covid-19 on prisons, prisoners and prison workers, and their implications for the future, demand careful consideration. This report outlines the responses taken to the Covid-19 pandemic in prisons worldwide, as outlined in academic and grey literature. In so doing, this report provides an overview of different practices at this challenging time, identifying transferable learning to inform Scotland's Covid Recovery Strategy. The central objective of this project is to identify and analyse the currently available evidence relating to the impact of Covid-19 in prison settings, with a focus on recovery.

METHODS

This project identified and analysed publicly available research and associated data from academic and grey literature, relating to the impacts of Covid-19 in prison settings. Our methodology identified studies at three levels: Scotland, UK and international prison jurisdictions. For the purposes of this report, the literature on Scotland is discussed first, followed by the literature on the rest of the world.

RESEARCH QUESTIONS

This project had four research questions:

1. How have prison systems in Scotland and internationally responded to the Covid-19 pandemic?

2. How have prison authorities innovated in response to the Covid-19 pandemic?

3. What are the medium and long-term effects of the pandemic on prisons systems?

4. How can the recovery be supported in post pandemic prisons across the world?

This study was undertaken in accordance with the methodological framework outlined in the Joanna Briggs Institute's Manual for Evidence Synthesis[xi,xii] , a widely utilised approach to evidence synthesis. Protocol development, search inclusion/exclusion criteria and the evidence review process, including undertaking sample cross-checks, was undertaken by all the project team.

STEPS IN THE METHODOLOGY

We designed and then followed a six-stage methodology based on the JBI Manual for Evidence Synthesis[xiii]: **This project entailed searches within the following twelve databases:**

- **ASSIA (Applied Social Sciences Index & Abstracts)**
- **CINAHL**
- **CORE**
- **EPPI-Centre**
- **Medline/PubMed**
- **NGO Search**
- **IGO Search**
- **PsycARTICLES**
- **Science Direct**
- **Scopus**
- **Web of Science**
- **WorldCat**

The project search terms were developed to find sources at the three search levels: 'Scotland' + 'prison' + 'covid'; 'UK' + 'prison' + 'covid'; 'Prison' + 'covid'. The search was conducted between May and August 2022 with no new sources added after August 31st, 2022. In addition to searching these databases, the research team each utilised their network of prison research contacts internationally. This provided further assurance that any recent or emerging international evidence is included in this report. As a result of these inquiries, nine additional sources were identified and included if they met the JBI criteria and provided new information. (One of these sources was published in October 2022.)

After all sources were identified, each was categorised into one of the 13 JBI critical appraisal types of source (https://jbi.global/critical-appraisal-tools). JBI's critical appraisal tools assist in assessing the trustworthiness, relevance and results of published papers. Therefore, this part of the methodology generated a score that was

assigned to each source aligned to the criteria within that specific appraisal tool. This was undertaken by two of the project team, and a 10% quality check by another, which confirmed 220 published papers for inclusion.

METHODOLOGICAL CHALLENGES AND STUDY LIMITATIONS

There were some challenges relating to the use of the JBI methodology during the project. Principally, these challenges relate to some of the JBI methodology critical appraisal tools. For example, we had to adapt the appraisal tool for systematic reviews to enable the appraisal of all types of review identified in our search. Also, with there being an inconsistent number of criteria across all types of review, an additional sub-stage of critical appraisal was required in terms of whether to include or exclude those sources which met exactly 50% of the criteria. Additionally, methodological challenges in this project relate to the lag in studies emerging meaning that much of the evidence analysed in this report relates to the earlier and middle stages of the pandemic. Further and ongoing analysis of the impacts of Covid-19 is prison settings is required to continue to contextualise the findings of this report.

At this stage, there is a lack of robust comparative analysis which focuses on the outcomes of measures adopted in prisons globally. The availability of such data would allow a greater comparative understanding of 'efficacy' and the longer-term consequences on measures adopted, to occur.

Finally, at this stage, there is a lack of robust comparative analysis which focuses on the outcomes of measures adopted in prisons globally. The availability of such data would allow a greater comparative understanding of 'efficacy' and the longer-term consequences on measures adopted, to occur.

FINDINGS

I) SCOTTISH PRISONS DURING THE PANDEMIC

In Scotland, the SPS adopted a range of measures in response to the Covid-19 lockdown, coming together in the SPS Covid-19 Routemap. This included modifying prison regimes, putting in place revised safe working practices, following advice to manage and control, as far as possible, the impact of the outbreak. The SPS established a National Coronavirus Response Group which was focussed on developing and overseeing any key policy changes – informed by advice from Health Protection Scotland.

There was limited research published about prisons in Scotland during the pandemic within our criteria. (Our search returned 11 results of which only 7 were critically assessed as of a suitable standard for inclusion.) The academic literature available about Scotland provides a unified and coherent picture of life in prisons at this time, although this was somewhat at odds with the early reports from HM Inspectorate of Prisons for Scotland (see below).

The academic literature highlights the depth of physical and mental isolation in the early months of the pandemic (Spring to early Autumn 2020), as prisoners adjusted to the loss of activities and contacts with families[xiv]. Further frustrations came for those prisoners whose release was predicated on 'progression' through sentence (the completion of 'programmes' - mandated rehabilitation courses and time spent in the 'top end' open estate).[1] These prisoners, and their families, reported that programmes all but ceased, and if they did begin again, it was with far smaller numbers. Fewer prisoners could a) access the open estate, and b) access 'day release' opportunities in the top end estate – both being part of the essential evidence required by the Parole Board that they are suitable for release.[xv] Similarly, due to the significant reduction in court activity during this time, the numbers of prisoners on remand increased due to the lengthening time before trials were held.[xvi] Prisoners reported increased depression, anxiety, and suicidal thoughts due to the loss of connection with families and communities.[xvii] There was also increased tension between prisoners and prison officers, and officers' own fears for their health further prevented meaningful communication with prisoners, a situation further exacerbated by the rotation of a limited number of staff around the prison estate. [xviii]

At the beginning of the pandemic, before mobile phones were introduced, prisoners reported a reluctance to use the communal phones on landings out of fear that the phones would spread infection due to a lack of sanitation equipment to clean them at the time.[xix] Although virtual visits and mobile phones were introduced in Summer 2020, participants reported difficulties with technologies, lack of access to technology[xx] and, overall, that these did not replace in person visits which were so central to their wellbeing [xxi] Despite these limitations, the introduction of communications technologies in prisons in Scotland and elsewhere, represented a major shift, one whose future implications remain to be fully assimilated. There was positive feedback from people in custody about the ability to attend courts virtually[xxii].

In a major Chief Scientist Office of Scotland study exploring the impact (Scotland in Lockdown) of the Covid-19 lockdown for marginalised groups, across a number of interviews prisoners reported absent and inconsistent hygiene measures across prisons, including: a lack of masks (until September 2020); prison staff not following guidelines; an inability to keep themselves or their cells clean; and inadequate information from SPS about the pandemic.[xxiii] As of 2021, all Scottish prison staff were provided with basic training on Covid-19 knowledge and medical grade masks are available to prisoners that have or are suspected of having Covid-19.[xxiv]

Scotland, unlike the rest of the UK, did not report its infection data to WHO, despite WHO requesting it

1. The 'top end' relates to parts of the prison system that house long term prisoners nearing the end of their sentence. The open estate relates to HMP Castle Huntly where conditions are relatively more 'open', again when prisoners are nearing the end of their sentence.

from all countries across the world. It is therefore not possible to see the Scottish data on Covid-19 infection rates in prisons, in a comparative perspective.[xxv]

The experiences of Scottish prisons during the pandemic were also documented in the various reports from His Majesty's Inspectorate of Prisons for Scotland (HMIPS) over the past two and a half years. The three Annual Reports of this period provide an overview. Published in November 2020, the 2019/20 Annual Report[xxvi] praised the proportionate response put in place to control the pandemic throughout prisons in Scotland, and the extent to which these were carried out in partnership with Public Health Scotland. The report praised the ongoing good relationships and cooperation between staff and people in custody, despite the restrictions. There had been no mass infection outbreaks in SPS prisons, and this was due to the good work of SPS at keeping people safe. Indeed, the low rates of infections in the early phases, and Covid-19 related deaths throughout, were praised.

Some of the concerns noted in these reports discuss problems which pre-existed the pandemic, but which were then thrown into sharp relief and / or further exacerbated by it.

For example, human rights were 'at risk of being breached' at HMP Barlinnie prior to the pandemic due to the condition of the building; the lack of adequate healthcare provision; and time spent locked in cells. This already bad situation was then further compounded when prison lockdown ensued.[xxvii] Similarly, the high numbers of prisoners on remand (who are untried or unsentenced) in Scottish prisons has long been a subject of concern, and the arrival of the pandemic increased these numbers significantly, due to a slowing down of court activity. Finally, the problem with 'progression' through sentences (which enable long-term and life sentenced prisoners to access the required courses and other opportunities to allow them suitable release by the Parole Board), has been long noted too.[xxviii]
Other problems were more pandemic specific, and these relate to the introduction of prison lockdown which, in repeated HMIPS reports, risked breaching Article 3 of the ECHR (the prohibition of torture or inhuman or degrading treatment or punishment). The 2020/21 Annual Report[xxix] reflected on the tension between different rights under the ECHR. It noted 'difficulty of ensuring that transmission of the virus was minimised (Article 2) against the definition of ill treatment (Article 3), and the need to respect family life (Article 8).' The (2021/22)[xxx] Annual Report was more critical. While prisons had succeeded at keeping infections low in the early phases of the pandemic, and deaths low throughout, this had come at the expense of Article 3 with many prisoners still locked in their cells for 22 or (more rarely) 23 hours a day, effectively constituting solitary confinement. The report continued that restricted regimes in prisons remained in place long after restrictions have been lifted in the community and the aspiration of an equivalence of support and treatment between prison and the community has therefore not been realised. The Chief Inspector notes 'there is a risk that locked-down prisons are seen as safer and better places, but that crucially misses the adverse impact on mental health and rehabilitation … [over the past year] there was a worrying acceptance that the extremely restricted regime contributed to a reduction in violence.' In that context, the report argues that there is 'no reason why prisons cannot return to regimes at least as open as they were before the pandemic.' In an interview, the Chief Inspector of Prisons for Scotland, clarified that 'prisoners and staff feel that the lockdown culture delivered a higher level of safety'[xxxi], and that this perspective may influence the continuation of locking people up for long periods of the day (up to 22 hours) [our emphasis]. We return to this in the conclusion of this report.

II) INFECTION CONTROL IN PRISONS GLOBALLY

The World Health Organization made recommendations on managing Covid-19 in prisons through developing guidelines and checklists for prison-level planning and outbreak management[xxxii].

Numerous pieces of research analysed for this report tracked the spread of infections within prisons, in comparison with the spread in the community, or to assess the effectiveness of different interventions.

Many prison systems took on the practice of 'cohorting', grouping people in the prison and restricting movement amongst those groups to restrict the spread of disease[xxxiii] . Modelling carried out in the first 6 months of the pandemic by Public Health England showed how introducing a range of public interventions in prisons (such as social distancing, isolating symptomatic cases and shielding vulnerable prisoners) would considerably reduce the total number of infections and also the probability that initial infections would result in a prison-wide outbreak.[xxxiv] These results were confirmed by an analysis of measures introduced in a large English prison in the first wave.[xxxv] Other UK modelling showed that requiring individuals to isolate prior to admission into the general prison population could detect up to 98% of infections over 10 days and 99% over 14 days.[xxxvi]

Several studies tracked infection rates within prisons and in comparison with the community. These revealed the close connection between rates in prisons and the community (see e.g., Poland,[xxxvii]) and that while rates in prisoners, prison staff and the community rose and fell at similar times, overall, rates were highest amongst imprisoned people (fieldwork conducted last 7 months of 2020 in the USA). This research also showed that higher security prisons had lower infection rates. [xxxviii] Further research showed that infection rates between prisoners and prison officers rose and fell at the same rate. [xxxix]

Later modelling from Stanford University showed that the resumption of mixing in prisons should wait until vaccine coverage was high, cell occupancy was no more than two, and baseline immunity from previous outbreaks was higher, before resuming pre-pandemic levels of activity within prisons.[xl] Less obvious results came from research in Brazil in a study including 778 prisoners undertaken in two phases in 2020. This study indicated that receiving visitors did not result in higher infection rates within that prison, in the conditions of visits with no contact, mask wearing and only asymptomatic visitors allowed.[xli]

PUBLIC HEALTH CAPACITY AND PARTNERSHIP WORKING

Several texts advocated for a public health response to supporting prisoners during the pandemic. [xlii] Such an approach might include better support from mental health staff,[xliii] and access to therapeutic activities in prisons[xliv] for example.

A systematic review found that to work effectively and efficiently, prisons and public health authorities must work in partnership to design collaborations that consider the specific characteristics of the prison environment, healthcare provision and security restrictions of individual establishments[xlv]. One such example comes from Australia where the state prison service worked with independent health providers in developing a rapid response to the pandemic[xlvi]. Similarly, early research highlighted how the Irish Prison Service partnered with two statutory health agencies to design and implement a prison-led contact tracing system in all prisons in Ireland, administered by prison officers and other prison staff.[xlvii] Other research discussed how medical professionals and police in France worked together to enable new ways of delivering medical care to people in custody during the pandemic[xlviii].

The public health implications of leaving prison during the pandemic were also a concern for some jurisdictions. Research from Canada highlighted how peer mentors can help provide vital support in linking people leaving custody with the necessary services after release and how the need for this increased during the pandemic due to the anxiety and uncertainty faced by prisoners upon release.[xlix] Other jurisdictions reported less successful measures, however, with reports highlighting how a lack of adequate 'throughcare' meant those released from prison early

were unable to receive the usual support at this stage leading to increased anxiety.[l,li]

Prison systems entered the pandemic with hugely varied capacity for treating and self-isolating infected people.

Thus, research from prisons across Italy confirmed the need for dedicated areas of self-isolation for infection control.[lii] Some prison systems in the Global South whose public health capacity was already very low prior to the pandemic, kept prisoners in very overcrowded conditions with little to no sanitisation or PPE[liii]. The basic infrastructure of prisons throughout Africa is so poor that it 'cannot meet the minimum requirements of humane detention, let alone [have] the capacity to deal with a health crisis'[liv], leaving prisoners in Malawi to tell researchers that survival during the pandemic was 'at the mercy of God'.[lv] Similar themes of an inability to provide basic sanitary provisions in the context of overcrowding and lack of public health capacity were reported in South American and African countries.[lvi,lvii] Other countries reported much greater success early in the pandemic, although the reliability of this data is not always clear. Thailand managed a wide distribution and use of PPE, mass release to ease overcrowding and provide space in prisons for self-isolation, and online courts, in April and May 2000.[lviii]

Public health capacities also refer to the receptiveness and ability of prison staff to take the necessary measures to control infection. Research from Switzerland found prison officers' willingness to follow mitigation strategies such as physical distancing, handwashing and mask wearing, was on par with those taken in the community and by healthcare workers, even though only 38% of prison staff observed social distancing measures.[lix]

TESTING

Testing emerges from the available research as integral to managing the outbreaks within prisons,[lx,lxi,lxii] and crucially, far more effective than reporting symptomatic cases at revealing who was infectious.[lxiii]

Early research from Italy showed how testing prison staff as a priority would be most successful at inhibiting the spread of infections within prisons, as they were the ones who brought Covid-19 into the prison environment [lxiv] and were also at the highest risk of catching Covid-19 in the prison. [lxv] However, mass testing tended to only be available in different countries if there had been an outbreak[lxvi], or for just a fraction of those inside prisons.[lxvii]

Research focusing on 120 prisons in England and Wales highlighted some ethical challenges around mass testing within prisons related to informed consent in a system lacking in 'thick trust' (trust which emerges between those who know each other well and / or who have a lot in common) and 'institutional' trust (the trust bestowed to an institution).[lxviii] An alternative approach might be to detect infections by testing wastewater, not individuals. This approach was effective at detecting infections before symptoms emerged and has been adopted in some prison systems in the USA. [lxix]

VACCINES

Vaccines are regarded as a key method of mitigating the health inequalities that exist within prisons. However, the availability and uptake of vaccines across the world only underlines the various structural disadvantages experienced by people in prison.

The case for vaccinating people in prison is clear. Modelling on the introduction of vaccines into the prison environment found that, compared with no vaccine, introducing vaccines for everyone who lived and worked in prisons would reduce deaths by 31%. However, importantly, if vaccines were delayed until the beginning of an outbreak, the benefits would be negligible. Similarly, further research found that vaccination was 'highly effective' at preventing infection in custodial settings.[lxx] Research from the USA found that States which prioritised vaccines in prisons had a higher vaccination uptake in prisons than States which did not, *even over time*.[lxxi]

Several pieces of large scale mixed-methods research sought to understand the reasons for vaccine take-up in prisons. Research from the USA found that health-related reasons (e.g., older age, pre-existing health conditions)

and demographic reasons (male, white and born outside the USA), were correlated with the decision to accept the vaccine. Despite being at higher risk in prison, overall vaccine uptake was the same as rates in the community at the time of writing (Summer 2021) [lxxii]. A contrasting picture was reported in research from Italy which found that vaccine uptake was significantly higher for women than men and was correlated with several other factors. These included whether or not those concerned had previously had the influenza vaccine, had received information from newspapers and the media, were involved in working activities in the prison, and had a High School or University degree. [lxxiii] Further research from the USA found that factors associated with low vaccine uptake were concerns around side-effects and efficacy, hypothetical concerns around the financial costs of vaccines and an annual booster, and mistrust of the medical system. Rates were also much lower in 'jails' (which hold pretrial or pre-sentenced populations) than in prisons (which hold sentenced prisoners). [lxxiv] Research from Italy found that knowledge about Covid-19 alone, was insufficient in persuading people whether or not to accept the vaccine. It found prisoners' knowledge about Covid-19, its risks and prevention strategies were 'adequate', but found that, despite this, willingness to receive the vaccine was not 'completely satisfactory' [lxxv]. Some reasons why this might be, are explored further, below.

Research with 31,000 'custody staff' in the USA found that the 39% of staff who were unvaccinated 'were younger and more likely to have had Covid-19; they were also more likely to work alongside other unvaccinated staff and live in communities with relatively low rates of vaccination.' On the latter point, the authors point out that unvaccinated staff living in communities with low vaccine uptake, means the likelihood of them passing infections into their work is even higher. [lxxvi]

TRUST, COMMUNICATION, VACCINATION, AND INFECTION CONTROL

As discussed above, the isolation of infected people is central to controlling infection in prisons. However, prisoners may hide symptoms due to 'stigma, lack of trust in medical confidentiality in prisons, and to avoid prolonged medical isolation' [lxxvii] .

Prisoners may hide symptoms due to 'stigma, lack of trust in medical confidentiality in prisons, and to avoid prolonged medical isolation' .

A range of research from North America showed how prisoners' low trust in prisons (and health services and Government) can exacerbate existing inequalities experienced by these populations. Thus, mistrust of Covid-19 vaccines was in response to several factors including 'the novelty of the disease, unusually rapid speed of vaccine development, politicisation of the vaccine, and some groups' mistrust in science and health experts'[lxxviii]. Similarly, the reasons for vaccine hesitancy amongst imprisoned people were '1) Risk perception: participants perceived that they were at lower risk of Covid-19 due to restricted visits and interactions; 2) Health care services in prison: participants reported feeling "punished" and stigmatized due to strict Covid-19 restrictions, and failed to identify personal benefits of vaccination due to the lack of incentives; 3) Universal distrust: participants expressed distrust in prison employees, including health care providers.'[lxxix] A more in-depth analysis found that younger Black populations were least likely to accept the vaccine in comparison with their older and other race and ethnic peers. Those who were hesitant about the vaccine cited the need for more information and efficacy and / or safety concerns, while those who refused the vaccine cited mistrust of healthcare, correctional, or Government personnel or institutions. The authors argue that mistrust amongst these populations is unsurprising given their historic mistreatment and mistrust of health and criminal justice institutions, but all the more worrying given their disproportionate representation in both of these systems due to various structural inequalities. [lxxx] Similarly, further research found that mistrust of the prison medical personnel was associated with lower vaccine uptake and that lower trust was found disproportionately in Black, Latina and Hispanic populations. The authors suggest the need for tailored

messaging to specific groups with low levels of uptake, offering the vaccine on repeated occasions, and broader action to (re)build trust with populations distrustful of prison and health authorities.[lxxxi]

Trust in the information provided to prisoners was key to mitigating the negative mental health effects of isolation, however, research suggests that in many places the information provided to prisoners was scant, inconsistent, and untrusted.

A lack of trust in the communication from the prison, was also cited as a factor underpinning the widespread violence and disorder which spread throughout prisons in the early months of the pandemic.[lxxxv]

In terms of which information sources were trusted the most, research showed that television was the most trusted source of information about Covid-19, followed by friends and family. However, amongst those who were vaccine hesitant, friends and family were the most trusted sources of information.[lxxxvi] Other research found that nearly 70% of its participants learned about Covid-19 from television compared to official announcements by the prison. [lxxxvii]

III) CONTROL OF PRISON POPULATION GLOBALLY AS MITIGATION

One of the key means of controlling infections in prison (particularly in the first year of the pandemic) was to reduce the prison population. This followed various official statements such as that from the Council of Europe's Commissioner for Human Rights urging all member states to 'make use of all available alternatives to detention whenever possible and without discrimination' and in this process to prioritise those who were medically most vulnerable. [lxxxviii]

Decarceration also occurred organically as a result of fewer arrests and reduced court activity during lockdowns throughout the pandemic[lxxxix]. There were many policies and practical measures put in place across a range of countries to reduce the number of people being sent to prison[xc].

There was significant variation in whether countries chose to decarcerate to control infection in prisons, and some of these variations occurred between countries which were otherwise similar. Not all US States decarcerated - Michigan implemented early release at the start of the pandemic[xci] , while others, such as California[xcii], did not, meaning that a wide range of other mitigation strategies were hindered [xciii] Similarly, Honduras released prisoners at the very start of the pandemic, while its neighbours El-Salvador and Guatemala, did not, implementing instead a range of 'extreme security measures' in their prisons.[xciv] Only three out of 26 prison systems in Latin America reduced their prison population over the pandemic.[xcv] Several countries in Latin America in fact *increased* their prison population over the pandemic, most notably Brazil and Mexico (the latter of which increased its population by 6.6% over 2020, driven primarily by the growth in pre-trial detention).[xcvi]

Globally, the story of the relationships between the pandemic and prison populations is therefore very variable and resistant to ready generalization. As we discuss further below, some countries where prison populations remained stable or increased were ones where there were already embedded trends, and where political investments had been made in robust punishment as a token of the state's commitment to public security, and this appears important in a context, such as in most Latin American countries, where prison populations have risen markedly over the last decade or more[xcvii]. Conversely, in situations where prison populations were already relatively controlled, and where practices to regulate them were already somewhat familiar, it may have been a shorter step to extend these, as aspects of the experiences reported from Germany, Spain and Canada (see below) may suggest. But this is not to say that there were no marked reverses in population trends, albeit sometimes short-lived ones.

Research from the WHO[xcviii] shows how occupancy rates have varied across European countries over the pandemic (until November 2021). This shows some, but by no means complete, correlation between occupancy rate and infection rates. However, WHO caution that these statistics do not cover the complete European picture and should therefore be treated with caution as the data available are likely to only come from the countries who were better able to respond (Scotland, for example, did not report its data).

OVERCROWDING

In the context of disease control during a pandemic, overcrowding was widely taken to be a more urgent matter than the scale of imprisonment as such. This is based on epidemiological research showing the correlation between overcrowding and infection rates from different countries[xcix,c].

In (more affluent) countries where single-cell occupancy was the norm, the pressure to 'decongest' the prisons was somewhat less pressing than in contexts where dormitory accommodation, or multiple occupancy of cells, were widespread. Thus, for example in Kenya, where the prison estate was chronically overcrowded, a reduction of approaching 25% in the prison population was achieved in the early months of the pandemic by a variety of means including the increased use of bail, and the development of community service orders[ci]. Similar trends can be noted in Latin American countries. [cii] Prison populations also reduced across Europe, though this was as much due to a drop in crime and a slow down or cessation in court activities, as it was to do with releasing people for infection control. [ciii]

How far states around the world were willing to go in 'decongesting' their prison systems in the interests of infection control, and how capable they proved of exercising the necessary measures to do so, are amongst the more telling differences between them. Those differences speak to the extent to which states were able to subdue some of the more contentious aspects of penal politics when epidemiological evidence and modelling seemed to require this; and how far they chose to treat prisoners as similarly eligible for vaccines and other protections as other citizens. For example, the political decision to release prisoners in Argentina was shortly overturned by their Supreme Court following public outcry. [civ]

'FRONT END' POPULATION CONTROL MEASURES

One systematic review highlighted measures taken by ten countries to reduce entry into the prison system, including diverting minor offences in the Netherlands, not returning people to custody for parole violations in the USA, and reducing remand in Australia.[cv]

> In several countries, the 'non-execution' of sentences (usually in the sense of doing something other than imprisoning people rather than remitting sentencing completely) was significantly extended, sometimes to entire categories of offences.

Thus, for example, in Germany, which has a long history of imprisonment for fine default, that practice largely ceased, at least for the duration of the pandemic, reportedly resulting in a fall in the prison population of the order of 10%, and a consequent reduction in pressure on space, especially among those on remand[cvi].

The ability of front-end reduction strategies to better control infection only works if the rest of the community and penal system has capacity to absorb those not sent to prison, which was not always the case. In Columbia, for example, the laudable effort to decarcerate by 20,000 was mitigated by severe overcrowding of more than 12,000 people in police stations instead.[cvii]

‘BACK-END’ POPULATION CONTROL MEASURES

Internationally, reductions in prison populations during the pandemic of the order of 10-20% were relatively widespread and occurred in quite diverse settings (the country with the largest decrease was Turkey which released 114,460 prisoners, almost 40% of its population)[cviii]. But these demanded both a degree of willingness to allow the scale of the prison population to answer to public health criteria rather than solely those of criminal justice, and the availability of one or more alternative means of population management, usually meaning the categorial removal of certain groups from the prison or the substitution of all or part of a sentence by another form of supervision, or both.

Many countries announced plans to carry out early release schemes to reduce overcrowding in prisons and jails; the exact criteria to qualify for early release varied across countries but most prisoners who were released under emergency measures were selected based on sentence type (seriousness of offence, or length of sentence).[cix] Notably, very few countries made decisions with reference to age or other health vulnerabilities.[cx] Even countries that were able to release some people from custody early found that, due to the delay in processing applications, many eligible people remained in custody as was the case, for example, in New York State and England and Wales.[cxii]

Several countries, including but by no means only, European near neighbours, went considerably further in these directions than any of the UK jurisdictions. For example, in Norway, the longstanding practice of ‘queuing’ (here meaning awaiting the availability of a place before admitting someone to prison) appears to have made it relatively easy to introduce further measures of population management, including ‘back-door’ ones such as early release under electronic monitoring[cxiii]. In Spain, whose prison population has in recent decades remained high among European comparators, there was a substantial increase of supervised release using electronic monitoring (or what is regarded there as the ‘extra-penitentiary modality’ of supervision under sentence), even though it required the reclassification of some sentences[cxiv]

Of course, conditions in the community may not be viewed much more favourably than in prison for some people, and in Chile, over 100 prisoners who were pardoned to reduce overcrowding declined this invitation because in prison they have secure shelter, food and work which provides some money they can continue to give to their families.[cxv]

MACRO CONTEXTS / PUBLIC OPINION

A body of literature sought to understand the societal factors which would support or diminish mitigation strategies within prisons, particularly those which might be regarded more politically or publicly contentious, such as early release, or (to a lesser extent) vaccine prioritisation. This research was all large-scale and involved surveying members of the public.

One Portuguese study found a correlation between right-leaning politics and reduced support for early release.[cxvi] Several different studies from the USA probed what factors would increase support for early release or other mitigation strategies. One study found that using the first-hand experiences of people in custody and healthcare workers during the pandemic – as told in five ‘narratives’, helped participants to not only believe in the vulnerability of those groups and support that they deserved, but also to increase their own health improving behaviours and support for others in their communities.[cxvii] Another study found that there is greater support for decarceration if the pandemic was framed as a risk to correctional staff (40% support) rather than prisoners (31%).[cxviii] Further research found that support for Covid mitigation strategies in prisons varied according to negative views of offenders and, to a lesser extent, mistrust in the justice setting, but that support increased when Covid in prisons was reframed as a risk to the wider public too[cxix].

Race was a defining variable in some studies. In two separate studies, support for decarceration was higher in Black and Hispanic than White participants.[cxx,cxxi]. Other research framed the pandemic in prisons as a question of structural disadvantage. Thus, although there was not widespread support for decarceration as a means of controlling Covid-19 in prisons (participants favouring the provision of PPE instead), the views

of those *most* against the early release of prisoners changed when they were presented with brief statements about the racial disparity in American prisons.[cxxii]

IV) HUMAN RIGHTS CONSIDERATIONS

Official guidance from bodies including the Council of Europe's Committee against the Prevention of Torture Committee (CPT), CoE's Commissioner for Human Rights, UNODC, WHO, UNAIDS and OHCHR, all emphasised the need for prisons to put human rights first, and that any restrictions needed to be evidence-based, non-discriminatory, necessary, proportionate, time-limited and transparent and 'non-arbitrary' [cxxiii,cxxiv,cxxv]

many pieces of research highlighted how the conditions in prisons during the pandemic infringed prisoners' human rights as enshrined in the UN's Standard Minimum Rules for the Treatment of Prisoners (the Nelson Mandela Rules), and the European Convention of Human Rights

However, many pieces of research highlighted how the conditions in prisons during the pandemic infringed prisoners' human rights as enshrined in the UN's *Standard Minimum Rules for the Treatment of Prisoners* (the Nelson Mandela Rules), and the European Convention of Human Rights.[cxxvi,cxxvii,cxxviii] most specifically prisoners' need for 2 hours of 'meaningful social contact' a day, and 1-hour fresh air.[cxxix] It is also unclear whether information was provided to prisoners and the transparency of decision-making.[cxxx] Similarly, time without access to family must only occur 'for a limited time period and as strictly required for the maintenance of security and order', according to the Mandela Rules. [cxxxi] Many children were also unable to maintain a relationship with their parent while the parent was in custody during the pandemic, in contradiction of the UNCRC and the ECHR.[cxxxii] Even if video or telephone technology allows some form of contact to occur, young children were not able to communicate this way. [cxxxiii] Covid-19 regimes also disrupted access to education and work programmes, limited social contact and access to legal advice[cxxxiv].

THE EFFECTS OF ISOLATION

Drug Availability

Due to the reduced traffic coming in and out of prisons (e.g., curtailment of visits, temporary leave etc.), the overall volume of drug availability in prisons in Europe seems to have decreased over the pandemic, though other measures such as the use of drones, or throwing drugs over the prison wall, mitigated these effects somewhat. However, drug use has persisted, and, together with an increase in mental health difficulties, has made the need for drug support in prisons, more acute than ever.[cxxxv] In England and Wales, the reduction in the availability of drugs made them more expensive, putting prisoners in even more debt. There was also increased concern for the safety of people taking drugs because of the greater time in isolation they now spent.[cxxxvi] The UNODC stated that medical support for people who use drugs in prison should be 'at least be commensurate' to those in the community. [cxxxvii]

The Psychological Effects of Isolation

A body of work examined the numerous (mostly negative) effects of Covid-19 regimes on people in custody. For example, research from Northern Ireland found that isolation had exacerbated poor mental health and feelings of self-harm.[cxxxviii] Qualitative research from England and Wales similarly reported rapidly deteriorating mental health and suicidal thoughts due to living 'in a prison,[cxxxix] Qualitative research from ten countries in all five continents reported widespread rapidly deteriorating mental health amongst prisoners held in isolation over the first 6 months of the pandemic. [cxl] A review of the first year of Covid-19 in a high security psychiatric prison in England found that self-harm (including suicide) increased in the first phase of the pandemic (early Spring – Summer 2020), but then returned to pre-Covid levels thereafter.[cxli]
The authors hypothesise this was to do with less patient doctor interaction and a reduction in the 'therapeutic

milieu'. Interestingly, this contradicts findings from prisons in the first three months of the pandemic in England which showed that self-harm *decreased* in this time, a trend the authors attributed to reduced often difficult interaction with peers, though minor acts of self-harm may have been missed or not recorded due to reduced interaction between prisoners and staff. [cxlii] The differences between the prison and the secure psychiatric environments may be due to the increased role of therapeutic activities for the latter, and the reduced importance of peer relationships.[cxliii] Research also showed an increase in suicides in Portuguese prisons in 2020 though more research is needed to understand if this is in response to the pandemic or a result of other reasons[cxliv]. Healthcare workers reported an increased need for excellent interpersonal skills to work with prisoners' increased distress and poor mental health.[cxlv]

The overwhelming majority of research included in this review reported the negative effects of this isolation, in terms particularly on mental health and self-harm. However, rarer findings reported that, for a minority of prisoners who may find the social life of the prison difficult (e.g., if they were vulnerable and had been bullied), the isolation had some benefits because it was easier to manage than pre-pandemic prison life.[cxlvi. cxlvii]. We return to this theme in the conclusion.

The Material Effects of Isolation

Most of the research in this area focused on the psychological impact of isolation and loss of visits from loved ones, however, some research also highlighted the real material impact of these experiences. Before the pandemic, people held in custody in more impoverished / developing countries relied on families for essentials such as food, medicine, and toiletries. Thus, in Mexico, when the pandemic started and many visits were curtailed, these essentials were harder to come by, and other forms of revenue for prisoners (e.g. giving things made in prison to their family to sell in the community) also ceased, resulting in significant hardship in terms of bare subsistence and basic sanitation for those in prison during this time. [cxlviii] Similarly, research from ten countries across five continents found that the suspension of visits across the world meant prisoners were left without adequate food, sanitary products, clothes, money for phones and even water, because in 'normal' times, these had been provided by families and other visitors,[cxlix] although in Chile, family members were able to deliver these items to the prison to be passed on to those inside.[cl]

Prison-Based Activities

Access to activities such as work, education and therapy was severely restricted in prisons across the world. A review of ten countries found these to have almost all stopped entirely in the first six months of the pandemic as prisoners were locked in cells for up to 23 hours a day.[cli,clii] Across the globe, outside agencies, often from the voluntary sector, had to redesign their education, skills and personal development services so that people in custody had activities to undertake in their cells during isolation. In some countries, however, this transition was not made possible, e.g., prisoners in Kenya were not able to continue with assessments as universities had moved their assessments online and there is no internet access for prisoners in Kenya. In some U.S. states completing certain education programmes can take time off one's sentence; this option was removed during the pandemic.[cliii]

The UNODC stated that access to healthcare for Covid-19 and other health conditions including mental health, must continue.[cliv] However, research highlights the disruption in drug related interventions for prison health services caused by changes in drug markets, contact reduction and the ceasing of programmes run by outside agencies in Belgium, France, Italy and Spain[clv] . A lack of access to rehabilitation activities and progress through the healthcare system may have been one reason for the increase in self-harm amongst those in one high-security psychiatric hospital in England.[clvi]

Legal Representation

Finally, a review of prisons under Covid-19 from ten countries across the world found varying degrees of access to legal representation during the first six months of the pandemic. While some countries managed to move these discussions either online, onto the phone or via letters, other countries either ceased all communication with lawyers entirely, or made prisoners pay for this themselves by using their own phone credit which was often inadequate.[clvii] In

this research, two countries – Hungary and New South Wales, Australia – permitted lawyers to continue visiting people in custody with health measures in place, despite national lockdowns. [clviii]

TECHNOLOGY AND ALLEVIATING ISOLATION

Large scale research carried out in three prisons in China, argued that 'visibility of nature through windows' (in terms of frequency, not durability) during the pandemic, had positive effects on both 'life satisfaction' and wellbeing, the latter due to increased distress tolerance and thus reduced loneliness and mental health problems.

The authors suggested that designing prisons to increase green space visibility through windows would help to alleviate poor mental health.[clix] Findings from Italy at the start of the pandemic highlighted the importance of 'hope' (that the pandemic would soon end) and 'gratitude' (for those staff working with them), for helping to alleviate some of the burdens of prison lockdown[clx] (see also[clxi] for the importance of 'hope' in this context).

Some prison systems sought to alleviate some of the difficulties of isolation through the provision of leaflets on the provision of mental health support, or puzzles or colouring.[clxii] However, participants often found these to be wholly inadequate for the level of hardship they endured during this time.[clxiii] Other research reported on creative approaches to working with prisoners – usually this was an initiative which was already underway and which then adapted during prison lockdown. For example, reflections on an arts therapy programme delivered through workbooks, revealed the mostly very beneficial effects this had with prisoners during an otherwise isolating time.[clxiv]

WHO advised that essential medical services, including mental health services, must continue throughout the pandemic, even though they may have to adapt their means of delivery,[clxv] which were discussed in several pieces of research. In the U.S., use of forensic mental telehealth assessment (FMTA) increased during the pandemic to conduct court sanctioned psychiatric and psychological evaluations and the use of FMTA is expected to remain in use[clxvi]. In England and Wales, new legislation allowed telemedicine services to take place in prisons through the use of tablets; now all prisons in England have this capacity for telemedicine services[clxvii]. After reducing their incarcerate population by 43%, an American jail met treatment demand for severe opioid disorder amongst its population through telemedicine processes[clxviii]. Researchers suggest that this process should continue beyond the pandemic, especially on weekends when a prescriber may not be on site[clxix].

Technology was also rapidly expanded to enable communication and (virtual) visits in prisons. However, even though this was enabled in many places across the world to compensate for the cessation of physical visits,[clxx] this was not universal. Some countries (e.g. Mexico[clxxi]) did not implement any alternatives to visits leaving prisoners isolated and their mental health deteriorating considerably during this time.[clxxii] However, their neighbouring country, Chile, did introduce mobiles and 'other technology' to allow for video-calls.[clxxiii] Research from Northern Ireland confirmed the benefits of contact with families for prisoners' mental health during periods of isolation in prison,[clxxiv] however, other research reported difficulty with this technology meaning that it did not work (e.g. if families' only internet connection was their mobile phone over which calls could not work), and a lack of privacy afforded in prison during video calls. [clxxv]

While most research highlighted the loss of physical touch enabled by in-person visits, video-technology did also change what, and who, could visit. For example, it was now possible for children to show their parent in prison the domestic space at home.[clxxvi] The introduction of videocall technology may have been especially beneficial for foreign national prisoners who were, for the first time during their sentence, able to not only hear their families during telephone calls but who were able to see their faces on screens as well. [clxxvii] On the other hand, research from a high-security psychiatric hospital in England argued that one reason for the increase in self-harm during the

initial stages of the pandemic may have been due to the introduction of video-technology for visits which enabled contact to be made with family members who had not visited in person for some time, and with whom the relationship was complicated. [clxxviii] Although there were some benefits to video-call technology for young children and their carers (e.g. reduced travel costs and not having to enter the prison environment), the overall effect of the pandemic on children's relationship with their parents in this time was negative due to the lack of physical contact and unsuitability of this technology for young children. They concluded that any introduction of video technology for visits should be optional and run alongside physical visits.[clxxix]

Many jurisdictions reported the shift towards telemedical support, though this was often ad-hoc, patchy, and reliant on faltering technology.[clxxx] Chaplains in Irish prisons provided 'tele-chaplaincy' to those of all faith, including to those in isolation.[clxxxi]

VIOLENCE AND DISORDER, GANGS AND ORGANISED CRIME

A review of 10 countries across five continents found that the widespread violence and disruption which marked many prison systems was caused by a combination of the abrupt nature of prison lock-downs, poor communication from the prison, fear of the unknown, and the sudden unavailability of drugs (and cigarettes in South Africa).[clxxxii] Research suggests that riots broke out in more than 22 prisons across Italy in March 2020 due to the psychological pain and fear of lockdown[clxxxiii]. The riots involved around 6,000 prisoners across the estate; extensive damage was caused to prison buildings and dozens of people, including officers, were injured[clxxxiv].

Research mentioned above (in 'the Psychological Effects of Isolation') argued that for a minority of prisoners, prison lockdowns were viewed positively because they alleviated some of the interpersonal difficulties of living with other prisoners. However, other research argued that problematic interactions continued during lockdown. For example, that bullying (in England and Wales) did not cease during lockdown, but it merely 'took on other forms'[clxxxv], for example by taking place in other locations in smaller groups, or at simply shouting at or through locked doors, from windows or landings. Although this intimidation was perhaps less frequent, it was sometimes more extreme.[clxxxvi]

Some literature highlights the exacerbating effect of the pandemic upon prisons already weakened by corruption and organised crime. Prisons in Honduras, El Salvador, and Guatemala, for example, report organised crime stepping in to address the demand for PPE.[clxxxvii] This same research described how the El-Salvadorian Government used the pandemic as an opportunity to implement 'extreme' security measures to control gang violence in its prisons.[clxxxviii]

VULNERABILITIES AND SPECIFIC GROUPS IN PRISON

Some research showed how health vulnerabilities were not factored into decision-making on the provision of vaccines, despite medical guidance (see e.g., research from England and Wales[clxxxix], the USA[cxc], and Australia [cxci]).

Some literature argues that, even though Black, Asian and minority ethnic groups' mortality was comparatively low during Covid throughout the British prison estate, this is more likely to be due to their (younger) age profile in prison. These groups may also have experienced prison lockdown more negatively than their White peers, due to the greater likelihood of undiagnosed mental health needs and poorer existing relationships with staff.[cxcii] Irish Travelling and Roma Communities have also been significantly harmed by the pandemic in prisons due to a number of factors including the removal of culturally sensitive support.[cxciii] Similar concerns exist for foreign national prisoners in prisons across the UK and Ireland, where their experiences may have been adversely affected by lack of dissemination of important information in their language, and where concerns for their families overseas were heightened, particularly if their families lived in countries where Covid-19 mortality was high. [cxciv] In research from England and Wales, transgender and non-binary prisoners' negative experiences during the pandemic were compounded =due to increased difficulty in accessing the gender-supportive services usually available, and increased stressors during their incarceration such as having to share showers (with others of the same sex, not gender).[cxcv]

Research from Mexico argued that women in prisons experienced a more repressive lockdown than their male counterparts, and this is because there are fewer of them and they are therefore easier to control,

Research from Mexico argued that women in prisons experienced a more repressive lockdown than their male counterparts, and this is because there are fewer of them and they are therefore easier to control, and secondly because women are socialized to be more compliant and are thus less likely to resist than their male counterparts.[cxcvi] Searches yielded little published work on children in prison during Covid-19. One piece of research highlighted the 614 children (under 18) in the juvenile estate in England and Wales in July 2021, many of whom were locked in their cells for 23 hours per day. [cxcvii] Another report described how children in England and Wales felt their opportunities to learn social skills required to survive in the adult estate, were not provided in their Yong Offenders Institution due to lockdown.[cxcviii]

SHARED GOVERNANCE AND PARTICIPATION

In a report on the future governance of prisons post Covid-19 by Penal Reform International (PRI), the first of 8 principles discussed was that of 'participation'. This report argued that the practice of involving prisoners in prison governance works because prisoners have 'sound and practical ideas to improve life in prison', and that '[p]risoner involvement can enhance prison regimes by reducing the dependency of dependent prisoners, the alienation of alienated ones, and the ambivalence to authority of most others.'[cxcix]

Hopes have been expressed, and indeed some claims made, for example in the paper by Jain, that has received some attention,[cc] that the pandemic might signal progressive change in prison regimes and the management of prison populations. However, support in the published research for these perspectives, which met the JBI criteria, is limited and patchy. There are examples of innovation, and these by no means only come from the more privileged contexts of liberal-democratic countries in the Global North.

The recognition that trust and participation could be important for how people responded to the challenges of the pandemic, including in respect of vaccine take-up, emerged in a range of settings.

For example, in the Philippines, more successful handling of pandemic challenges occurred in contexts where staff and prisoners improvised measures of shared governance. According to the researchers, staff, prisoners and visitors cooperated to share information and improvise 'makeshift quarantine areas', amongst other measures.[cci] The PRI report, above, mentioned how successful some existing peer support and education programmes which existed prior to the pandemic then became once the pandemic struck. Notable examples were prisoners' committees in Italy who helped to disseminate information leading to important changes, and a video about the vaccine produced by prisoners in Ireland, leading to a high vaccine uptake due to the trust placed in fellow inmates as opposed to the prison system.[ccii]

CONCLUSION AND IMPLICATIONS

This report has discussed the literature found in our searches, as discussed in the 'Methods' section, above. The findings were organised according to the themes as they emerged in analysis. For a summary of the key findings and how they relate to the research questions, please see the Executive Summary.

Looking to the future, two reports suggest principles and practices for how prison systems might improve as they seek to rebuild and recover from the pandemic. Firstly, the World Health Organization[cciii] highlights six areas of good practice for how prisons should respond in the event of another pandemic. **They are:**

- ***human rights and alternatives to imprisonment.*** **The continuation of inspections, mitigation measures for any restrictions imposed, the use of community penalties rather than imprisonment, and early release in the event of another pandemic.**

- ***preparedness, contingency planning and level of risk.*** **Risk assessments should be carried out in advance, along with contingency planning, and these should be communicated to all relevant parties.**

- ***training and education.*** **Prison staff (including those responsible for cleaning) should be trained in infection control, including PPE, and the spread of Covid.**

- ***risk communication.*** **Efforts should be made to ensure communication of risk is not hampered by language and cultural barriers, and that this communication includes preventative measures as well as disease information.**

- ***preventative measures.*** **Thorough risk assessments at every entrance and exit of the prison should be carried out, space should be made available for quarantining and for isolating vulnerable prisoners, face masks should be made available to all.**

- ***case management.*** **An infection surveillance system should be established which connects to the national system. Protocols should be developed for transferring very ill patients when required, and so that isolation is not broken at release.**

Penal Reform[cciv] International suggests eight principles around which prison rebuilding should occur in their report 'Good governance for prisons: Putting good governance into action during and beyond the COVID-19 pandemic.' **They are:**

- ***participation.*** **Participation is the 'cornerstone' of good governance, and this remains true in prisons too. Participation in prison both makes the prison experience and environment a more positive one, but it also helps to build the skills required for successful community reintegration after release. There are many forms and levels of participation, and these should include all groups in prison.**

- ***rule of law.*** **While measures taken to control infection have 'undoubtedly' violated the rights of people in prison, these measures should be 'balanced' against the legitimate aim of protecting health and life. However, this balance should include 'crucially, the absolute prohibition on torture and other-ill treatment.' Any changes implemented must be time-bound, subject to regular review, and limited to focusing on the crisis itself.**

- ***transparency.*** **Information about prison policy should be available and accessible to everyone, including to people in custody who should have 'timely' information about any changes and how this affects their rights, as well as information about community developments. New and innovative ways should be made to communicate more effectively with people in prison.**

- ***responsiveness*. Develop contingency and emergency preparedness for times of emergencies. These laws and policies must adhere to human rights standards and be flexible enough to allow for local variation, if required. Staff must be trained to best respond, quickly, at times of crisis.**

- ***consensus orientated.* Develop national and international communication mechanisms to ensure a consensus orientated approach is possible. Learn from international good practice in this area. Prison and community health agencies should work together more closely and consideration given to transfer prison health provision to 'health ministries'.**

- ***equity and inclusiveness.* Maintain good record keeping and data, conduct analysis into the effects of polices, with a particular focus on the effects of these on inequalities and on certain groups in prison such as minorities and those with vulnerabilities.**

- ***effectiveness and efficiency.* Ensure 'organisational agility' so that rapid responses can occur at times of emergency. Justice systems must also be adequately resourced for the same reason. Partnerships with community and civil organisations should be prioritised.**

- ***accountability.* Inspections should continue during times of crisis, and changes in response to inspection and monitoring should be enabled. Ensure people in prison can make requests and complaints, even during emergencies. Learn from experiences for longer-term and strategic reform.**

It is also worth highlighting the paucity of research focusing on the mental and physical impact of Covid-19 on staff (with a few notable exceptions[ccv,ccvi]). Any attempt to rebuild prisons after the pandemic must have the support and development of its staff at its centre – it is they who create the culture within prisons and who can shape and sustain whatever policy, services, or infrastructure, is introduced.

LESSONS FROM THE COVID-19 RESPONSE IN PRISON

Future research, and preparation for future episodes of infectious disease, requires attention to ways in which public and political views of prisons and prisoners may serve to limit the effectiveness of public health measures

Settings for Closed Institutions (such as Care Homes) Future research, and preparation for future episodes of infectious disease, requires attention to ways in which public and political views of prisons and prisoners may serve to limit the effectiveness of public health measures, especially where prisoners are regarded as 'less eligible' than other citizens for intervention, resources or wider forms of consideration that concern welfare or personal autonomy.

Effective health promotion and disease control in prisons, perhaps especially with respect to variations in vaccine take-up, seems to depend upon enhancing trust, ensuring the free flow of information, involving participants, and developing provision driven by need rather than status. In these respects, people who live and work in prisons barely differ from anyone else, but the institutional setting makes prisons sensitive and sometimes contentious and volatile places in which to practice infection control.

Gaps in the currently available evidence base

- **There is limited independent analysis of the impacts of specific policy responses and their effects within prison settings (e.g., the introduction of mobile phones). This is especially true for medium and longer-term impacts which are only emerging now.**

- **The experiences of prison staff and prison managers are relatively under analysed in the available evidence.**
- **The experiences of certain demographics within the prison estate of the pandemic have not been fully analysed. For example, we currently know relatively little about the experiences of young people within prison settings during the pandemic.**
- The available data does not lend itself well to robust and precise international comparison.

Recommendations for future study and research

- **Further analysis of the impacts of Covid-19 within prison settings is required in order to fully learn from what worked and what didn't to shape future pandemic preparedness.**
- **Given the variability in the response to Covid-19 in prison settings internationally, we recommend future comparative analysis on the relative impacts of the response in certain countries compared to others.**
- **We encourage prison administrators find ways to enable research even at times of restricted access to prisons to enable a rich and full evidence base to emerge.**
- **Ongoing analysis is required to assess the medium to long-term impacts of Covid-19 within prison settings. For example, we don't yet know the implications of the Covid-19 response to extended periods of isolation for rehabilitation rates.**

REFERENCES

[i] J.B. Institute, (2015). Joanna Briggs Institute reviewers' manual: 2015 edition/supplement. *Adelaide: The Joanna Briggs Institute*

[ii] Peters, M. D. J., Marnie, C., Tricco, A. C., Pollock, D., Munn, Z., Alexander, L., McInerney, P., Godfrey, C. M., & Khalil, H. (2020). Updated methodological guidance for the conduct of scoping reviews. *JBI Evid Synth*, 18(10), 2119-2126. https://doi.org/10.11124/jbies-20-00167

[iii] Beaudry, G. Zhong, S., Whiting, D., Javid, B., Frater, J. and Faze, S., 2020. Managing outbreaks of highly contagious diseases in prisons: a systematic review

[iv] Fair, J. and Jacobson, J. (2021) Keeping COVID out of prisons: Approaches in ten countries

[v] Beaudry, G. Zhong, S., Whiting, D., Javid, B., Frater, J. and Faze, S., 2020. Managing outbreaks of highly contagious diseases in prisons: a systematic review

[vi] Johnson, L., Gutridge, K., Parkes, J., Roy, A and Plugge, E. (2021) Scoping review of mental health in prisons through the COVID-19 pandemic. BMJ Open.

[vii] Pearce, L., Vaisey, A., Keen, C., Calais-Ferreira, L., Foulds, J., Young, J., Southalan, L., Borschmann, R., Gray, R., Stürup-Toft, S. and Kinner, S. (2021) A rapid review of early guidance to prevent and control COVID-19 in custodial settings. Health and Justice 9:27

[viii] Heard, C. (2020) Commentary: Assessing the Global Impact of the Covid-19 Pandemic on Prison Populations, Victims & Offenders, 15:7-8, 848-861, DOI: 10.1080/15564886.2020.1825583

[ix] HMIPS (2021) Annual Report

x Scottish Government (2022) Scottish Prison Population Statistics 2021-22. [Online] https://www.gov.scot/publications/scottish-prison-population-statistics-2021-22/documents/ Accessed on: 2 March 2023.

[xi] J.B. Institute, (2015). Joanna Briggs Institute reviewers' manual: 2015 edition/supplement. *Adelaide: The Joanna Briggs Institute*

[xii] Peters, M. D. J., Marnie, C., Tricco, A. C., Pollock, D., Munn, Z., Alexander, L., McInerney, P., Godfrey, C. M., & Khalil, H. (2020). Updated methodological guidance for the conduct of scoping reviews. *JBI Evid Synth*, 18(10), 2119-2126. https://doi.org/10.11124/jbies-20-00167

[xiii] Munn, Z., Barker, T. H., Moola, S., Tufanaru, C., Stern, C., McArthur, A., Stephenson, M., & Aromataris, E. (2020). Methodological quality of case series studies: an introduction to the JBI critical appraisal tool. *JBI evidence synthesis*, 18(10), 2127-2133.

[xiv] Armstrong, S., Pickering, L., Barkas, B., Brooks, O., Bunn, C., Burman, M., Burns, N., Casey, R., Cornish, N., Davis, A. and Gilmour, M., 2020. Left out and locked down: impacts of COVID-19 for marginalised groups in Scotland; Maycock, M. and Dickson, G., 2021. Analysing the views of people in custody about the management of the COVID-19 pandemic in the Scottish Prison Estate. *International Journal of Prisoner Health*.

[xv] Armstrong, S., Pickering, L., Barkas, B., Brooks, O., Bunn, C., Burman, M., Burns, N., Casey, R., Cornish, N., Davis, A. and Gilmour, M., 2020. Left out and locked down: impacts of COVID-19 for marginalised groups in Scotland; Maycock, M. and Dickson, G., 2021. Analysing the views of people in custody about the management of the COVID-19 pandemic in the Scottish Prison Estate. *International Journal of Prisoner Health*.

[xvi] Armstrong, S., Pickering, L., Barkas, B., Brooks, O., Bunn, C., Burman, M., Burns, N., Casey, R., Cornish, N., Davis, A. and Gilmour, M., 2020. Left out and locked down: impacts of COVID-19 for marginalised groups in Scotland.

[xvii] Maycock, M. and Dickson, G., 2021. Analysing the views of people in custody about the management of the COVID-19 pandemic in the Scottish Prison Estate. *International Journal of Prisoner Health*.

[xviii] Maycock, M. and Dickson, G., 2021. Analysing the views of people in custody about the management of the COVID-19 pandemic in the Scottish Prison Estate. *International Journal of Prisoner Health*.

[xix] Maycock, M. and Dickson, G., 2021. Analysing the views of people in custody about the management of the COVID-19 pandemic in the Scottish Prison Estate. *International Journal of Prisoner Health*.

[xx] Sinclair-Green, W. and Maycock, M. (2022) Reflections on the Scottish Experience of recovering after the pandemic. [Online] https://www.crimeandjustice.org.uk/sites/crimeandjustice.org.uk/files/PSJ%20259%2C%20Scottish%20experiences.pdf [Accessed 20 December 2022).

[xxi] Armstrong, S., Pickering, L., Barkas, B., Brooks, O., Bunn, C., Burman, M., Burns, N., Casey, R., Cornish, N., Davis, A. and Gilmour, M., 2020. Left out and locked down: impacts of COVID-19 for marginalised groups in Scotland.

[xxii] Sinclair-Green, W. and Maycock, M. (2022) Reflections on the Scottish Experience of recovering after the pandemic. [Online] https://www.crimeandjustice.org.uk/sites/crimeandjustice.org.uk/files/PSJ%20259%2C%20Scottish%20experiences.pdf [Accessed 20 December 2022).

[xxiii] Armstrong, S., Pickering, L., Barkas, B., Brooks, O., Bunn, C., Burman, M., Burns, N., Casey, R., Cornish, N., Davis, A. and Gilmour, M., 2020. Left out and locked down: impacts of COVID-19 for marginalised groups in Scotland.

[xxiv] MacDonald, M. and Kane, D. (2021), "Guest editorial", *International Journal of Prisoner Health*, Vol. 17 No. 3, pp. 189-193. https://doi.org/10.1108/IJPH-09-2021-104

[xxv] WHO (2022) 'Health in Prisons – COVID-19 Minimum Dataset: Summary of data reported from May 2020 to October 2021' https://apps.who.int/iris/bitstream/handle/10665/351496/WHO-EURO-2022-4752-44515-63010-eng.pdf?sequence=1&isAllowed=y

[xxvi] HMIPS (2020) Annual Report 2019/20. https://www.prisonsinspectoratescotland.gov.uk/sites/default/files/publication_files/HM%20Chief%20Inspectors%20Annual%20Report%202019-20.pdf

[xxvii] HMIPS (2020) Annual Report 2019/20. https://www.prisonsinspectoratescotland.gov.uk/sites/default/files/publication_files/HM%20Chief%20Inspectors%20Annual%20Report%202019-20.pdf

[xxviii] HMIPS (2021) Annual Report 2020/21. https://www.prisonsinspectoratescotland.gov.uk/sites/default/files/publication_files/HM%20Chief%20Inspectors%20Annual%20Report%202021-22%20r.pdf

[xxix] HMIPS (2021) Annual Report 2020/21. https://www.prisonsinspectoratescotland.gov.uk/sites/default/files/publication_files/HM%20Chief%20Inspectors%20Annual%20Report%202021-22%20r.pdf

[xxx] HMIPS (2022) Annual Report 2021/22. https://www.prisonsinspectoratescotland.gov.uk/sites/default/files/publication_files/HMIPS%20-%20HM%20Chief%20Inspectors%20Annual%20Report%20-%202021-22%20-%20Final%20Version_0.pdf

[xxxi] Sinclair-Green, W. and Maycock, M. (2022) Reflections on the Scottish Experience of recovering after the pandemic. [Online] https://www.crimeandjustice.org.uk/sites/crimeandjustice.org.uk/files/PSJ%20259%2C%20Scottish%20experiences.pdf [Accessed 20 December 2022).

[xxxii] Pearce, L., Vaisey, A., Keen, C., Calais-Ferreira, L., Foulds, J., Young, J., Southalan, L., Borschmann, R., Gray, R., Stürup-Toft, S. and Kinner, S. (2021) A rapid review of early guidance to prevent and control COVID-19 in custodial settings. Health and Justice 9:27

[xxxiii] Pearce, L., Vaisey, A., Keen, C., Calais-Ferreira, L., Foulds, J., Young, J., Southalan, L., Borschmann, R., Gray, R., Stürup-Toft, S. and Kinner, S. (2021) A rapid review of early guidance to prevent and control COVID-19 in custodial settings. Health and Justice 9:27

[xxxvi] Bays, D., Williams, H., Pellis, L., Curran-Sebastian, J., O'Mara, O., Team, P.J.M. and Finnie, T., 2021. Insights gained from early modelling of COVID-19 to inform the management of outbreaks in UK prisons. *International Journal of Prisoner Healt*h.

[xxxv] Coleman, P.C., Pailing, A., Roy, A., O'Moore, É., Chandan, J.S., Lumby, V., Newton, P., Taylor, A., Robinson, E., Swindells, J. and Dowle, S., 2022. Implementation of novel and conventional outbreak control measures in managing COVID-19 outbreaks in a large UK prison. *BMC Public Health*, 22(1), pp.1-10.

[xxxvi] Bays D, Williams H, Pellis L, Curran-Sebastian J, O'Mara O, Team PJM, Finnie T. Insights gained from early modelling of COVID-19 to inform the management of outbreaks in UK prisons. Int J Prison Health. 2021 Aug 3;ahead-of-print(ahead-of-print):380–97. doi: 10.1108/IJPH-09-2020-0075.

[xxxvii] Augustynowicz, A., Wójcik, M., Bachurska, B., Opolski, J., Czerw, A., Raczkiewicz, D. and Pinkas, J., 2021. COVID-19–Infection prevention in prisons and jails in Poland.

[xxxviii] Towers, S., Wallace, D., Walker, J., Eason, J.M., Nelson, J.R. and Grubesic, T.H., 2022. A study of SARS-COV-2 outbreaks in US federal prisons: the linkage between staff, incarcerated populations, and community transmission. *BMC public health*, 22(1), pp.1-11.

[xxxix] Augustynowicz, A., Wójcik, M., Bachurska, B., Opolski, J., Czerw, A., Raczkiewicz, D. and Pinkas, J., 2021. COVID-19–Infection prevention in prisons and jails in Poland.

[xl] Ryckman, T., Chin, E.T., Prince, L., Leidner, D., Long, E., Studdert, D.M., Salomon, J.A., Alarid-Escudero, F., Andrews, J.R. and Goldhaber-Fiebert, J.D., 2021. Outbreaks of COVID-19 variants in US prisons: a mathematical modelling analysis of vaccination and reopening policies. The Lancet Public Health, 6(10), pp.e760-e770.

[xli] Borges, L.P., Martins, A.F., de Souza, D.R.V., de Rezende Neto, J.M., Santos, A.A., Oliveira, B.M., Matos, I.L.S., da Invenção, G.B., Dos Santos, K.A., Souza, N.A.A. and de Jesus, P.C., 2021. Does In-Person Visiting Affect the Number of COVID-19 Cases in Prisons?. Life, 11(11), p.1184.

x[lii] See e.g. Rooney etc.

[xliii] Gray, R., Rooney, B. and Connolly, C., 2021. Experiences of COVID-19 isolation in Northern Ireland prisons: a qualitative study. *International Journal of Prisoner Health*.

[xliv] Drake, J.E., Papazian, K. and Grossman, E., 2022. Gravitating toward the arts during the COVID-19 pandemic. *Psychology of Aesthetics, Creativity, and the Arts.*

[xlv] Beaudry, G. Zhong, S., Whiting, D., Javid, B., Frater, J. and Faze, S., 2020. Managing outbreaks of highly contagious diseases in prisons: a systematic review

[xlvi] Blogg J, McGrath C, Galouzis J, Grant L, Hoey W. Lessons learned from keeping NSW's prisons COVID-free. Int J Prison Health. 2021 Mar 1;ahead-of-print(ahead-of-print). doi: 10.1108/IJPH-09-2020-0073

[xlvii] Clarke, M., Devlin, J., Conroy, E., Kelly, E. and Sturup-Toft, S., 2020. Establishing prison-led contact tracing to prevent outbreaks of COVID-19 in prisons in Ireland. *Journal of Public Health*, 42(3), pp.519-524.

[xlviii] Dufayet L, Macaigne C, Soussy N, Alcaraz E, Gorgiard C. Emerging issues related to the management of patients in custody during the COVID-19 outbreak in France. Int J Prison Health. 2021 May 6;ahead-of-print(ahead-of-print). doi: 10.1108/IJPH-04-2020-0023

[xlix] McLeod, K.E., Timler, K., Korchinski, M., Young, P., Milkovich, T., McBride, C., Young, G., Wardell, W., Condello, L.L., Buxton, J.A. and Janssen, P.A., 2021. Supporting people leaving prisons during COVID-19: perspectives from peer health mentors. I*nternational Journal of Prisoner Health*.

[l] US Department of State (2020) 'Custom Report Excerpts: China, Germany, Hong Kong, Japan, Macau, Tibet, United Kingdom'. Available https://www.state.gov/report/custom/c131980450/

[li] HMIP (2021) What happens to prisoners in a pandemic? https://www.justiceinspectorates.gov.uk/hmiprisons/inspections/what-happens-to-prisoners-in-a-pandemic/

[lii] Giuliani, R., Mazzilli, S., Sebastiani, T., Cocca, G., Bortolotti, R., Cairone, C., Scardina, G., Arzilli, G., Tavoschi, L. and Ranieri, R., 2021. The epidemic burden on prisons in Lombardy (Italy) during the first wave of the COVID-19 pandemic: the transmission and measures of prevention in detention facilities. *International Journal of Prisoner Health*.

[liii] See also: UN News (2021) 'Impact of COVID-19 'heavily felt' by prisoners globally: UN expert'. https://news.un.org/en/story/2021/03/1086802

[liv] Muntingh LM. Africa, Prisons and COVID-19. J Hum Rights Pract. 2020 Aug 31:huaa031. doi: 10.1093/jhuman/huaa031

[lv] Jumbe, V., Mhango, V., Muula, A., Kaima, R., Chimbwete, L.R., Mangwana, A., Msutu, B., Tembo, L., Bigland, C., Kewley, S. and Van Hout, M.C., 2022. A multi-stakeholder situation assessment of COVID-19 disease preparedness and mitigation measures in a large prison complex in Malawi. *International Journal of Prisoner Health.*

[lvi] Heard, C., 2021, May. Locked in and locked down-prison life in a pandemic: evidence from ten countries. ICPR. https://www.prisonstudies.org/sites/default/files/resources/downloads/locked_in_and_locked_down.pdf

[lvii] Katey D, Morgan AK, Asori M, Ampofo ST, Mpobi RKJ. COVID-19 and the marginalized: an opinion piece on further measures to address COVID-19 in prisons in Sub-Saharan Africa. Int J Prison Health. 2021 Jun 7;ahead-of-print(ahead-of-print). doi: 10.1108/IJPH-12-2020-0101. PMID: 34089577

[lvii] Wahidin, M., Pane, M. and Angkasawati, T.J., 2022. Prevention Measures of COVID-19 in Prisons in Indonesia. *Asia Pacific Journal of Public Health*, p.10105395221088654.

[lix] da Cunha Gonçalves, L., Baggio, S., Schnyder, N., Zaballa, M.E., Baysson, H., Guessous, I., Rossegger, A., Endrass, J., Wolff, H., Stringhini, S. and Gétaz, L., 2022. COVID-19 Fears and Preventive Behaviors among Prison Staff. *Victims & Offenders*, pp.1-18.

[lx] See Rice, W.M., Chudasama, D.Y., Lewis, J., Senyah, F., Florence, I., Thelwall, S., Glaser, L., Czachorowski, M., Plugge, E., Kirkbride, H. and Dabrera, G., 2021. Epidemiology of COVID-19 in Prisons, England, 2020. Emerging Infectious Diseases, 27(8), p.2183; Czachorowski, M., Bashton, M., O'Moore, É., McGrath, N., Smith, D., Gutridge, K., Parkes, J. and Plugge, E., 2022. Repeated mass testing of staff and residents in prison outbreaks of Covid-19: an enhanced outbreak investigation in two adult prisons in England, 2021. *medRxiv*.

[lxi] WHO (2021) 'Preparedness, prevention and control of COVID-19 in prisons and other places of detention'. Available: https://www.who.int/europe/publications/i/item/WHO-EURO-2021-1405-41155-57257

[lxii] Cerrato F, Esposito M, Drusiani A, Moi I, Franciosi E, Assueri N, Campalastri R, Fioritti A. Locking out the virus: management of a SARS-CoV-2 outbreak in an Italian prison. Int J Prison Health. 2021 May 6;ahead-of-print(ahead-of-print). doi: 10.1108/IJPH-12-2020-0100

[lxiii] Blackmore, C., Czachorowski, M., Farrington, E., O'Moore, É. and Plugge, E., 2022. Testing for COVID-19 during an outbreak within a large UK prison: an evaluation of mass testing to inform outbreak control. I*nternational Journal of Infectious Diseases*, 125, pp.138-144.

[lxiv] Other research found that one prison outbreak in the USA arose from infections brought into prison by two correctional staff. See Silverman, R.A., Ceci, A., Cohen, A., Helmick, M., Short, E., Bordwine, P., Friedlander, M.J. and Finkielstein, C.V., 2022. Vaccine Effectiveness during Outbreak of COVID-19 Alpha (B. 1.1. 7) Variant in Men's Correctional Facility, United States. *Emerging infectious diseases*, 28(7), p.1321.

[lxv] Giuliani, R., Mazzilli, S., Sebastiani, T., Cocca, G., Bortolotti, R., Cairone, C., Scardina, G., Arzilli, G., Tavoschi, L. and Ranieri, R., 2021. The epidemic burden on prisons in Lombardy (Italy) during the first wave of the COVID-19 pandemic: the transmission and measures of prevention in detention facilities. *International Journal of Prisoner Health*. See also Czachorowski, M., Bashton, M., O'Moore, É., McGrath, N., Smith, D., Gutridge, K., Parkes, J. and Plugge, E., 2022. Repeated mass testing of staff and residents in prison outbreaks of Covid-19: an enhanced outbreak investigation in two adult prisons in England, 2021. medRxiv.

[lxvi] Suhomlinova, O., Ayres, T.C., Tonkin, M.J., O'Reilly, M., Wertans, E. and O'Shea, S.C., 2022. Locked up while locked down: Prisoners' experiences of the COVID-19 pandemic. *The British Journal of Criminology*, 62(2), pp.279-298.

[lxvii] Marmolejo, L., Barberi, D., Bergman, M., Espinoza, O. and Fondevila, G., 2020. Responding to COVID-19 in Latin American prisons: the cases of Argentina, Chile, Colombia, and Mexico. *Victims & Offenders*, 15(7-8), pp.1062-1085.

[lxviii] Lambert, S. and Wilkinson, D., 2021. Trust, efficacy and efficacy when testing prisoners for COVID-19. I*nternational Journal of Prisoner Health*.

[lxix] Amnesty International (2021) 'Forgotten behind bars'. https://www.amnesty.org.uk/press-releases/Covid-19-prisoners-forgotten-victims-pandemic-new-report?utm_source=google&utm_medium=grant&utm_campaign=AWA_GEN_coronavirus-dynamic-search-ads&utm_content=&gclid=Cj0KCQiAnsqdBhCGARIsAAyjYjS3pSzdGXmJ88alr6qON_tsaGHWtijWJ6K_Ad1PP7x0Qd2Z4TjZUkQaAp-xEALw_wcB

[lxx] Silverman, R.A., Ceci, A., Cohen, A., Helmick, M., Short, E., Bordwine, P., Friedlander, M.J. and Finkielstein, C.V., 2022. Vaccine Effectiveness during Outbreak of COVID-19 Alpha (B. 1.1. 7) Variant in Men's Correctional Facility, United States. *Emerging infectious diseases*, 28(7), p.1321.

[lxxi] Biondi, B.E., Leifheit, K.M., Mitchell, C.R., Skinner, A., Brinkley-Rubinstein, L. and Raifman, J., 2022. Association of state COVID-19 vaccination prioritization with vaccination rates among incarcerated persons. *JAMA Network Open*, 5(4), pp.e226960-e226960.

[lxxii] Hagan, L.M., Dusseau, C., Crockett, M., Rodriguez, T. and Long, M.J., 2021. COVID-19 Vaccination in the Federal Bureau of Prisons, December 2020—April 2021. Vaccine, 39(40), pp.5883-5890.

[lxxiii] Di Giuseppe, G., Pelullo, C.P., Lanzano, R., Lombardi, C., Nese, G. and Pavia, M., 2022. COVID-19 Vaccination Uptake and Related Determinants in Detained Subjects in Italy. *Vaccines*, 10(5), p.673.

[lxxiv] Liu, Y.E., Oto, J., Will, J., LeBoa, C., Doyle, A., Rens, N., Aggarwal, S., Kalish, I., Rodriguez, M., Sherif, B. and Trinidad, C., 2022. Factors associated with COVID-19 vaccine acceptance and hesitancy among residents of Northern California jails. *Preventive medicine reports*, 27, p.101771.

[lxxv] Di Giuseppe, G., Pelullo, C.P., Lanzano, R., Napolitano, F. and Pavia, M., 2022. Knowledge, attitudes, and behavior of incarcerated people regarding COVID-19 and related vaccination: a survey in Italy. *Scientific reports*, 12(1), pp.1-11.

[lxxvi] Prince, L., Long, E., Studdert, D.M., Leidner, D., Chin, E.T., Andrews, J.R., Salomon, J.A. and Goldhaber-Fiebert, J.D., 2022, March. Uptake of COVID-19 Vaccination Among Frontline Workers in California State Prisons. In *JAMA Health Forum* (Vol. 3, No. 3, pp. e220099-e220099). American Medical Association.

[lxxvii] Beaudry, G. Zhong, S., Whiting, D., Javid, B., Frater, J. and Faze, S., 2020. Managing outbreaks of highly contagious diseases in prisons: a systematic review

[lxxviii] Badr, H., Zhang, X., Oluyomi, A., Woodard, L., Adepoju, O., Raza, S. and Amos, C. (2021) Overcoming COVID-19 Vaccine Hesitancy: Insights from an Online Population-Based Survey in the United States

[lxxix] Ortiz-Paredes, D., Varsaneux, O., Worthington, J., Park, H., MacDonald, S.E., Basta, N.E., Lebouché, B., Cox, J., Ismail, S.J. and Kronfli, N., 2022. Reasons for COVID-19 vaccine refusal among people incarcerated in Canadian federal prisons. Plos one, 17(3), p.e0264145.

[lxxx] Stern, M.F., Piasecki, A.M., Strick, L.B., Rajeshwar, P., Tyagi, E., Dolovich, S., Patel, P.R., Fukunaga, R. and Furukawa, N.W., 2021. Willingness to receive a COVID-19 vaccination among incarcerated or detained persons in correctional and detention facilities—four states, September–December 2020. *Morbidity and Mortality Weekly Report*, 70(13), p.473.

[lxxxi] Liu, Y.E., Oto, J., Will, J., LeBoa, C., Doyle, A., Rens, N., Aggarwal, S., Kalish, I., Rodriguez, M., Sherif, B. and Trinidad, C., 2022. Factors associated with COVID-19 vaccine acceptance and hesitancy among residents of Northern California jails. *Preventive medicine reports*, 27, p.101771.

[lxxxii] Gray, R., Rooney, B. and Connolly, C., 2021. Experiences of COVID-19 isolation in Northern Ireland prisons: a qualitative study. *International Journal of Prisoner Health*.

[lxxxiii] Suhomlinova, O., Ayres, T.C., Tonkin, M.J., O'Reilly, M., Wertans, E. and O'Shea, S.C., 2022. Locked up while locked down: Prisoners' experiences of the COVID-19 pandemic. *The British Journal of Criminology*, 62(2), pp.279-298.

[lxxxiv] Sorge, A., Bassanini, F., Zucca, J. and Saita, E., 2021. "Fear can hold you, hope can set you free". Analysis of Italian prisoner narrative experience of the COVID-19 pandemic. *International Journal of Prisoner Health.*

[lxxxv] Heard, C., 2021. Locked in and locked down-prison life in a pandemic: evidence from ten countries. ICPR. https://www.prisonstudies.org/sites/default/files/resources/downloads/locked_in_and_locked_down.pdf

[lxxxvi] Liu, Y.E., Oto, J., Will, J., LeBoa, C., Doyle, A., Rens, N., Aggarwal, S., Kalish, I., Rodriguez, M., Sherif, B. and Trinidad, C., 2022. Factors associated with COVID-19 vaccine acceptance and hesitancy among residents of Northern California jails. *Preventive medicine reports*, 27, p.101771.

[lxxxvii] Pettus-Davis, C., Kennedy, S.C. and Veeh, C.A. (2021), "Incarcerated individuals' experiences of COVID-19 in the United States", *International Journal of Prisoner Health*, Vol. 17 No. 3, pp. 335-350. https://doi.org/10.1108/IJPH-11-2020-0094

[lxxxviii] Council of Europe Commissioner for Human Rights (2020) 'COVID-19 pandemic: urgent steps are needed to protect the rights of prisoners in Europe'. https://www.coe.int/en/web/commissioner/-/covid-19-pandemic-urgent-steps-are-needed-to-protect-the-rights-of-prisoners-in-europe

[lxxxix] Fair, J. and Jacobson, J. (2021) Keeping COVID out of prisons: Approaches in ten countries

[xc] Fair, J. and Jacobson, J. (2021) Keeping COVID out of prisons: Approaches in ten countries

[xci] Comartin, E.B., Victor, G., Ray, B., Nelson, V., Whitehead, T. and Kubiak, S., 2022. County jails' responses to COVID-19: Practices, procedures, and provisions of behavioral health services. *Psychological Services*.

[xcii] Duarte, C., Cameron, D.B., Kwan, A.T., Bertozzi, S.M., Williams, B.A. and McCoy, S.I., 2022. COVID-19 outbreak in a state prison: a case study on the implementation of key public health recommendations for containment and prevention. *BMC Public Health*, 22(1), pp.1-12.

[xciii] See note 2, above.

[xciv] Pitts, W.J. and Inkpen, C.S., 2020. Assessing the Effects of COVID-19 in Prisons in the Northern Triangle of Central America. *Victims & Offenders*, 15(7-8), pp.1044-1061.

[xcv] Ospina-Escobar, A. and Pocoroba, A., 2022. Confinement with No Rights. Perceptions of Inmates' Relatives Regarding Measures for COVID-19 Control Implemented in Mexican Prisons. *Victims & Offenders*, pp.1-27.

[xcvi] Ospina-Escobar, A. and Pocoroba, A., 2022. Confinement with No Rights. Perceptions of Inmates' Relatives Regarding Measures for COVID-19 Control Implemented in Mexican Prisons. *Victims & Offenders*, pp.1-27.

[xcvii] Sozzo, M. (2017) "Postneoliberalism and Penality in South America", *International Journal for Crime, Justice and Social Democracy*, 6(1), pp. 133-145. doi: 10.5204/ijcjsd.v6i1.391

[xcviii] WHO (2022) Health in Prisons – COVID-19 Minimum Dataset: Summary of data reported from May 2020 to October 2021. https://apps.who.int/iris/bitstream/handle/10665/351496/WHO-EURO-2022-4752-44515-63010-eng.pdf?sequence=1&isAllowed=y

[xcix] Leibowitz, A.I., Siedner, M.J., Tsai, A.C. and Mohareb, A.M., 2021. Association between prison crowding and COVID-19 incidence rates in Massachusetts prisons, April 2020-January 2021. *JAMA Internal Medicine*, 181(10), pp.1315-1321.

[c] Towers, S., Wallace, D., Walker, J., Eason, J.M., Nelson, J.R. and Grubesic, T.H., 2022. A study of SARS-COV-2 outbreaks in US federal prisons: the linkage between staff, incarcerated populations, and community transmission. *BMC public health*, 22(1), pp.1-11.

[ci] Deche, M., Bosire, C. and Kinyanjui, S. (2022) in F. Dünkel et al. (eds) *The Impact of Covid 19 on Prison Conditions and Penal Policy, Routledge*

[cii] Marmolejo, L., Barberi, D., Bergman, M., Espinoza, O. and Fondevila, G., 2020. Responding to COVID-19 in Latin American prisons: the cases of Argentina, Chile, Colombia, and Mexico. *Victims & Offenders*, 15(7-8), pp.1062-1085.

[ciii] Aebi, M. F., Cocco, E., Molnar, L., & Tiago, M. M. (2022). SPACE I - 2021 – Council of Europe Annual Penal Statistics: Prison populations. Council of Europe.

[civ] Marmolejo, L., Barberi, D., Bergman, M., Espinoza, O. and Fondevila, G., 2020. Responding to COVID-19 in Latin American prisons: the cases of Argentina, Chile, Colombia, and Mexico. *Victims & Offenders*, 15(7-8), pp.1062-1085.

[cv] Fair, J. and Jacobson, J. (2021) Keeping COVID out of prisons: Approaches in ten countries

[cvi] Dünkel, F. and Morgernstern, C. (2022) 'Germany' in F. Dünkel et al. (eds) *The Impact of Covid 19 on Prison Conditions and Penal Policy, Routledge*

[cvii] Marmolejo, L., Barberi, D., Bergman, M., Espinoza, O. and Fondevila, G., 2020. Responding to COVID-19 in Latin American prisons: the cases of Argentina, Chile, Colombia, and Mexico. *Victims & Offenders*, 15(7-8), pp.1062-1085.

[cix] Aebi, M.F. and Tiago, M.M., 2020. Prisons and Prisoners in Europe in Pandemic Times: An evaluation of the medium-term impact of the COVID-19 on prison populations. Strasbourg: *Council of Europe*.

[cix] Fair, J. and Jacobson, J. (2021) Keeping COVID out of prisons: Approaches in ten countries

[cx] Amnesty International (2021) 'Forgotten behind bars'. https://www.amnesty.org.uk/press-releases/Covid-19-prisoners-forgotten-victims-pandemic-new-report?utm_source=google&utm_medium=grant&utm_campaign=AWA_GEN_coronavirus-dynamic-search-ads&utm_content=&gclid=Cj0KCQiAnsqdBhCGARIsAAyjYjS3pSzdGXmJ88alr6qON_tsaGHWtijWJ6K_Ad1PP7x0Qd2Z4TjZUkQaAp-xEALw_wcB

[cxi] Fair, J. and Jacobson, J. (2021) Keeping COVID out of prisons: Approaches in ten countries

[cxii] Fair, J. and Jacobson, J. (2021) Keeping COVID out of prisons: Approaches in ten countries

[cxiii] Johnsen, B. (2022) 'Norway' F. Dünkel et al. (eds) *The Impact of Covid 19 on Prison Conditions and Penal Policy, Routledge*

[cxiv] Montero Perez de Tudela, E. (2020) Telematic Control and Semi-Freedom as a Response to the Pandemic: The Spanish Penitentiary System Experience, Victims & Offenders, 15:7-8, 1186-1202

[cxvi] Marmolejo, L., Barberi, D., Bergman, M., Espinoza, O. and Fondevila, G., 2020. Responding to COVID-19 in Latin American prisons: the cases of Argentina, Chile, Colombia, and Mexico. *Victims & Offenders*, 15(7-8), pp.1062-1085.

[cxvi] Lopes, P.C., Pinto, I.R., Marques, J.M. and Bobowik, M., 2021. Releasing prisoners during COVID-19: the impact of the support for the early release, perceived insecurity and political orientation on attitudes towards released prisoners in Portugal. *International Journal of Prisoner Health.*

[cxvii] Andrews, M.E., Mattan, B.D., Richards, K., Moore-Berg, S.L. and Falk, E.B., 2022. Using first-person narratives about healthcare workers and people who are incarcerated to motivate helping behaviors during the COVID-19 pandemic. *Social Science & Medicine*, 299, p.114870.

[cxvii] McCauley, E.J., 2022. The COVID-19 pandemic behind bars: Experimental evidence showing higher support for decarceration when framed as risk to correctional staff. *SSM-Population Health*, 19, p.101218.

[cxix] Eno Louden, J., Vaudreuil, E., Queen, C., Alvarez, M.E. and Garcia, A., 2021. Flattening the curve in jails and prisons: Factors underlying support for COVID-19 mitigation policies. *Psychology, Public Policy, and Law*, 27(1), p.124.

[cxx] McCauley, E.J., 2022. The COVID-19 pandemic behind bars: Experimental evidence showing higher support for decarceration when framed as risk to correctional staff. *SSM-Population Health*, 19, p.101218.

[cxxi] Denney, M.G. and Valdez, R.G., 2021. Compounding Racialized Vulnerability: COVID-19 in Prisons, Jails, and Migrant Detention Centers. J*ournal of Health Politics, Policy and Law*, 46(5), pp.861-887.

[cxxii] Denney, M.G. and Valdez, R.G., 2021. Compounding Racialized Vulnerability: COVID-19 in Prisons, Jails, and Migrant Detention Centers. *Journal of Health Politics, Policy and Law*, 46(5), pp.861-887.

[cxxiii] Council of Europe (2020) 'Follow-up statement regarding the situation of persons deprived of their liberty in the context of the ongoing Covid-19 pandemic'. Found online: https://rm.coe.int/16809ef566

[cxxiv] Council of Europe Commissioner for Human Rights (2020) 'COVID-19 pandemic: urgent steps are needed to protect the rights of prisoners in Europe'. https://www.coe.int/en/web/commissioner/-/Covid-19-pandemic-urgent-steps-are-needed-to-protect-the-rights-of-prisoners-in-europe

[cxxv] UNODC, WHO, UNAIDS and OHCHR (2020) 'UNODC, WHO, UNAIDS and OHCHR joint statement on COVID-19 in prisons and other closed settings' https://www.who.int/news/item/13-05-2020-unodc-who-unaids-and-ohchr-joint-statement-on-Covid-19-in-prisons-and-other-closed-settings

[cxxvi] Suhomlinova, O., O'Reilly, M., Ayres, T.C., Wertans, E., Tonkin, M.J. and O'Shea, S.C., 2022. "Gripping onto the last threads of sanity": transgender and non-binary prisoners' mental health challenges during the Covid-19 pandemic. *International Journal of Mental Health*, pp.1-21.

[cxxvii] House of Commons Justice Committee (2020) 'Coronavirus (Covid-19): The impact on prisons.. Available online: https://committees.parliament.uk/publications/2154/documents/20016/default/

[cxxv] 111 Logar, S. and Leese, M. (2021), "41-bis prison regime (Italy): leave no one behind during COVID-19", *International Journal of Prisoner Health*, Vol. 17 No. 3, pp. 296-298. https://doi.org/10.1108/IJPH-05-2020-0033

[cxxix] Naylor, B., Shalev, S. (2022). Solitary Confinement and the Meaning of 'Meaningful Human Contact'. In: Burbano Herrera, C., Haeck, Y. (eds) Human Rights Behind Bars. Ius Gentium: Comparative Perspectives on Law and Justice, vol 103. Springer, Cham
cxxx Johnson, L., Gutridge, K., Parkes, J., Roy, A and Plugge, E. (2021) Scoping review of mental health in prisons through the COVID-19 pandemic. BMJ Open.

[cxxxi] Naylor, B., Shalev, S. (2022). Solitary Confinement and the Meaning of 'Meaningful Human Contact'. In: Burbano Herrera, C., Haeck, Y. (eds) Human Rights Behind Bars. Ius Gentium: Comparative Perspectives on Law and Justice, vol 103. Springer, Cham

[cxxxii] Minson, S. and Flynn, C., 2021. Symbiotic harms of imprisonment and the effect on children's right to family life: Comparing the Impact of COVID-19 prison visiting restrictions in the UK and Australia. *The International Journal of Children's Right*s, 29(2), pp.305-325.

[cxxxiii] Minson, S. and Flynn, C., 2021. Symbiotic harms of imprisonment and the effect on children's right to family life: Comparing the Impact of COVID-19 prison visiting restrictions in the UK and Australia. *The International Journal of Children's Rights*, 29(2), pp.305-325.

[cxxxiv]Beaudry, G. Zhong, S., Whiting, D., Javid, B., Frater, J. and Faze, S., 2020. Managing outbreaks of highly contagious diseases in prisons: a systematic review

[cxxxv] European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) (2022) Prison and Drugs in Europe. https://www.emcdda.europa.eu/system/files/publications/13904/TDXD21001ENN.pdf

[cxxxvi] HMIP (2021) What happens to prisoners in a pandemic? https://www.justiceinspectorates.gov.uk/hmiprisons/inspections/what-happens-to-prisoners-in-a-pandemic/

[cxxxvii] UNODC (2020) 'Covid-19, HIV prevention, treatment, care and support for people who use drugs and people in prison' https://www.unodc.org/unodc/en/hiv-aids/new/Covid-19-and-hiv.html

[cxxxviii] Gray, R., Rooney, B. and Connolly, C., 2021. Experiences of COVID-19 isolation in Northern Ireland prisons: a qualitative study. *International Journal of Prisoner Health*.

[cxxxix] Suhomlinova, O., Ayres, T.C., Tonkin, M.J., O'Reilly, M., Wertans, E. and O'Shea, S.C., 2022. Locked up while locked down: Prisoners' experiences of the COVID-19 pandemic. *The British Journal of Criminology*, 62(2), pp.279-298.

[cxl] Heard, C., 2021, May. Locked in and locked down-prison life in a pandemic: evidence from ten countries. ICPR. https://www.prisonstudies.org/sites/default/files/resources/downloads/locked_in_and_locked_down.pdf

[cxli] Challinor, A., Naylor, K. and Verstreken, P., 2021. The effects of COVID-19 on self-harm in a high-secure psychiatry hospital. *The Journal of Forensic Practice*.

[cxlii] Hewson, T., Green, R., Shepherd, A., Hard, J. and Shaw, J. (2021) "The effects of COVID-19 on self-harm in UK prisons," *BJPsych Bulletin*. Cambridge University Press, 45(3), pp. 131–133. doi: 10.1192/bjb.2020.83.

[cxliii] Challinor, A., Naylor, K. and Verstreken, P., 2021. The effects of COVID-19 on self-harm in a high-secure psychiatry hospital. *The Journal of Forensic Practice*.

[cxliv] Gonçalves, R. A. , Andrade, J., 2021, 'Mental Health Issues during Covid-19 Pandemic in Portuguese Prisons', in F. Gabrielli, F. Irtelli (eds.), Anxiety, Uncertainty, and Resilience During the Pandemic Period - Anthropological and Psychological Perspectives, IntechOpen, London. 10.5772/intechopen.97798.

[cxlv] Testoni, I., Francioli, G., Biancalani, G., Libianchi, S. and Orkibi, H., 2021. Hardships in Italian prisons during the COVID-19 emergency: the experience of healthcare personnel. *Frontiers in Psychology*, 12, p.619687.

[cxlvi] Armstrong, S., Pickering, L., Barkas, B., Brooks, O., Bunn, C., Burman, M., Burns, N., Casey, R., Cornish, N., Davis, A. and Gilmour, M., 2020. Left out and locked down: impacts of COVID-19 for marginalised groups in Scotland.

[cxlvii] Suhomlinova, O., O'Reilly, M., Ayres, T.C., Wertans, E., Tonkin, M.J. and O'Shea, S.C., 2022. "Gripping onto the last threads of sanity": transgender and non-binary prisoners' mental health challenges during the Covid-19 pandemic. *International Journal of Mental Health*, pp.1-21.

[cxlviii] Ospina-Escobar, A. and Pocoroba, A., 2022. Confinement with No Rights. Perceptions of Inmates' Relatives Regarding Measures for COVID-19 Control Implemented in Mexican Prisons. *Victims & Offenders*, pp.1-27.

[cxlix] Heard, C., 2021. Locked in and locked down-prison life in a pandemic: evidence from ten countries. ICPR. https://www.prisonstudies.org/sites/default/files/resources/downloads/locked_in_and_locked_down.pdf

[cl] Marmolejo, L., Barberi, D., Bergman, M., Espinoza, O. and Fondevila, G., 2020. Responding to COVID-19 in Latin American prisons: the cases of Argentina, Chile, Colombia, and Mexico. *Victims & Offenders*, 15(7-8), pp.1062-1085.

[cli] Heard, C., 2021. Locked in and locked down-prison life in a pandemic: evidence from ten countries. ICPR. https://www.prisonstudies.org/sites/default/files/resources/downloads/locked_in_and_locked_down.pdf

[clii] Fair, J. and Jacobson, J. (2021) 'Keeping COVID out of prisons: Approaches in ten countries' has some information about this.

[cliii] Fair, J. and Jacobson, J. (2021) 'Keeping COVID out of prisons: Approaches in ten countries' has some information about this.

[cliv] UNODC (2020) 'Covid-19, HIV prevention, treatment, care and support for people who use drugs and people in prison' https://www.unodc.org/unodc/en/hiv-aids/new/Covid-19-and-hiv.html

[clv] Montanari L, Teltzrow R, Vanmalderen S, Ranieri R, Martín Peláez JA, Vandam L, Mounteney J, Pirona A, Meroueh F, Giraudon I, Matias J, Skarupova K, Royuela L, Morel d'Arleux J. The impact of the COVID-19 lock-down on drug service provision in European prisons. Int J Prison Health. 2021 Aug 21;ahead-of-print(ahead-of-print). doi: 10.1108/IJPH-11-2020-0089

[clvi] Challinor, A., Naylor, K. and Verstreken, P., 2021. The effects of COVID-19 on self-harm in a high-secure psychiatry hospital. *The Journal of Forensic Practice*.

[clvii] Heard, C., 2021. Locked in and locked down-prison life in a pandemic: evidence from ten countries. ICPR. https://www.prisonstudies.org/sites/default/files/resources/downloads/locked_in_and_locked_down.pdf

[clviii] Fair, J. and Jacobson, J. (2021) Keeping COVID out of prisons: Approaches in ten countries

[clix] Li, H., Zhang, X., You, C., Chen, X., Cao, Y. and Zhang, G., 2021. Can Viewing Nature Through Windows Improve Isolated Living? A Pathway Analysis on Chinese Male Prisoners During the COVID-19 Epidemic. *Frontiers in Psychiatry*, 12.

[clx] Sorge, A., Bassanini, F., Zucca, J. and Saita, E., 2021. "Fear can hold you, hope can set you free". Analysis of Italian prisoner narrative experience of the COVID-19 pandemic. I*nternational Journal of Prisoner Health.*

[clxi] Sorge A, Bassanini F, Zucca J, Saita E. "Fear can hold you, hope can set you free". Analysis of Italian prisoner narrative experience of the COVID-19 pandemic. Int J Prison Health. 2021 Aug 14;ahead-of-print(ahead-of-print):406–23. doi: 10.1108/IJPH-07-2020-0051.

[clxii] Suhomlinova, O., O'Reilly, M., Ayres, T.C., Wertans, E., Tonkin, M.J. and O'Shea, S.C., 2022. "Gripping onto the last threads of sanity": transgender and non-binary prisoners' mental health challenges during the Covid-19 pandemic. *International Journal of Mental Health*, pp.1-21.

[clxiii] Suhomlinova, O., O'Reilly, M., Ayres, T.C., Wertans, E., Tonkin, M.J. and O'Shea, S.C., 2022. "Gripping onto the last threads of sanity": transgender and non-binary prisoners' mental health challenges during the Covid-19 pandemic. *International Journal of Mental Health*, pp.1-21.

[clxiv] Barlow, C., Soape, E., Gussak, D.E. and Schubarth, A., 2021. Mitigating Over-Isolation: Art Therapy in Prisons Program During COVID-19. *Art Therapy*, pp.1-10.

[clxv] WHO (2021) 'Preparedness, prevention and control of COVID-19 in prisons and other places of detention.' https://www.who.int/europe/publications/i/item/WHO-EURO-2021-1405-41155-57257

[clxvi] Drogin EY. Forensic mental telehealth assessment (FMTA) in the context of COVID-19. Int J Law Psychiatry. 2020 Jul-Aug;71:101595. doi: 10.1016/j.ijlp.2020.101595.

[clxvii] Hewson T, Robinson L, Khalifa N, Hard J, Shaw J. Remote consultations in prison mental healthcare in England: impacts of COVID-19. BJPsych Open. 2021 Feb 8;7(2):e49. doi: 10.1192/bjo.2021.13.

[clxviii] Duncan, A., Sanders, N., Schiff, M., Winkelman, T. (2020) Adaptations to jail-based buprenorphine treatment during COVID-19 pandemic. Journal of Substance Abuse Treatment. https://doi.org/10.1016/j.jsat.2020.108161

[clxix] Duncan, A., Sanders, N., Schiff, M., Winkelman, T. (2020) Adaptations to jail-based buprenorphine treatment during COVID-19 pandemic. Journal of Substance Abuse Treatment. https://doi.org/10.1016/j.jsat.2020.108161

[clxx] Lockwood, K., 2021. 'Lockdown's changed everything': Mothering adult children in prison in the UK during the COVID-19 pandemic. *Probation Journal*, 68(4), pp.458-475; Heard, C., 2021. Locked in and locked down-prison life in a pandemic: evidence from ten countries. ICPR. https://www.prisonstudies.org/sites/default/files/resources/downloads/locked_in_and_locked_down.pdf;

[clxxi] Ospina-Escobar, A. and Pocoroba, A., 2022. Confinement with No Rights. Perceptions of Inmates' Relatives Regarding Measures for COVID-19 Control Implemented in Mexican Prisons. *Victims & Offenders*, pp.1-27.

[clxxii] Ospina-Escobar, A. and Pocoroba, A., 2022. Confinement with No Rights. Perceptions of Inmates' Relatives Regarding Measures for COVID-19 Control Implemented in Mexican Prisons. *Victims & Offenders*, pp.1-27.

[clxxiii] Marmolejo, L., Barberi, D., Bergman, M., Espinoza, O. and Fondevila, G., 2020. Responding to COVID-19 in Latin American prisons: the cases of Argentina, Chile, Colombia, and Mexico. *Victims & Offenders*, 15(7-8), pp.1062-1085.

[clxxiv] Gray, R., Rooney, B. and Connolly, C., 2021. Experiences of COVID-19 isolation in Northern Ireland prisons: a qualitative study. *International Journal of Prisoner Health*. Gr

[clxxv] Lockwood, K., 2021. 'Lockdown's changed everything': Mothering adult children in prison in the UK during the COVID-19 pandemic. *Probation Journal*, *68*(4), pp.458-475. Heard, C., 2021. Locked in and locked down-prison life in a pandemic: evidence from ten countries. ICPR. https://www.prisonstudies.org/sites/default/files/resources/downloads/locked_in_and_locked_down.pdf

[clxxvi] Heard, C., 2021. Locked in and locked down-prison life in a pandemic: evidence from ten countries. ICPR. https://www.prisonstudies.org/sites/default/files/resources/downloads/locked_in_and_locked_down.pdf

[clxxvii] Brandon, Avril, and Gavin Dingwall, (2022) 'Issues and Impacts: Foreign Nationals', *Minority Ethnic Prisoners and the COVID-19 Lockdown: Issues, Impacts and Implications* (Bristol: Policy Press Scholarship.

[clxxviii] Challinor, A., Naylor, K. and Verstreken, P., 2021. The effects of COVID-19 on self-harm in a high-secure psychiatry hospital. *The Journal of Forensic Practice*.

[clxxix] Flynn, C., Bartels, L., Dennison, S., Taylor, H. and Harrigan, S., 2022. Contact experiences and needs of children of prisoners before and during COVID□19: Findings from an Australian survey. *Child & Family Social Work*, 27(1), pp.67-78.

[clxxx] Suhomlinova, O., Ayres, T.C., Tonkin, M. J., O'Reilly, M., Wertans, E. and O'Shea, S.C., 2022. Locked up while locked down: Prisoners' experiences of the COVID-19 pandemic. *The British Journal of Criminology*, 62(2), pp.279-298.

[clxxxi] Brandon, Avril, and Gavin Dingwall, (2022) 'Issues and Impacts: Black, Asian and *Minority Ethnic Groups', Minority Ethnic Prisoners and the COVID-19 Lockdown: Issues, Impacts and Implications* (Bristol: Policy Press Scholarship.

[clxxxii] Heard, C., 2021, May. Locked in and locked down-prison life in a pandemic: evidence from ten countries. ICPR. https://www.prisonstudies.org/sites/default/files/resources/downloads/locked_in_and_locked_down.pdf

[clxxxiii] Sorge A, Bassanini F, Zucca J, Saita E. "Fear can hold you, hope can set you free". Analysis of Italian prisoner narrative experience of the COVID-19 pandemic. Int J Prison Health. 2021 Aug 14;ahead-of-print(ahead-of-print):406–23. doi: 10.1108/IJPH-07-2020-0051.

[clxxxiv] Sorge A, Bassanini F, Zucca J, Saita E. "Fear can hold you, hope can set you free". Analysis of Italian prisoner narrative experience of the COVID-19 pandemic. Int J Prison Health. 2021 Aug 14;ahead-of-print(ahead-of-print):406–23. doi: 10.1108/IJPH-07-2020-0051.

[clxxxv] Heard, C., 2021, May. Locked in and locked down-prison life in a pandemic: evidence from ten countries. ICPR. https://www.prisonstudies.org/sites/default/files/resources/downloads/locked_in_and_locked_down.pdf

[clxxxvi] HMIP (2021) What happens to prisoners in a pandemic? https://www.justiceinspectorates.gov.uk/hmiprisons/inspections/what-happens-to-prisoners-in-a-pandemic/

[clxxxvii] Pitts, W.J. and Inkpen, C.S., 2020. Assessing the Effects of COVID-19 in Prisons in the Northern Triangle of Central America. *Victims & Offenders*, 15(7-8), pp.1044-1061.

[clxxxviii] Pitts, W.J. and Inkpen, C.S., 2020. Assessing the Effects of COVID-19 in Prisons in the Northern Triangle of Central America. *Victims & Offenders*, 15(7-8), pp.1044-1061.

[clxxxix] Locked up While Locked Down: Prisoners' Experiences of the COVID-19 Pandemic

[cxc] Kwan, A., Garcia-Grossman, I., Sears, D., Bertozzi, S.M. and Williams, B.A., 2022. The Impact Of COVID-19 On The Health Of Incarcerated Older Adults In California State Prisons: Study examines the impact of COVID-19 on the health of incarcerated older adults in California state prisons. *Health Affairs*, 41(8), pp.1191-1201.

[cxci] Hwang, Y.I.(J)., Ginnivan, N.A., Simpson, P.L., Baidawi, S., Withall, A., Williams, B. and Butler, T.(2021), "COVID-19 and incarcerated older adults: a commentary on risk, care and early release in Australia", *International Journal of Prisoner Health*, Vol. 17 No. 3, pp. 245-257. https://doi.org/10.1108/IJPH-10-2020-0078

[cxcii] Brandon, Avril, and Gavin Dingwall, (2022) 'Issues and Impacts: Black, Asian and Minority Ethnic Groups', Minority Ethnic Prisoners and the COVID-19 *Lockdown: Issues, Impacts and Implications* Bristol: Policy Press Scholarship.

[cxciii] Brandon, Avril, and Gavin Dingwall (2022) 'Issues and Impacts: The Irish Travelling and Roma Communities', Minority Ethnic Prisoners and the COVID-19 Lockdown: *Issues, Impacts and Implications* Bristol, Policy Press Scholarship.

[cxciv] Brandon, Avril, and Gavin Dingwall, (2022) 'Issues and Impacts: Black, Asian and Minority Ethnic Groups', Minority Ethnic Prisoners and the COVID-19 Lockdown: *Issues, Impacts and Implications* (Bristol: Policy Press Scholarship.

[cxcv] Suhomlinova, O., O'Reilly, M., Ayres, T.C., Wertans, E., Tonkin, M.J. and O'Shea, S.C., 2022. "Gripping onto the last threads of sanity": transgender and non-binary prisoners' mental health challenges during the Covid-19 pandemic. *International Journal of Mental Health*, pp.1-21.

[cxcvi] Ospina-Escobar, A. and Pocoroba, A., 2022. Confinement with No Rights. Perceptions of Inmates' Relatives Regarding Measures for COVID-19 Control Implemented in Mexican Prisons. Victims & Offenders, pp.1-27.

[cxcvii] Day, A.-M. (2021), "Children in prison during COVID-19: the new "double jeopardy"", *Safer Communities*, Vol. 20 No. 2, pp. 57-61. https://doi.org/10.1108/SC-07-2020-0024

[cxcviii] HMIP (2021) What happens to prisoners in a pandemic? https://www.justiceinspectorates.gov.uk/hmiprisons/inspections/what-happens-to-prisoners-in-a-pandemic/

[cxcix] Penal Reform International (2022) 'A framework for good governance in prison systems' https://cdn.penalreform.org/wp-content/uploads/2022/03/Good-governance-guide.pdf

[cc] Jain, N. (2020). Pandemics as Rights-Generators. *American Journal of International Law*, 114(4), 677-686. doi:10.1017/ajil.2020.58

[ccii] Penal Reform International (2022) 'A framework for good governance in prison systems' https://cdn.penalreform.org/wp-content/uploads/2022/03/Good-governance-guide.pdf

[cciii] World Health Organisation (2021) Good practices in managing infectious diseases in prison settings: a snapshot of responses to COVID-19 implemented around the globe between May and September 2020. Available online at: https://apps.who.int/iris/handle/10665/352611

[cciv] Prison Reform International (2022) 'A framework for good governance in prison systems' https://cdn.penalreform.org/wp-content/uploads/2022/03/Good-governance-guide.pdf

[ccv] Johnson, L., Gutridge, K., Parkes, J., Roy, A and Plugge, E. (2021) Scoping review of mental health in prisons through the COVID-19 pandemic. BMJ Open.

[ccvi] Kothari R, Forrester A, Greenberg N, Sarkissian N, Tracy DK. COVID-19 and prisons: Providing mental health care for people in prison, minimising moral injury and psychological distress in mental health staff. *Medicine, Science and the Law*. 2020;60(3):165-168. doi:10.1177/0025802420929799

www.sccjr.ac.uk