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"We sleep 10cm apart so there is no social distancing": COVID-19 preparedness in a Zimbabwean prison complex.

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Abstract

Purpose: Prisons in Africa face unprecedented challenges during COVID-19. In July 2020, the first prison system case of COVID-19 was notified in Zimbabwe. Subsequently, the Zimbabwe Prisons and Correctional Services released their COVID-19 operational plan.

Design/methodology/approach: A multi-method situation assessment of COVID-19 preparedness was conducted across three Zimbabwean prisons. The WHO Checklist to evaluate preparedness, prevention and control of COVID-19 in prisons was administered to frontline health managers. Information garnered was further explored during site observation and in multi-stakeholder key informant interviews with policy makers, prison health directorate, frontline health care professionals, officers in charge and non-governmental organisations (n = 26); focus group discussions with correctional officers (n = 18) and male/female prisoners (n = 36). Data was triangulated and analysed using content thematic analysis.

Findings: Outdated infrastructure, severe congestion, interrupted water supply and inadequate hygiene and sanitation were conducive to ill health and spread of disease. Health professionals had been well trained regarding COVID-19 disease control measures. COVID-19 awareness among prisoners was generally adequate. There was no routine COVID-19 testing in place, beyond thermo scanning. Access to healthcare was good, but standards were hindered by inadequate medicines and personnel protective equipment supply. Isolation measures were compromised by accommodation capacity issues. Flow of prison entries constituted a transmission risk. Social distancing was impossible during meals and at night.

Originality: This unique situation assessment of Zimbabwean prisons' preparedness and approach to tackling COVID-19 acknowledges state and prison efforts to protect prisoners and staff, despite infrastructural constraints and inadequate resourcing from government.

Keywords

COVID-19, Mandela Rules, Zimbabwe, human rights, prisoners, infectious disease

Background

On March 11th, 2020, the World Health Organization (WHO) announced that the Coronavirus disease 2019 (COVID-19) outbreak (a respiratory illness caused by the Severe Acute Respiratory Syndrome Coronavirus 2 or SARS-CoV-2) was a pandemic (WHO, 2020a). Criminal justice and prison systems worldwide faced, and continue to face, unprecedented challenges during COVID-19 (UNODC, 2020a; WHO, 2020b). Prisons are high risk environments for communicable disease outbreaks, particularly airborne diseases such as tuberculosis (TB), and now COVID-19 with potential for rapid transmission due to prison confines, high population density and turnover (Beaudry *et al.,* 2020). Prisoners with chronic ill-health are especially vulnerable to severe COVID disease (Beaudry *et al.,* 2020). On March 25th 2020, the UN High Commissioner for Human Rights called on States to decongest their prisons as a critical component of their overall COVID-19 response (OHCHR, 2020; UNODC *et al.,* 2020; Amon, 2020). Early and emergency prison release schemes, presidential pardons and amnesties were implemented in many countries (Simpson and Butler, 2020; Lines *et al.,* 2020). In 2020, several key non-binding United Nations Office on Drugs and Crime (UNODC), WHO and Penal Reform International technical guidance documents (WHO, 2020b; WHO, 2020c; UNODC, 2020a; PRI, 2020) were promulgated at the start of the COVID epidemic.

Approximately one million people are incarcerated in the African continent, where prison capacity is stretched (over capacity is highest in Uganda at 318%) with, on average, 42% of the prison populations held in pre-trial detention (World Prison Brief, 2020). Historical poor standards and conditions of detention in many African member states were observed by the most recent inspection report published by the African Commission on Human and Peoples' Rights (ACHPR) Special Rapporteur on Prisons (2012). The COVID-19 pandemic has highlighted the significant risks to health in African prisons, where lack of resourcing in government COVID-19 responses has contributed to an inadequate COVID-19 response (Nkengasong and Mankoula, 2020; Muntingh, 2020; Van Hout, 2020a; Van Hout, 2020b; Nweze *et al.,* 2020; World Prison Brief, 2020; Van Hout and Wessels, 2021; Van Hout *et al.,* 2021). The threat of COVID-19 was not confined to those in detention, but extended to prison staff and their families, visitors and local communities (Van Hout, 2020c; Van Hout, 2020d).

The first COVID-19 case in Africa was reported in Egypt, followed by Algeria, spreading to 23 southern and east African countries (except Lesotho) in the period March 5th, 2020, to 15th April 2020 (Muntingh, 2020). Several declarations were issued by the African Commission on Human and Peoples' Rights (ACHPR) outlining effective human rights-based responses to COVID-19 in prisons, which urged Member States to decongest prisons and upscale disease mitigation and control measures (ACHPR, 2020a; ACHPR, 2020b). By May 26th 2020, prisons in Algeria, Sierra Leone, Cameroon, Ghana, Democratic Republic of Congo, Guinea, Egypt, Morocco, Kenya and South Africa confirmed

cases of COVID-19 (Prison Insider, 2020). There is little published data provided by African States regarding prison release schemes or transparent prison monitoring data on COVID-19 infection rates (Muntingh, 2020; Nweze *et al.,* 2020). Protests and riots by both staff and those deprived of their liberty occurred in many African states in response to the continued committals, and severely inadequate COVID-19 mitigation measures including supply of personal protective equipment (PPE) and COVID-19 testing kits, prison contagion, lack of health response and existing poor standards of detention and care (lack of clean water, inadequate disinfection practices, supplies of soap, disinfectant and medicines) (Prison Insider, 2020; Van Hout and Wessels, 2021).

We focus here on Zimbabwe, where the first prison system case was notified in July 2020 in a Bulawayo prison where four prisoners and a prison officer tested positive for COVID-19 (Netsianda, 2020). By late July, the number had increased to 43 prisoners and 23 officers (Muronzi, 2020). As of July 28, the Ministry of Health reported that Zimbabwe had 2,817 confirmed cases of Covid-19 and 40 deaths (Mavhinga, 2020). Shortly thereafter, the Zimbabwe Prisons and Correctional Services (ZPCS) released their COVID-19 operational plan, designed to prevent and mitigate against COVID-19 transmission. Deplorable environmental conditions in prisons have been reported (Alexander, 2009; USSD, 2016; Zimbabwe Human Rights, 2018). Research conducted by our team just prior to the COVID-19 pandemic highlighted continued poor standards of detention, congestion and chronic ill health of prisoners in the Zimbabwean prison system (Mhlanga-Gunda *et al.,* 2020; Chivandikwa *et al.,* 2020; Pillay *et al.,* 2021). Official occupancy level is 129.4%. In March 2019, the prison population was estimated to be 22,000 (World Prison Brief, 2020). Some efforts were made to decongest the system via the release of 4,208 prisoners between March and June 2020 under President Mnangagwa's amnesty (Mavhinga, 2020) and, by March 2021, the prison population had reduced to 20,407 (World Prison Brief, 2021).

Since July 2020, both national and international media warned of an impending public health crisis reporting on the severe lack of testing, insufficient PPE (masks, hand sanitisers), water and sanitation and isolation capacity for those testing COVID-19 positive in the Zimbabwe Prisons and Correctional Services (ZPCS) prison system (Netsianda, 2020; Chinowaita, 2020; Muronzi, 2020; Mavhinga, 2020; Daily News 2020; Whiz, 2020 Mukwenha *et al.,* 2021). The criminal justice system became severely hampered during government lockdowns and restrictions, with courts suspended and prison visits for those in detention banned, including that of legal representatives (Lawyers for Lawyers, 2020; Zimbabwe Peace Project, 2021). It is against this background that we conducted a multi-stakeholder situation assessment of the ZPCS prison system preparedness and response to COVID-19 in one large prison complex.

Methods

The assessment was undertaken as part of a large-scale international collaborative human rights research project in sub-Saharan Africa. Our approach was largely based on the WHO Checklist to evaluate preparedness, prevention and control of COVID-19 in prisons (WHO, 2020c) and was cognisant of the ultimate importance of upholding human and health rights of those who live and work in prisons as per the non-binding Mandela Rules (and the international and regional human rights frameworks) and ensuring the correct balance between protective measures during contagion and the risk of inhumane or degrading treatment of those in prison (UN, 2016; UNODC 2020a; 2020b). We focused on documenting and exploring multi-stakeholder perspectives regarding prison system preparedness and implementation of a response to COVID-19 across three Zimbabwean prisons; one male, one female and one open farm prison.

Before approaching ethical bodies for ethical clearance and permission to enter each prison complex, a letter of support for the study from the prison health directorate was sought and granted. Ethical approval was granted by the University Research and Ethics Committee at Liverpool John Moore's University, United Kingdom (20/PHI/031), the Medical Research Council of Zimbabwe (MRCZ) (A/2730) and the Joint Research Ethics Committee at the University of Zimbabwe (JREC) (JREC/171/2021) in Harare, Zimbabwe. Information was provided verbally and in written format to all participants and written informed consent was received prior to participation. All participants were advised of their voluntary participation and ability to withdraw at any time and were provided with a day to reflect and to ask questions prior to consenting to take part. All were advised with clear information that the study was not linked to medical treatment or any other health or social service, that there was no potential of physical risk and that privacy, anonymity, confidentiality, and data security would be ensured. Special care was taken to answer as appropriately as possible all questions from participants that arose in relation to the study.. No rewards were offered or given to participants to coerce them into participation. Participants signed two copies of the consent forms; one was retained by the participant and the other taken by the research team. Participants were assured that the study could be discontinued at any time by the government or regulatory authorities.

Firstly, the WHO COVID-19 Checklist (WHO, 2020c) was administered to frontline health providers in each of the three sites. It was developed as an additional resource to support countries in implementing the interim guidance issued by WHO regarding COVID-19 in detention settings (WHO, 2020b). It is intended for use by policy makers and prison administrators to evaluate their level of preparedness to prevent and control COVID-19. The checklist evaluates the level of *human rights assurance* (principles and practice in prisoner treatment and prison systems) and *preparedness* for COVID-19 (risk mitigation, communications, clinical response, prevention actions, contingency

measures, staff and inmate awareness raising and training). During administration of the checklist, site observation and documentation of disease control measures (standard operating procedures, screening and testing capacity, disinfection, sanitation, PPE, segregation and isolation cells, awareness-raising) was conducted by medically trained research staff (authors one and two) in the three sites. See Table 1.

Insert **Table 1 The WHO Checklist** about here

Information garnered from the checklist responses and direct observation were further explored in multi-stakeholder key informant in-depth interviews (KIIs) with policy makers, prison health directorate, frontline implementers of health care in prisons, senior health care managers, officers in charge and non-governmental organisations (NGO) (n = 26) and focus group discussions (FGDs) with correctional officers (n = 18) and prisoners (n = 36).

A purposive sample of stakeholders participated in the KIIs. Participant inclusion criteria centred on a) senior level prison policy makers knowledgeable about health policies in prisons and willing to participate in the study; or b) members of the prison health directorate, frontline implementers of health care in prisons (doctors, nurses, social care workers, environmental health technicians), senior health care managers and officers in charge having worked at the prison site for at least three months and being capable and willing to provide informed verbal consent.

Three external NGOs were identified in consultation with the prison health directorate and were also approached to participate as key informants (Human Rights NGO Forum, Voluntary Service Organization (VSO) and Zimbabwe Association for Crime Prevention and Rehabilitation of the Offender (ZACRO)). The KIIs guide was administered in its original English form and did not require translation into local language. KIIs were used as a pragmatic approach to explore the perspectives and experience of COVID-19 preparedness. The examination included aspects of prison infrastructure, including the impact on environmental and occupational determinants of health, responses to biohazards, impact of weak judicial systems causing high pre-trial detention and congestion, government resource allocation to protect the prison and those who live and work in it, continuum of COVID-19 testing capacity within the domestic health and prison system, potential breaches of basic, health, gender and occupational rights, protection and care of the vulnerable or chronically ill and general standards of health care for those unwell with COVID-19. All KIIs were conducted face to face during working hours and in full compliance with COVID-19 regulations (lasting 30 and 45 minutes).

A convenience sample of male and female correctional officers and prisoners were selected to participate in a series of FGDs, each with six participants. Mobilization and recruitment were organised by the prison health directorate across all three sites. Exclusion criteria centred on prisoners under 18

years of age, with a diagnosis of mental illness and with less than three months detention. Exclusion of correctional officers centred on those with less than three months employment at the complex. FGDs with correctional officers explored ground level perspectives and experience of COVID-19 preparedness in the prison, aspects of prison infrastructure impacting on environmental and occupational determinants of health (congestion, safe clean water, disinfection, soap, ventilation) and responses to biohazards (PPE, testing, isolation protocols and capacity) breaches of rights, care of the vulnerable, prison release schemes and access to and standards of health care). FGDs with prisoners explored their experiences around awareness of COVID-19, standards of detention, ability to protect themselves from disease and access to and adequacy of healthcare. FGDs were not audio-recorded in accordance with prison policy and were facilitated outside by two facilitators and one note-taker, in full compliance with COVID-19 regulations. Handwritten notes were taken during the FGDs using the local vernacular language. FGDs lasted between 60-90 minutes. Refreshments were served to all participants at the conclusion of each FGD.

All KIIs were transcribed and translated verbatim in a single step. FGD notes were concurrently transcribed and translated into English. Thematic analysis (Braun and Clarke, 2006; Braun *et al.,* 2019) was deemed appropriate in gaining an in-depth multi-stakeholder understanding of the complexities and dynamics around the experience and preparedness of tackling COVID-19 in the prison complex. Analysis of the combined KII and FGD data set consisted of several key steps to ensure scientific rigor by the team: reading and re-reading the transcription, individually and in two pairs to share and identify early ideas; the systematic coding of data; an iterative process to organize codes into groups in developing themes and subthemes; team refinement and review of generated themes as a collective and with examination of coherence of patterns across themes and finalization and naming of themes. Following thematic analysis, the WHO Checklist data presented in Table 2 (Supplemental Table) and direct observational data were triangulated across methods and data sources (Golafshani, 2003).

Triangulated data is subsequently presented in a series of themes; *COVID-19 communications and adoption of safety measures; Prison infrastructure, congestion and the mitigation of disease; Environmental health, hygiene and sanitation measures; Personal protection measures for those living and working in the prison; Testing, tracing and the bridge of disease; Equivalence of health care* and *Contact with the outside world,* all with illustrative quotes.

Results

Insert **Table 2: The WHO Checklist Results** about here [SUPPLEMENTAL FILE]

Participant Profile

Twenty six multi-stakeholder KIIs were conducted with policy makers, prison health directorate, frontline implementers of health care in prisons (doctors, nurses, social care workers), senior health care managers, officers in charge and NGOs. Nine FGDs with six participants in each were conducted, three with correctional officers (n = 18) and four with prisoners (n = 36). See Table 3.

Insert **Table 3: Participant Profile** about here

COVID -19 communications and adoption of safety measures

The WHO Checklist and subsequent KIIs revealed that there was no documented COVID-19 risk communication strategy in place, nor was there any mechanism to gather and integrate the risk perceptions of prisoners, staff and visitors in strategy or health message development. There was, however, consensus across the WHO Checklist, the KIIs and FGD with correctional officers that national guidelines for public health awareness raising and clinical care, as derived from the WHO were adopted. Medical staff had received governmental training on all aspects of COVID-19 detection, prevention and control. However, training for correctional officers was piecemeal and dependent on certain shifts ***"…if you are on leave or on night shift you probably miss out on the COVID-19 training…" (FGD, Correctional Officer, Farm Prison)***. In fact, most correctional officers indicated they had to rely on COVID-19 information from social media channels: "…***Social media is where we get information concerning COVID 19…" (FGD, Correctional Officer, Female Prison).***

FGDs revealed that both correctional officers and prisoners had good general knowledge about the signs and symptoms of COVID-19 disease. There were some reported misconceptions in male and female prisoners around COVID-19 transmission and treatment with one inmate believing ***"…if you eat contaminated meat you can catch the virus…" (FGD, Male Inmate, Farm Prison)***. Another reported how ***"…one can drink Zumbani [herb drink] and they can be cured…" (FGD Male Inmate, Farm Prison).***

Despite this, key preventative messages were found to be communicated by the prison authorities in a clear, accurate and relevant manner especially regarding social distancing, hand hygiene, correct use of face masks and respiratory etiquette. Various channels were documented in the WHO Checklist and during KIIs/FGDs to include group and one-to-one sessions and the use of peer educators trained by NGOs. Posters and pamphlets supplied by several NGOs and documented in the WHO Checklist were in fact described by many stakeholders as inadequate and did not fully consider language, literacy levels and disabilities. Prisoners raised concerns during the FGDs that due to their lack of contact with the outside world, COVID-19 health messaging was lagging behind within the prison walls:

> "…***When COVID-19 started we were given information, since the end of last year [2020] no information has been shared with us…" (FGD Inmate, Male Prison)***

"…It's not the same as outside where people have access to social media, television and radio to fully inform them... in prison we don't have access to all this…" (FGD Male Inmate, Farm Prison).

Both policy makers, health workers and some correctional officers across all sites observed the dynamic nature of human behaviour centring on high levels of adherence in the earlier stages of the pandemic by both prisoners and staff:

"…We are encouraged to always put on face masks, wash hands and sanitize… We are also adopting a new way of life because we don't know when this will end…" (FGD, Correctional Officer Farm Prison)

"…We try to reinforce the importance of compliance to COVID-19 prevention and control, each and every day…" (KII Policy Chief Nursing Officer).

However, compliance to the recommended safety measures was observed by many stakeholders to lessen over time, particularly relating to social distancing and correct mask etiquette. Health workers reported ***"…when COVID-19 first hit they [staff] were very compliant but now you have to remind a staff member to properly put on their masks…" (KII, Sister in Charge, Farm Prison)***; at first fear drove conformity but now ***"…it's difficult to control… when COVID- 19 started they [prisoners] were very compliant because they were scared…" (KII, Sister in Charge, Female Prison).***

Prison infrastructure, congestion and the mitigation of disease

Triangulated data indicated that the prison complex was operating over capacity and that basic living standards in all three prisons were poor and under resourced, with a severe lack of adequate hygiene and sanitation. Communal cells were overcrowded, poorly lit and insufficiently ventilated. There was a lack of provision of clothing, blankets and food. Prisoners of both genders spent most of the day outside in the courtyard or working in the farm prison. While a KII acknowledged the fundamental rights of prisoners, albeit against an extremely challenging context ***"…prisoners should enjoy all the rights in the constitution which include food, shelter, clothing and medication. We are trying to observe their rights but there is limitation in resources…" (KII, Policymaker Legal Affairs)***. Two NGOs independently described the living situation during their interview as:

"…The accommodation is filthy, no lights, poor ventilation…" (KII, NGO)

"…The current number of prisoners is causing overcrowding, not only for space but for resources too …There is no proper ventilation and no lights in the cells …" (KII, NGO).

Expressing concern over the state of accommodation during the COVID-19 pandemic, one female inmate said ***"…The situation here is terrible…" (FGD, Inmate, Female Prison).***

There was consensus across all data sources that social distancing with the recommended one to two metre apart safe distance was impossible, especially at night on return to communal cells as ***"…It's [complex] now exceeding the holding capacity…there is no space… making it impossible to maintain social distancing..." (KII, Policymaker Chief Nursing Officer).*** While acceptable distancing was reported by prisoners to be more achievable at the farm prison, it was noted this was not over capacity and most time was spent working outside. In both main prisons however, NGOs and male and female prisoners described the extreme congestion in communal cells and the intense close proximity of people at night. Prisoners voiced their fears of contracting COVID-19, reporting that they ***"…are in danger because our cells measure almost 9×4 meters and we are about 45 in one cell…" (FGD, Inmate, Male Prison)***; they ***"…sleep squashed and breathing over each other… Social distancing is zero..." (FGD, Inmate, Female Prison)***; and ***"…when sleeping they maintain a distance of 10-20cm between each person." (KII, NGO).***

The WHO Checklist documented that there were no additional measures in place to avoid concentration of people, with group activities and food collection points observed by the health directorate and officials to constitute a particularly high risk for COVID-19 transmission. Prisoners reported how because they ***"…do our activities in tightly closed gangs; we can't practice any social distancing…" (FGD, Inmate, Female Prison)*** and "…***even when we are queuing up for food, we cannot maintain social distance because we are supposed to stand in a line to maintain order…" (FGD, Male Inmate, Farm Prison).***

Segregation of those most at risk of severe COVID-19 disease (older individuals and those with chronic conditions) was generally not possible due to accommodation constraints. These capacity constraints were also observed in the WHO Checklist and KIIs to restrict the ability of officials to implement sufficient isolation measures. Powerless, one health worker stated: ***"…there is nothing we can do...we do not have the infrastructure...cells are overcrowded, leaving no space for an inmate to turn" (KII Registered General Nurse Female Prison).***

Environmental health, hygiene and sanitation measures

The severe lack of hygiene and sanitation was reported across all data sources. Access to water was not equivalent to that in the community. Interrupted supply of water was identified as a serious environmental health problem in prison, ***"…we get water for three hours whereas outside in the community water is available at all times…" (KI, Sister in Charge, Female Prison).*** This compounded problems in maintaining an adequate minimum level of hygiene and was observed by many stakeholders to heighten risk of exposure to disease, including COVID-19. A '*bucket system'* was in operation at certain times of the day, to retrieve water for drinking and washing and to flush toilets

which were reportedly out of order for a long time. NGOs had provided several storage tanks and the prison had sunk several wells in order to overcome the problem so ***"… when water comes, we fill in the buckets, it only comes in the morning..." (KII, Sister In Charge Farm Prison)*** but ***"…they do not store water; they take water from another toilet tank and use it to clean other toilets …" (FGD, Male Inmate, Farm Prison).***

Mixed views were shared on availability of soap provided by the ZPCS, NGOs, families and local churches. Prisoners described the inadequacy of supply and some indicated going without soap for three to five months as ***"…we only get soap when there are confirmed cases of COVID-19, only when there is a problem or when they have extras" (FGD, Inmate, Female Prison)*** but ***"…in all honesty there is no soap…" (FGD, Inmate, Male Prison)***. The insufficient provision of soap was corroborated by a senior health manager who stated ***"…they are provided with one bar per six people… they end up relying on their relatives to bring them soap from home…" (KI, Sister in Charge, Farm Prison)***.

There were mixed opinions between prisoners and officials regarding adequate provision of cleaning materials and detergents, not only relating to surface contamination but particularly regarding the cleanliness of bedding materials in preventing transmission of disease. It was reported that ***"…detergents are inadequate, we have limited quantities..." (KII Policy Deputy Chief Nursing Officer)*** although ***"…when an inmate is discharged from isolation, we give them soap and detergent, to wash the used blankets so they are clean for the next inmate that goes into isolation…" (KII Registered General Nurse Female Prison).*** This was contradicted by one inmate who stated ***"…we are not given detergents for cleaning…blankets are not washed and the infected person will be coughing on the blankets and diseases will continue spreading..." (FGD, Inmate, Female Prison).***

Personal protection measures for those living and working in the prison

Triangulated data supports that a range of preventative strategies and practices had been implemented to mitigate COVID-19. These included the use of hand sanitizers, regular hand washing with soap and water and the wearing of face masks. Provision of PPE for correctional staff and prisoners was irregular and inadequate, with shortages attributed to the low governmental budget allocated to prisons. Prisoners reported that the:

> ***"…prison cannot afford to provide us with PPEs… We mostly receive them from donors and they will be short supply…*** *" **(FGD, Inmate, Female Prison)***.
>
> ***"… When outside one can buy PPE but in here, we are jailed, visitors are not allowed, where would I get any PPE? I have to rely on donors and when they donate, I just get a few items... we get 20 or 38 sanitizers in a cell which is used up within a single night.***

We have one mask each and we can't even wash them..." (FGD, Inmate, Female Prison).

There were, however, mixed views between officials and prisoners with regard to the adequate provision of face masks for prisoners. Masks are reportedly ***"…provided when going to court with a medical/surgical mask and a cloth one…" (KII, Policy, Pharmacy)*** but this is inadequate as ***"…one mask is not enough, it is a challenge… They need two or three, so when one is washed, they have a spare mask to put on" (KII, Registered General Nurse, Male prison)***. One inmate reported that they ***"…were given one mask a month.. we reuse the same mask for three months…" (FGD, Male Inmate, Farm Prison)***.

ZPCS was documented to be manufacturing its own masks but only in one size, which was reportedly too small for some prisoners and not fit for purpose. Indeed, supply was outstripped by demand, as ***"…we are sewing washable masks, but we are failing to meet the demand…" (KII Policy Medical Director)***. In addition, the prison itself was manufacturing its own sanitiser, but supplies were often diverted by prisoners due to the alcohol content, despite being ***"…given two 500ml bottles of sanitizer a week amongst the six of us… Sanitizer is an alcohol, so we find that prisoners spend their day drunk from it…" (FGD, Inmate, Male Prison)***, thus, ***"…we use liquid soap in the water instead of giving them hand sanitizer which can be used inappropriately…" (KII, Registered General Nurse, Female Prison)***. However, wall-mounted liquid-soap dispensers were not readily available in communal areas (toilets, showers). Instead, water buckets with liquid soap were placed at strategic points to help with handwashing: "…***we set up water buckets, where prisoners eat and near the toilet. We encourage them to wash their hands regularly…" (KII, Registered General Nurse, Female Prison).***

Triangulation of data revealed that there was an inconsistent supply of PPE between medical and correctional staff. A comprehensive assessment regarding the need for daily and critical medical PPE and other essential supplies had been completed. These included face and medical masks, disposable gowns/aprons, gumboots, shields, hazmat suits, N95 masks and goggles for barrier nursing. Yet, for health workers, ***"…there are not enough PPE; we do not even have gowns to wear… I have to make my own at home…" (KII, Registered General Nurse Female Prison).***

Many observed that the PPE supplies for barrier nursing were reserved for COVID-19 emergencies. Yet, the laboratory in contrast had N95 masks, disposable aprons, goggles, and face shields. There were concerns around the lack of disposable gowns for correctional staff when accessing those in isolation resulting in long hours of exposure and heightening their risk vulnerability: "…***officers may not get enough PPE when working night hours and long shifts in sections with COVID patients, so we end***

up prolonging their shifts since they have been exposed already…" (KII, Officer in Charge Farm Prison). Even when gowns were provided, they were ***"…not adequate, staff who are looking after the prisoners who have COVID-19 have to attend to them without the gowns leaving them at great risk…" (KII, Officer in Charge Female Prison)***

Testing, tracing and the bridge of disease

There was general agreement across KIIs that the burden of COVID-19 disease was low in the prison complex, possibly due to lack of testing capacity. At the time of data collection, there were no active COVID-19 cases: ***"…we were lucky, not to be affected here… All the control measures were put in place to prevent the spread of COVID-19..." (KII, Officer in Charge, Male Prison)***. However, the shortage of testing capacity was questioned by one male inmate who noted that ***"…when one falls sick at night, nurses do come but they fail to test for COVID-19 … test kits are usually unavailable…this makes us doubt if they really test us for COVID…" (FGD, Inmate, Male Prison)***.

There were further identified concerns around the bridge of disease between the prison and the outer community. Concerns centred initially on the lack of medical examination of prisoners when in police custody as ***"…there is no medical examination done in police cells…" (KII, Sister in Charge, Female Prison)***. Transport to and from the prison complex was observed in KIIs and FGDs to present a significant risk to staff and detainees for exposure and transmission of COVID-19 because ***"…there is no social distancing... You should see us packed together in the trucks when accompanying prisoners on remand to court… It is even worse after court and we have all to fit in the same truck no matter how many we are… " (FGD, Correctional Officer, Female Prison)***. Another participant observed that ***"..the courts send people to prison whether the cells are full or not… we do not have the authority to send them back…" (KII Policy Administrator)***.

Some KIIs expressed concern about staff mobility acting as a bridge of exposure and transmission to COVID-19, particularly the non-resident correctional officers (about 600) who lived outside the prison complex. The prison had subsequently introduced flexi working schedules. Only the farm prison had conducted a risk assessment with staff, who were observed to be entering one at a time to comply with social distance guidelines ***"…to safeguard the health of correctional staff and reduce their risk to COVID-19 disease we introduced a week on and week off on a rotational basis…" (KII Policy Administrator).*** Procedures centred on thermo scanning of all committals and visitors on entry into the prison, however, devices were reported to be faulty at times, particularly in the farm prison. Sanitizers and registers of all visitors entering the prison were in place at all entrances and a foot bath was present at the male prison. All three sites had a dedicated area identified for immediate medical isolation of any person who presented with a fever or symptoms.

KIIs concurred that before admission all prisoners undergo a medical assessment and are screened for TB, HIV, COVID 19 and, in the case of female prisoners, pregnancy. Rapid diagnostic tests for COVID-19 were available and detainees were ***"...tested and screened on admission… we have a rapid responses team, but test kits are a challenge …" (KII Officer in Charge Farm Prison)*** as they are dependent on the availability of test kits and the time of arrival of prison vehicles from the courts. However, prisoners and correctional staff almost all agreed that COVID-19 testing was not done on admission but instead randomly. Random testing was also conducted for staff, on request or if showing symptoms. One nurse reported that ***"…staff are tested but not very often… As officers we do on request but for prisoners, we do those presenting symptoms or we do random testing…" (KII Registered General Nurse Male Prison)***. At the start of the pandemic, prisoners, ***"…would get tested five from each cell only if there are those showing signs…" (FGD Inmate Male Prison).***

Following admission assessment, prisoners were subsequently placed in isolation for seven days. There were observed difficulties by staff in KIIs in implementing these assessments and isolation procedures, particularly at night as ***"…some come in late because the courts will have rounded up late so they will not be attended to…" (KII Sister in Charge, Male Prison)***. There were difficulties in adhering to isolation protocols, with some health workers and correctional officers reporting that isolation could be as low as 7 days for prisoners due to availability of accommodation space ***"…we are saying quarantine [isolation] but before they reach seven days, we are mixing them with those that arrive from court on a daily basis…" (KII Registered General Nurse Female Prison).*** In cases where a person was suspected of having contracted COVID -19, there was consensus across all data sources that individuals (staff and prisoners) were immediately isolated for a period of 10-14 days in accordance with national guidelines indeed, ***"…once a case is identified they immediately put them in quarantine [isolation] and the patient receives all the services like that of an outside patient..." (FGD Correctional Officer Male Prison).***

Health-care staff worked on a rotational basis when COVID-19 cases were identified and isolated and staff were aware of room decontamination practices. The WHO Checklist reported that there was no documented standard operating procedure to facilitate referrals or guidance relating to the management of patients on site. However, staff were aware of national protocols adapted from global WHO technical guidance and the prison process when transferring severely ill patients to hospital. The referral system and clinical management of COVID-19 cases centred on relatively quick access to further laboratory tests and referral systems to hospitals if required. Serious cases were admitted to the COVID-19 unit within the prison hospital. All data on COVID-19 collected in the prison system was reported to be integrated in the local/national epidemiological surveillance system. Contact tracing of positive

individuals would be instituted. However, with regard to the release of individuals from prison, prison administrators were unable to check if an active COVID-19 case had a place to go to maintain isolation.

Equivalence of health care

There was consensus across all data sources that access to healthcare in prison was equivalent to that in the outside community; ***"…health care access is available anytime including weekends and afterhours in this prison…" (KII Sister in Charge Farm Prison).*** General prison healthcare was observed by all prisoners to be very accessible. Those requiring specialist care were referred to community hospitals:

> ***"…we can access these services from 9am-1/2pm. They [nurses] come to the halls every morning to see if anyone is feeling unwell…Services are available even on public holidays and weekends… Emergencies at night are attended to…" (FGD Inmate, Male Prison).***
>
> ***"… Saturday and Sunday prisoners go to the clinic. Mondays to Friday nurses just come to the centre court... At night the sick just report to the officer in charge.…"(FGD Inmate, Male Prison).***

Most staff agreed the standard of COVID-19 response was equivalent to that in the community and aligned with WHO guidelines. One exception was the timely return of COVID-19 testing results ***"… it is the same as prisons are guided by the national protocols adapted from WHO…" (KII, Policy Deputy Chief Nursing Officer)***, although, ***"…we are lagging behind…those on the outside get their COVID19 results on the same day, those in here have to wait more than 14 days…" (KII Registered General Nurse, Female Prison).***

Resourcing of health care particularly professional staff, medicines and testing kits was deemed an issue across all data sources and impacted on the standard of care. The farm prison standard of health care in particular was observed and recorded by the WHO Checklist as experiencing shortages of diagnostic equipment and medicine supplies with a ***"…huge shortage of drugs, specialist doctors, as there is only one doctor, who manages the prison…" (KII, NGO).***

In medical emergencies, and when the prison clinic experienced a medicine stock out, families were permitted during prison lockdown to bring medicine to the prison ***"…we are finding a major challenge with medication… If an inmate requires drugs that we don't have, we contact the family…" (FGD, Correctional Officer, Farm Prison).***

The availability of vaccines was observed to have added a new dimension to the mitigation of COVID-19 transmission ***"…we are vaccinating prisoners and staff and their dependents, currently we have stopped vaccinating because we are waiting for vaccines…" (KII Sister in Charge Farm Prison)***.

Contact with the outside world

Whilst lawyers were reported to be given unrestricted access to their clients, during prison lockdown, no alternative arrangements were in place to support non-contact visits to prisoners (for example telephone, Skype). It also emerged during FGDs that all land line telephones at the complex were out of order because wires had been stolen ***"…communication system is now down, telephones are not working so we hardly communicate with our relatives…" (FGD, Male Inmate, Farm Prison)***. Indeed, ***"…practically nothing happens there, they don't communicate on our behalf, they don't have airtime to phone on our behalf…" (FGD, Inmate, Male Prison).***

Discussion

At the time of writing, Zimbabwe has recorded 128, 804 cases of COVID-19, 4592 deaths and 121,653 COVID-19 recoveries (Worldometer COVID-19 Data, 2021). This unique situation assessment of the Zimbabwean prison system approach to tackling COVID-19 presents a preparedness and readiness insight on measures taken in prisons to mitigate COVID-19 in a large maximum correctional complex in Zimbabwe. It acknowledges state and prison efforts to protect prisoners and staff, despite infrastructural constraints and inadequate resourcing from government. It is imperative that the views of policy makers, staff and prisoners are documented, utilized and contribute to reframing the state of preparedness and readiness to respond not only to COVID-19 but any other infectious disease. The strengths of this assessment lie in the depth of consultation and triangulation of data across stakeholders and data sources. Limitations of the situation assessment centre on its small scale 'one prison complex' approach.

The ZPCS COVID-19 approach was aligned to international non-binding technical guidance (WHO, 2020b; WHO, 2020c; UNODC, 2020a; PRI, 2020) and the Southern African Development Community (SADC) protocols (2020) and was relatively successful in preventing a catastrophe of contagion within Zimbabwean prison walls. The assessment supports extant reporting since July 2020 regarding the significant challenges encountered by the ZPCS in protecting staff and prisoners from COVID-19 (Netsianda, 2020; Chinowaita, 2020; Muronzi, 2020; Mayhinga, 2020; Daily News 2020; Whiz, 2020l Mukwenha *et al.,* 2021). As elsewhere in the sub-Saharan African region, the COVID-19 prison system response and the monitoring of COVID-19 incidence (Chireh, and Kwaku Essien, 2020; Amnesty International, 2020; Muntingh, 2020) by the ZPCS was compromised by systemic poor prison conditions and capacity issues including inhibiting staff and prisoners to maintain hygiene standards

and adhere to social distance guidelines and to segregate those most vulnerable to severe COVID-19 disease. As in other African countries (Muntingh, 2020), the role of civil society continues to play a significant part in supporting provision of basic needs such as soap, detergent, food, bedding and now, face masks and sanitiser. Whilst stakeholders observed that COVID-19 case positivity was shared with local health intelligence, a cautionary note is that Zimbabwe, unlike other countries in the sub-Saharan Africa region (Van Hout and Wessels, 2021), does not publish exact figures pertaining to COVID-19 positivity (active or recovered) the prison system, nor does the ZPCS track cases on release from prison.

COVID-19 has amplified the need to address prison congestion, outdated and inadequate prison infrastructure, and the insufficient level of government resourcing for prisons and prison health in Zimbabwe. Compassionate or early release of detainees is a critical component of the COVID-19 response, alongside upholding the occupational health rights of those working in the prison environment and the fundamental human rights of those deprived of their liberty relating to mitigation of disease transmission and basic standards of detention. In support of calls for prison reform in the sub-Saharan African region (Muntingh, 2020; Katey *et al.,* 2021; Van Hout and Wessels, 2021), COVID-19 may act as a leverage to improve overall criminal justice system functioning, prison accommodation and environmental health standards and, ultimately, enhance the conditions for those who live and work in Zimbabwean prisons to an acceptable level. The sufficient equipping of medical units and isolation accommodation in the Zimbabwean prison system is of paramount importance for future contagion containment. Equally important are the processes and capacity to ensure social distancing is achievable and that both staff and prisoners have sufficient PPE (Katey *et al.,* 2021; Van Hout and Wessels, 2021). The continuation of traffic of remand detainees to and from court, the inability to maintain social distance on transport, and the failure to screen intake at night provided a route to a serious spread of disease within prison confines. Whilst the bridge of disease transmission between prison and the community is of grave concern in Africa (Van Hout, 2020a), the ZPCS did attempt to mitigate risk by thermo scanning all entries and by rotating staff on a weekly basis.

The situation assessment has yielded several contradictions. Although there is a mandatory policy on medical examination on admission, this was inconsistently conducted and a gap between policy and practice was observed. Collaboration and communication between ZPCS and Zimbabwe Republic Police (ZRP) could be further strengthened to prevent transmission of contagious diseases from police cells into prisons. Detainees and committals were not tested for COVID-19 on admission, but thermo screened and isolated for an indeterminate timeframe based on prison holding capacity. Random COVID-19 testing for prisoners was in place but based on symptomatology in cells. There was a discrepancy in provision of COVID-19 training between medical and correctional staff and prisoners. The lack of contact with outside media sources was observed to contribute to a lagged response and

weaker understanding of the disease. Whilst access to medical care was deemed good and equivalent to that in the community, stakeholder ccontradictions emerged regarding the standard of basic healthcare provisions such as medicines, soap, detergent and both daily and critical medical PPE. Correctional staff were not protected when engaging with prisoners detected as COVID-19 positive and in isolation accommodation. Also of interest is the observation by staff that legal representatives were permitted access to the prison during the banning of prison visits, when the complete opposite is cited in the press (Lawyers for Lawyers, 2020; Zimbabwe Peace Project, 2021). There was consensus that the ZPCS did not provide alternative methods of communication for prisoners.

Conclusion

Whilst the health of prisoners is usually by default a neglected political issue in Africa (O'Grady, 2011), COVID-19 has amplified the need for governments to address the ill-resourced criminal justice system and congested prison infrastructures. Decongestion schemes (early releases, amnesties, pardons) are a useful first step in countering high capacity rates in African prisons during COVID-19. Zimbabwe continues to operate at 120% capacity, caused in part by substantial pre-trial detention rates (18.6%) (World Prison Brief, 2021). The importance of a strategic public health and human rights based approach to protect those living and working in prisons from disease cannot be underestimated (Amon, 2020; Badu *et al.,* 2020; Kinner *et al.,* 2020; Nweze *et al.,* 2020; Van Hout, 2020a;b;c;d). Our work is intended to support strategic public interest litigation, leverage for prison and justice reform, enhance health surveillance across prisons and communities and support the generation of a strategic disease mitigation response for future disease outbreaks. Prison health surveillance and prison health research is historically under resourced and underdeveloped in the region (Mhlanga-Gunda *et al.,* 2020), which compounds the challenges of the COVID-19 response efforts (Van Hout and Wessels, 2021). Further independent oversight of the Zimbabwean prison system operations and standards of care will support continued efforts to provide the minimum standards of care, uphold the rights of prisoners and staff, mitigate against disease and chronic ill-health and ultimately protect those living and working in its prisons. Our work and our partnership activities are aligned to a small but growing evidence base on prison system functioning during COVID-19.

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Table 1: Summary of the WHO Checklist and expected relevance to stakeholders.

Thematic Area	Aim of the Assessment	Relevance ✓ = relevant ✓✓ = highly relevant	
		Providers	Policy Makers
Human Rights	To ensure that good principles and practice in prisoner treatment and prison management, as indicated by the United Nations Standard Minimum Rules for the Treatment of Prisoners (Mandela Rules), are adhered to in the presence of a possible epidemic outbreak. To remind Member States that protective measures must never result in inhuman or degrading treatment of persons deprived of their liberty.	✓	✓✓
Risk assessment and management	To prevent COVID-19 from entering prisons and to manage the associated risks.	✓✓	✓
Referral system and clinical management	To ensure that identified cases are appropriately managed and receive adequate health care.	✓✓	✓✓
Contingency planning	To check that contingency planning is in place and adequately communicated.	✓	✓✓
Training	To evaluate if prison staff are adequately trained to deal with COVID-19.	✓✓	✓
Risk Communication	To assess coordination between teams involved in risk communication and to evaluate if key messages are clearly communicated in the prison setting.	✓	✓✓
Prevention Measures	To assess prevention and control facilities in prison.	✓	✓✓
Case management	To ensure that all cases are appropriately managed.	✓✓	✓

Table 3: Participant Profile

KII	ZPCS Nehanda HQ	Male Prison	Female Prison	Farm Prison	Total
Policy Makers	9	0	0	0	9
Officers in charge	0	1	1	1	3
Frontline Health Workers (*breakdown below)*	0	5	3	1	9
• Sister in Charge • Registered General Nurse • Resident Medical Doctor who covers the full complex • Environmental Health Technician		1 2 1 1	1 2	1	
Social Welfare Officers	0	1	1	0	2
NGOs	0	0	0	0	3
Total number of participants					*N* = 26
Focus Group Discussions (FGD)		**Male Prison**	**Female Prison**	**Farm Prison**	**Total**
Correctional Officers 3 FGD		6	6	6	18
Male Prisoners 4 FGD		12	0	12	24
Female Prisoners 2 FGD		0	12	0	12
Total number of participants					*N* = 36

Table 2 Supplemental File

Table 2: The WHO Checklist Results * *WHO Checklist question in bold and responses to additional detailed questioning.

WHO Checklist Questions	Response for Each Prison						Additional Comments
	Maximum		Female		Farm		**KEY**: MA – Maximum Prison for Males FE – Female Prison FA – Farm Prison
	Yes	No	Yes	No	Yes	No	
A Human Rights Relevance Providers ✓ Policy-makers ✓✓							
Aim: To ensure that good principles and practice in prisoner treatment and prison management, as indicated by the United Nations Standard Minimum Rules for the Treatment of Prisoners (Mandela Rules), are adhered to in the presence of a possible epidemic outbreak. To remind Member States that protective measures must never result in inhuman or degrading treatment of persons deprived of their liberty.							
A1. Are the standards of health care available for people in prison similar to those in the outside community?	✓		✓			✓	There was a shortage of diagnostic equipment and medicines at FA
A2. Are basic living standards in prison being observed (enough space, fresh air, light and sanitation)?		✓		✓		✓	This was not observed, cells were overcrowded, not well ventilated, well lit. Water was not consistently available across all three sites. Hand hygiene stations were not observed during the assessment. The bucket system was in use at MA and FA prison
A3. Are people in prison allowed at least one hour of outdoor activities per day?	✓		✓		✓		Most of the time was spent in the courtyard (MA/FE) or out out in the farm working all day.
B. Risk assessment and management Relevance Providers ✓✓ Policy-makers ✓							
Aim: To prevent COVID-19 from entering prisons and to manage the associated risks.							
B1. Is there a detailed registry of all people moving in and out of prison?	✓		✓		✓		
B2. Are risk assessments undertaken on all people entering the prison (visitors, staff, new arrivals, etc.)?	✓			✓		✓	Risk assessments were reported to be carried out at the MA however, no tool or history was recorded but instead thermo-scanning was used across all three sites. However, at the FA the thermo-scan was out of order.
B3. Are such assessments carried out in the case of prison staff entering the facility, at each access?	✓		✓		✓		Only thermo-scanning was used across all three sites but at the FA the thermo-scan was out of order.
B4. Is there a dedicated area for these risk assessments?		✓	✓			✓	
• Is space of at least 1 metre between all individuals maintained during the screening process.		✓		✓		✓	Although at FA staff are said to arrive on duty one at a time
B5. Is information on symptoms over the previous seven days collected as part of this risk assessment?		✓		✓		✓	
• Is an algorithm for rapid implementation of source control measures in place in the event that a staff member, visitor or detainee is identified as symptomatic?		✓		✓		✓	Not documented anywhere across all prisons
B6. Is information collected on recent contact with possible cases (over previous 14 days)?		✓		✓		✓	
B7. Is information on travel restrictions and emergence of symptoms provided to prison staff so that they can inform the designated health-care officer?		✓		✓		✓	
• Is there a communication process with local public health authorities?	✓		✓		✓		The process not documented in any prison but staff across all sites indicated they knew of the communication process.
B8. Is advice on contact restrictions and presence of symptoms provided to visitors well in advance of their arrival at the prison?		✓		✓		✓	
B9. Are asymptomatic individuals prevented from visiting if they meet any of the criteria for exclusion (i.e., contact with symptomatic person or travel history that indicates risk)?	✓		✓		✓		
B10. Are symptomatic visitors excluded from visits?	✓		✓		✓		

B11. Has some arrangement to allow non-contact visits (e.g., Skype or phone) been set up?		✓		✓		✓	Across all sites, the Skype facility was not available, land phone access was only for emergencies and if working.
• Are people with higher risk of severe complications from COVID-19 (older individuals and those with underlying conditions such as cardiovascular disease, diabetes mellitus, immunosuppression) provided with medical masks and accommodated in separate cells?		✓		✓		✓	At MA there was limited space, so separate accommodation was impossible. There is no separated holding capacity at the FA. However, separation at the FA was possible because the facility was not full to capacity because of presidential amnesty.
C. Referral system and clinical management Relevance Providers ✓✓ Policy-makers ✓							
Aim To Ensure that identified cases are appropriately managed and receive adequate health care.							
C1. Do suspected cases have quick access to laboratory tests?	✓		✓		✓		
C2. Do laboratory-confirmed cases have access to isolation and management (either onsite or in a medical facility)?	✓		✓		✓		
• Is there a dedicated area identified for immediate medical isolation of any person who presents with a fever or symptoms?	✓		✓		✓		
C3. Do contacts of laboratory-confirmed cases have access to places for adequate quarantine according to national protocols?		✓		✓		✓	This was unknown across each site
C4. Do health-care teams dealing with the collection of biological samples (including respiratory samples, stools and blood) have access to the necessary preventive protective equipment (PPE) as described in WHO prison guidance?		✓		✓		✓	Gumboots, hazmat suits were not consistently available at the MA and at the FA gumboots, shields and E-95 medical masks were not consistently available.
C5. Are prison authorities made aware of the hospitals (e.g., respiratory support or intensive care units) to which they can transfer those requiring admission?	✓		✓		✓		This was not written anywhere but staff indicated they knew of these hospitals
C6. Are there clear criteria for transferring severely ill patients to hospital?	✓			✓		✓	This was not written anywhere but staff indicated they knew of the criteria at the MA site
C7. Are there protocols in place to manage patients onsite (if they do not meet the criteria for transfer to hospital)?	✓			✓		✓	This was not documented anywhere but staff indicated they knew of the protocol at the MA site
C8. Are there any measures in place to avoid concentration of people in prison (e.g. food delivered to cells)?	✓			✓		✓	There was only one point for collection of food, but staff indicated they knew of measures at the MA site
D. Contingency planning Relevance Providers ✓ Policy-makers ✓✓							
Aim: To check that contingency planning is in place and adequately communicated.							
D1. Are there any continency plans for managing the impact of an infectious disease outbreak in prisons? **If yes to D1:** • **Have contingency plans been shared with prison administrators?** • **Have contingency plans been shared with prison staff?** • **Have contingency plans been shared with people in prison?**	✓			✓	✓		In both the MA and FA there was a taskforce in place but across all three sites there was no documented contingency plan documented.
D2. Was a national comprehensive risk assessment of the prison system conducted?	✓			✓	✓		No risk assessment conducted at the FE site; at both MA and FA an assessment was said to have been conducted but no report was made not available
D3. Was an assessment of the need for PPE and other essential supplies carried out?	✓			✓	✓		No assessment was conducted at the FE site; at both MA and FA an assessment was said to have been conducted but no report was made not available
D4. Has sufficient PPE for use by prisons been available during the COVID-19 pandemic?	✓			✓		✓	See H4.
E. Training Relevance Providers ✓✓ Policy-makers ✓							
Aim: To evaluate if prison staff are adequately trained to deal with COVID-19.							
E1. Have prison staff received any training on basic COVID-19 disease knowledge, including pathogen, transmission route, signs and clinical disease progression?		✓		✓		✓	At both MA and FA sites, only medical staff were trained, the rest of the correctional staff awareness and knowledge was disseminated during parade. At the FE only a few Correctional Officers were trained.
E2. 1 Have prison staff received any training on hand hygiene practice?		✓		✓		✓	At all sites only medical staff received training

E2. 2. Have prison staff received training on respiratory etiquette?		✓		✓		✓	At all sites only medical staff received training
E3. Have prison staff received any training on appropriate use and disposal of PPE?		✓		✓		✓	At all sites only medical staff received training
E4. Have prison staff (including cleaning personnel) received any training on environmental prevention measures, including cleaning and disinfection?		✓		✓		✓	At all sites only medical staff received training and the prisoners do their own cleaning
E5. Has any action been taken to disseminate information broadly among people in prison, visitors and staff family members?	✓		✓		✓		Yes, however, see F4 regarding visitors
• Is adherence to prevention policies and procedures by all people observed all the time?	✓			✓		✓	This is was found to be inconsistent across FE and FA site
F. Risk communication Relevance Providers ✓ Policy-makers ✓✓							
Aim: To assess coordination between teams involved in risk communication and to evaluate if key messages are clearly communicated in the prison setting.							
F1. Is there a communication strategy/office to deal with public and risk communication about disease outbreaks in prison?		✓		✓		✓	A strategy was not documented
F2. Is there a mechanism to gather and integrate the risk perception of people in prison, staff and visitors in strategy/message development?		✓		✓		✓	
F3. 1 Are key messages communicated in a clear, accurate and relevant manner about preventive measures to staff especially hand hygiene practices	✓		✓		✓		
F 3.2 Are key messages communicated in a clear, accurate and relevant manner about preventive measures to staff especially respiratory etiquette?	✓		✓		✓		
F 3.3. Are key messages communicated in a clear, accurate and relevant manner about preventive measures to people in prison especially hand hygiene practices?	✓		✓		✓		
F 3.4. Are key messages communicated in a clear, accurate and relevant manner about preventive measures to people in prison especially hand respiratory etiquette?	✓			✓	✓		At both MA and FA, this was directed only at medical staff, none evidenced at the FE
F3.5. Are key messages communicated in a clear, accurate and relevant manner about preventative measures to visitors, especially hand hygiene practices and respiratory etiquette?		✓		✓		✓	All prison visits were banned since the outbreak of the pandemic at all sites apart from lawyers and in emergencies
F4. Are key messages communicated in a clear, accurate and relevant manner to people in prison, staff and visitors about disease signs and symptoms, including warning signs of severe disease requiring immediate medical attention?	✓		✓		✓		Across all sites, messages to staff, prisoners, and legal practitioners accessing prisons.
F5. Is information on COVID-19 accessible through relevant channels and tools and as conveyed by trusted influencers/mediators?	✓			✓		✓	Information was accessible at the MA and FA to Peer educators but not at the FE
F6. Are the items detailed in F2–4 available in formats that take account of possible language and cultural barriers (versions in translation and at different literacy levels, including versions using pictograms only) and disabilities?		✓		✓		✓	Information not translated nor provided in brail.
G. Prevention measures Relevance Providers ✓ Policy-makers ✓✓							
Aim: To assess prevention and control facilities in prison.							
G1. Are there protocols in place to manage staff who meet the definition of a suspected or confirmed case?	✓		✓		✓		
• Are staff tested and treated according to National Protocols?	✓		✓		✓		
• Are prison staff (prison officers and health-care providers) with signs and symptoms of COVID-19 allowed to come to work?		✓		✓		✓	
G2. Are there routines and facilities that allow hands to be washed with soap and water and dried using single-use towels (or cleaned with alcohol sanitizer, with at least 60% alcohol)?		✓		✓		✓	While there were hand sanitizers water supply was inadequate water and soap for prisoners not consistently available
G3. Are wall-mounted liquid-soap dispensers available in communal areas (toilets, showers)?		✓		✓		✓	Across all sites these were always inadequate not consistently available

G4. Are paper towels available in these areas?		✓		✓		✓	Across all sites these were always inadequate not consistently available
• Are approved detergent and disinfection solutions for use on environmental surfaces available or for noncritical medical equipment available?		✓		✓		✓	Across all sites these were always inadequate not consistently available
G5. Are there routines and facilities in place that allow appropriate physical distancing?		✓		✓		✓	
G6. Are there medical masks available for confirmed cases or suspected cases with symptoms (e.g. a cough)?	✓		✓		✓		Supplies were insufficient and inconsistent
G6.1 If yes to G6, are people informed about the proper use of such masks, including disposal procedure?	✓		✓		✓		People are not always informed regarding disposal at the FE site
G7. Are there facilities that allow any person in prison suspected of having COVID-19, based on risk assessment, to be placed in quarantine, in single accommodation, according to national protocols?	✓		✓		✓		
G8. When isolated, are people in prison medically observed at least twice a day (including checking and recording of symptoms and temperature)?	✓			✓	✓		
G9. Are staff with COVID-19 symptoms encouraged to stay at home and seek medical attention as necessary?	✓		✓		✓		
H. Case management Relevance Providers ✓✓ Policy-makers ✓							
Aim: To ensure that all cases are appropriately managed.							
H1. Are data on COVID-19 that are collected in the prison system integrated in the local/national epidemiological surveillance system?	✓		✓		✓		
H2. When COVID-19 cases are identified, are they isolated and placed in single accommodation, according to national protocols? **H2.1 If no to H2, are there options to group patients with confirmed infections in one place?**	✓		✓		✓		
H3. If suspected cases are identified, is a health-care professional designated to care for them exclusively?		✓		✓		✓	At all sites, staff rotate to reduce risk
H4. Do staff use PPE when caring for suspected cases? • Do staff working with patients suspected of having COVID-19 have access to the required personal protective equipment (PPE)?	✓		✓		✓		It is noted these are always inadequate not consistently available.
• Is eye protection equipment (e.g. goggles or face shield) available?		✓		✓		✓	
• Are medical masks and disposable gowns (or aprons) available?		✓		✓		✓	It is noted these are always inadequate not consistently available.
• Are disposable gloves available?	✓		✓		✓		
• Are biohazard waste bags and appropriate sharps containers available?		✓		✓		✓	It is noted these are always inadequate not consistently available.
H5. Are there facilities (kitchen, bathroom, etc.) designated exclusively for suspected cases? **H5.1 If no to H5, are facilities used by suspected cases disinfected before they are used by others?**	✓		✓		✓		
H6. If a suspected case is transferred, are there procedures in place to ensure that the room is not used before it has been appropriately decontaminated?		✓		✓		✓	This procedure was reported to be followed but not documented
H7. When a person is released from prison, do prison administrators check if an active COVID-19 case (or the contact of a COVID-19 case) has a place to go to maintain quarantine?		✓		✓		✓	There was no documented procedure in place at both the MA and FE and it the procedure was unclear at the FA
H8. When a released individual is transferred to a hospital or medical facility while still in quarantine, has the receiving facility been notified of the person's status (confirmed or suspected)?	✓		✓		✓		

*Questions not in bold were additional questions used to assist the examination