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Mhlanga-Gunda, R, Kewley, S, Chivandikwa, N and Van Hout, MC

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Prison conditions and standards of health care for women and their children incarcerated in Zimbabwean prisons.

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Abstract

Purpose The Sub Saharan (SSA) region remains at the epicentre of the HIV epidemic and disproportionately affecting women, girls and prisoners. Women in prison are a minority group and their special health needs relating to gender sensitivity, reproductive health, their children, and HIV/AIDs are frequently neglected.

Design/methodology/approach A qualitative study using focus group discussions and key informant interviews explored the perspectives of women in prison, correctional officers, correctional health professionals, and non-governmental organisations around prison conditions and standards of health care whilst incarcerated in a large female prison in Zimbabwe. Narratives were transcribed and analysed using thematic analysis.

Findings Three key themes emerged: '*Sanitation and hygiene in the prison*'; '*Nutrition for women and children*' and '*Prison based health services and health care*'. Divergence or agreement across perspectives around adequate standards of sanitation, hygiene, quality and adequacy of food, special diets for those with health conditions, access to healthcare in prison and the continuum of care across incarceration and community are presented.

Practical implications Understanding prison environmental cultures which shape correctional staff understanding and responsiveness to women in prison, environmental health conditions and access to healthcare is vital to improve conditions and continuum of care in Zimbabwe.

Originality/value Policy and technical guidance continues to emphasise the need for research in SSA prisons to garner insight into the experiences of women and their children, with a particular emphasis on the prison environment for them, their health outcomes and healthcare continuum. Our unique study responded to this need.

Key Words

Prison, sexual and reproductive health, women, Zimbabwe

Introduction

The Sub Saharan (SSA) region remains at the epicentre of the HIV epidemic with two thirds of all people infected with HIV living in this region, and disproportionately affecting women (UNAIDS, 2014, Telisinghe *et al.*, 2016). Women and girls, and imprisoned people are disproportionately infected by HIV (UNAIDS, 2014). There is a concentration of HIV/AIDS amongst those who are incarcerated (UNODC/UNAIDS/WB, 2007; Todrys *et al.*, 2011; UNODC, 2017, 2018). Women in prison in the SSA region are a minority group and their special health needs relating to gender sensitivity, reproductive health, their children, and HIV/AIDs are neglected (WHO, 2009; Van den Bergh *et al.*, 2011; Dolan *et al.*, 2016; Van Hout and Mhlanga-Gunda, 2018, 2019a). HIV prevalence of women in prisons is higher than for men because of sub-standards in hygiene, risk of mother to child HIV transmission whilst in prison, limited access to sexual and reproductive health (SRH) services and interruption of the necessary health services during internment (UNODC, 2017). This creates a public health challenge centring on the sexual and reproductive health (SRH) care needs of women in prison who constitute a vulnerable HIV/AIDS risk population, and experience dual disadvantage according to gender and incarceration, and whose special SRH needs are neglected in prisons. Children incarcerated with their mothers in SSA prisons are a particularly vulnerable group (Ackermann, 2014; Solomon *et al.*, 2014) often described as “*hidden victims*”, with “*their reality and circumstances related to incarceration seldom recognised*” (Schoeman and Basson, 2009) Adequate health services in prisons for women (and their children) however are required under the Sustainable Development Goals (SDG 3, 5, and 16), as well as under the ‘*Nelson Mandela Rules*’ covering the UN Standard Minimum Rules for the Treatment of Prisoners (A/RES/70/175), Standard Rules for Non-Custodial Measures (Tokyo Rules) and the Bangkok Rules for Female Prisoners (A/RES/65/229). In the SSA region, the Southern African Development Community (SADC) Minimum Standards for HIV in Prisons have mandated minimum requirements for prisons to be able to effectively prevent, treat and control HIV/AIDS in prisons.

Prisons and other closed settings in Zimbabwe

Deaths from disease in Zimbabwe's prisons have increased since the late 1990s due to the country's economic decline and political instability and resultant government corruption (Alexander, 2009). There are 46 main prisons in Zimbabwe with an official capacity of 17,000, but with a prison population total (including pre-trial detainees / remand prisoners) of 19 382 and a prison population rate of 114 (per 100,000 of national population) as at April 2019 (see <https://www.prisonstudies.org/country/zimbabwe>). HIV prevalence in Zimbabwean prisons continues to be a public health and prison health challenge, with prevalence among those imprisoned (28% in 2011) estimated to be double that of the general population (13.8%) (Zimbabwe Prison and Correctional Services (ZPCS), 2011; ZimSTAT, 2016). The Zimbabwean prison population is predominantly male, but with HIV prevalence higher among females (39%) than male (26.8%) (see ZPCS 2011; Ministry of Health and Child Care/National AIDS Council, 2015). This is reflective of the general population prevalence in Zimbabwe, and with most imprisoned people acquiring HIV prior to incarceration (Machingura *et al.*, 2018). Whilst the prison population itself in Zimbabwe contains high numbers of HIV infected and vulnerable individuals, the environment is also conducive to other infectious disease such as tuberculosis (TB), hepatitis (A,B,C) and sexually transmitted infections (STIs) which can significantly increase vulnerability to HIV acquisition. Multi-drug resistant TB is also on the rise (Alexander, 2009), as it is elsewhere in SSA prisons (Centers for Disease Control and Prevention (CDCP), 2003; Habeenzu *et al.*, 2007)

In 2017, the Zimbabwe Country Policy and Information Note reported that whilst prison conditions in Zimbabwe are poor, they are not systematically inhuman and life-threatening as to meet the high threshold of Article 3 of the European Convention on Human Rights. The ZPCS struggles to provide adequate food and sanitary conditions (United States State Department (USSD), 2016). The prison environment has been described as deplorable (Alexander, 2009) and underpinned by overcrowding due to lengthy pretrial detentions, outdated infrastructure and judicial backlogs (Freedom House, 2016), and inadequate and poor quality nutrition, food shortages, inadequate lighting and ventilation, insufficient mattresses, blankets, warm clothing, sanitary supplies, and hygiene products, poor hygiene and sanitation, lack of blankets, uniforms, winter clothing and limited

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3 access to clean water (Alexander, 2009; USSD, 2016; UNODC, 2017; Van Hout and Mhlanga-Gunda,
4 2018, 2019a:b). Physical and sexual abuses are common. This fuels vulnerability to infectious
5 diseases and creates ideal conditions for transmission. Previous studies have reported that prisoners
6 have access to very basic medical care, with a clinic and doctor at every facility, with testing for HIV
7 only when requested, and with care compromised by lack of specialised clinical staff and medicines
8 (USSD, 2016; Van Hout and Mhlanga-Gunda, 2018, 2019a; The Zimbabwe Human Rights, 2018).
9 Prisoners also suffer from routine but treatable medical conditions such as hypertension, TB, diabetes,
10 asthma, and respiratory diseases, generally exacerbated by the environmental conditions and irregular
11 supplies of medicines (Van Hout and Mhlanga-Gunda, 2018, 2019a:b).
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24 *The Female Prison system in Zimbabwe*

25 Zimbabwe has only three fully fledged female prisons in the country – Chikurubi, Shurugwi and
26 Mlondolozhi, with all the other prisons having a section set aside for women. 2.4% of the total prison
27 population are female prisoners. According to USSD in 2016,
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32 *'NGOs reported that female prisoners generally fared better than did male prisoners.*
33 *Authorities held women in separate prison wings and provided for women guards.*
34 *Women generally received more food from their families than did male prisoners. The*
35 *several dozen children under age three living with their incarcerated mothers, however,*
36 *were required to share their mothers' food allocation. NGOs were unaware of women*
37 *inmates reporting rapes or physical abuse, which were more common among the male*
38 *inmate population. Prisons, with support from NGOs, provided sanitary supplies for*
39 *women. Officials did not provide pregnant and nursing mothers with additional care or*
40 *food rations, but the ZPCS solicited donations from NGOs and donors for additional*
41 *provisions. The prisons do not support post- natal care.'*
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54 Despite SADC minimum standards and international mandates, current provisions for women in
55 prison and their children in Zimbabwean prison systems fall far short of these equivalence care
56 standards according to a 2017 UNODC evaluation conducted by authors (UNODC, 2017).
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3 There have been some encouraging shifts in government attention. In May 2016, in an
4 attempt to reduce overcrowding, the President pardoned 2,000 imprisoned people who were
5 subsequently released. In March 2019, the Zimbabwean government moved to amend the Prisons Act
6 in order to incorporate international norms and standards relating to prison administration as well as
7 aligning the domestic law with the national constitution. In April 2019, there was a call on
8 government by the ZPCS to commit all women inmates to the open prison system. However, in 2019,
9 there is little strategic information available around women's experiences and their prison health care
10 needs in Zimbabwe (UNODC, 2017; Van Hout and Mhlanga-Gunda, 2018, 2019a). Research and
11 surveillance activity is low (Mhlanga-Gunda *et al.*, 2019). Policy and technical guidance continues to
12 emphasise the need for additional research to garner insight into the experiences of female prisoners
13 and their children, with a particular emphasis on SRH and the factors contributing to the transmission
14 of HIV in Zimbabwean prisons (Van Hout and Mhlanga-Gunda 2018, 2019a:b; Machingura *et al.*,
15 2018; UNODC, 2019). Hence, our study aimed to respond to this need, by investigating the current
16 health inequalities of female prisoners, and gain an enhanced understanding of their experiences of
17 prison health, healthcare continuum in prisons, and in particular, HIV Prevention, Treatment, Support
18 and Care (PTC&S) in Zimbabwean prisons.
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39 **Methods**

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41 A qualitative study using focus group discussions (FGD) and key informant interviews (KII) explored
42 the perspectives of women in prison, prison hereafter correctional officers (ground level wardens),
43 correctional health professionals, and non-governmental organisations around prison conditions and
44 standards of health care whilst incarcerated. Structured KII and FGD guides were developed based on
45 a series of scoping reviews on health situation and standards of care in SSA prisons conducted by
46 members of the team (Van Hout and Mhlanga-Gunda, 2018, 2019a:b). Open ended question guides
47 that allowed for probing through follow on questioning were used for data collection. FGD questions
48 were designed to explore female correctional officers and women in prison's experiences around
49 awareness of human rights, SRH and HIV/AIDS, enablers and barriers to accessing SRH and HIV
50 PTC&S services, attitudes and stigma, and unique SRH health needs of women when incarcerated.
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3 KII questions were designed to assess awareness, knowledge, attitudes and practices around human
4 rights and prison based SRH and HIV PTC&S policies; determine the level of availability and
5 accessibility of SRH services for women; and document current SRH service delivery gaps.
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9 Ethical approval was granted by the University Research Ethics Committee (UREC),
10 Liverpool John Moores University United Kingdom, the Medical Research Council of Zimbabwe
11 (MRCZ), and Research Council of Zimbabwe (RCZ). Copies of ethical clearances from both MRCZ
12 and RCZ were shared with policy and health management personal from the Zimbabwe Prisons and
13 Correctional Services (ZCPS). It was required that all participants who were willing to engage had to
14 provide informed written consent. A total of 24 women and 24 correctional staff were conveniently
15 sampled to partake in FGD on the day of access to the prison. Mobilization and recruitment was
16 carried out by a social worker and sister in charge of the prison clinic. Those excluded from the study
17 included inmates under 18 years of age, those having a diagnosis of mental illness, and those
18 unwilling to voluntarily participate and give consent. To ensure information rich cases with
19 knowledge and experience on prison health operations, 13 key informants (prison health
20 professionals, and non-governmental organisations supporting in the provision of healthcare in the
21 correctional facility) were identified by the on a listing provided by a senior officer in the health
22 directorate were purposively sampled for interview. These individuals were identified as being at
23 senior management, with knowledge of health policies in prisons, having experience in prison health,
24 and having worked in the Chikurubi female prison for three months or more prior to the study. The
25 participant profile is illustrated in **Table One**.
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47 Insert **Table One** 'Participant Profile' about here
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51 KII were between 30-45 minutes in duration (n=13). FGD were between 60-120 minutes in
52 duration and were composed of six participants per group, with four conducted with women in prison
53 (n=24), and four conducted with prison correctional officers (n=24). Women's FGD were facilitated
54 in two indigenous local languages (*Isindebele and Shona*). After the data was transcribed in these
55 local languages, transcriptions were then translated back into English ensuring original meaning was
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not lost during translation. For prison correctional officers and key informants, data was collected and transcribed in English.

Data was analysed using Thematic Analysis (TA) (Braun *et al.*, 2019). This approach was deemed appropriate to both develop an understanding of the health situation and standards of SRH care for women incarcerated in Zimbabwean prisons, from diverse perspectives across the prison eco-system ranging from those incarcerated to those at senior levels; as well as providing the means to triangulate themes across these groups. TA enables examination of experiences from a range of multifaceted perspectives, ensuring particular and unique realities, and meanings, are incorporated along with an appreciation of complex social contexts and challenges faced by participants (Nowell *et al.*, 2017; Braun and Clarke, 2006; Clarke and Braun, 2018). To ensure scientific rigour, a quality framework for analysis was used (Braun and Clarke, 2006). This involved five key steps: 1) reading and rereading the transcription, noting early ideas; 2) coding in a systematic and logical manner using a data driven approach supported by NVivo version 12, and paying attention to interesting concepts and ideas within the data; 3) organisation of codes into corresponding groups using an iterative process in developing themes and sub themes; 4) refining and reviewing of themes by the team as a collective in terms of internal homogeneity and external heterogeneity, examination of coherence of patterns across themes and development of a thematic map; and 5) final clear definition and naming of themes, with data extracts representing and articulating the essence of the theme, and overall analysis.

Results

Three key themes emerged from the content analysis of data, and include: '*Sanitation and hygiene in the prison*'; '*Nutrition for women and children*' and '*Prison based health services and health care*'. These, along with their subordinate themes are detailed in supplemental **Table Two**. To demonstrate findings from the triangulation process of the analysis, that is, where findings across respective groups either converged, were complementary, or where there was discrepancy (Farmer *et al.*, 2006; Erzerberger and Perin, 1997; Foster, 1997) an individual graph summarising the quantity of

code frequency, by each group, and each superordinate theme is presented as illustration (see **Graphs One to Three**).

Sanitation and hygiene in the prison

Insert **Graph One** *'Divergent opinions around standards of sanitation and hygiene in the prison'* about here

The theme describes views and issues pertaining to standards of sanitation and hygiene in the prison.

Divergent opinions across groups are illustrated in **Graph One**. Women in prison referred to their concerns regarding the health consequences of a lack of access to clean safe water. Intermittent electricity affected water pumps, and it was widely reported by correctional staff and key informants providing health services in the prison and the Officer in Charge that *"water is not available 24/7 due to power outages"* (KII-H), because, *"when we have power outages water cannot be pumped into the storage tanks"* (KII-OiC). This affected supply, and also quality and safety of drinking water for both staff and inmates. Divergent opinions around water safety and availability were observed across groups (see **Graph One**). Correctional staff at ground levels stated even though there may be delays *"tanks are always full. Water is available to inmates 24/7"* (FG3- CS), with key informants providing health and social work services claiming water was safe and of good quality because *"it is tested once a year for safety"* (KII-SW) and that *"we do have storage tanks...our water is relatively safe I think"* (KII-H). One senior health professional noted this issue within the broader country context and highlighted, *"it is important to note that Harare and the whole country have water adequacy problems"* (KII-SHO). Given that the supply of water is erratic at the country level, some correctional health professionals described preparing for periods of shortage;

"when we see water trickling, we know Zimbabwe National Water Authority ZINWA water is available and we also harness for our own domestic use" (KII-SHO).

Strategies to stock pile water were adopted across the prison, with women in prison reporting, *"when there is no electricity, we use buckets to fetch water from other unsafe sources, such as shallow wells"* (FG1-WiP). Correctional staff supported this view, noting how;

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3 *“inmates are also encouraged to fill in their plastic buckets when the water is available*
4 *for use when power goes off” (FG1-CS).*

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7 Some commented on these alternative water sources and said *“occasions we get water from*
8 *the farm and we also get water from tanks, but we do not know its source”* (FG1-WiP). Yet, divergent
9
10 opinions around the safety of the water by women in prison and the contradictory views of
11
12 correctional staff and some health professionals were observed (see **Graph One**). Several women in
13
14 prison commented;

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16
17 *“unprotected pond water sometimes has dead frogs in it and the water is very itchy*
18 *because we use it for bathing or even drinking”* (FG2-WiP) and *‘there is an uncovered*
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20 *tank and a shallow well that we have to use have to fetch water from in case of water*
21
22 *shortages. Sometimes it appears as if there is something that died in the water as the*
23
24 *water appears oily”* (FG3-WiP).

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28 Even though women in prison were aware of the consequences of drinking potentially unsafe water
29
30 they were all of the view *“that’s the only option we have”* (FG4-WiP). Hygiene and sanitation
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32 appeared compromised due to water issues (availability, source and safety). They discussed the
33
34 impact of intermittent water supply on the functioning of toilets. Several women described how their;

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37 *“toilets are always a mess...can you imagine if one is having her menstruation and there*
38
39 *is no water and you visit the toilet after they have been there before you”* (FG4-WiP).

40
41 They described how women are housed in areas where *“no water goes directly to the toilets so toilets*
42
43 *are in a terrible state”* (FG4-WiP). In contrast, one correctional officer claimed: *“the conditions in*
44
45 *toilets are fine except that the toilets are old”* (FG3-CS).

46
47 One of the significant health concerns raised by both women in prison and prison health
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49 professionals was the lack of basic sanitary products needed to maintain minimal levels of hygiene to
50
51 support adequate sanitation. Insufficient provision of soap and detergent by prison authorities and
52
53 NGO donors were regularly described across FGD and KII. Women in prison described that while
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55 they;

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58 *“get detergents such as basic soap...for the cleaning of toilets, we get dip*
59
60 *[BLEACH)...at times we may get sodium hypochlorite if we are lucky”*

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3 These were viewed by them as “*not adequate and there is inconsistent supply from both government*
4 *and NGO donors*” (FG1-WiP). During a KII, the Officer in Charge described the inadequacy of
5 cleaning detergents and how “*the dip is not adequate as the supplies are erratic*” (KII-OiC). This was
6 also observed by prison health professionals who said: “*cleaning detergents are inadequate due to*
7 *lack of adequate resources...the dip is not adequate as the supplies are erratic*” (KII-ShO).
8 Generally, all participants agreed that this hindered personal hygiene and the washing of clothes for
9 women and their children and has serious public health consequences pertaining to infection spread
10 and contamination risk, and reduces basic hygiene and sanitation levels below the international and
11 SADC mandated health standards in the prison. One woman said;

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22 “*because of inadequate detergents, we end up with our health compromised... I have*
23 *fungus infection on my feet now* (FG2-WiP).
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27 When soap was provided, this was mainly due to donations from local NGOs and other
28 donors. Prison health professionals acknowledged this issue, and were “*truly grateful as this gesture*
29 *by donors has taken off a huge weight off the prison authorities*” (KII-H) but noting that even when
30 “*soap is available and rationed to inmates, it is inadequate*” (KII-H) and “*due to the prevailing harsh*
31 *economic hardships soap is not always adequate*” (KII-OiC). Women in prison described how
32 without donor provisions of soap and detergents, they faced death from disease, with one individual
33 stating;
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42 “*shortages in prison make life very difficult. We are happy there are donors, otherwise,*
43 *we would die here*” (FG3-WiP).
44

45
46 As a consequence, they commented about “*near fights relating to theft of soaps. Some*
47 *situations are really desperate*” (FG1-WiP). Many described how women and their children were
48 unfairly disadvantaged as they have to engage in informal transactions to negotiate for basic
49 provisions;
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54 “*if you do not have soap, you become a victim of "mabrusho" - unfair barter trade,*
55 *where you do someone's laundry in exchange for soap...for some of us with children we*
56 *do not have a choice but to barter trade our labour for soap*” (FG3-WiP).
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3 It was very encouraging to view across all perspectives that the provision of sanitary wear
4 was good. One woman said;

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7 *“Pads are donated and when you need some all you do is to go to the clinic and ask for*
8 *some... There is no restriction as to how many you are given at a time, the clinic will*
9 *give out the pads according to the quantity you will have asked”* (FG4-WiP).
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15 *Nutrition for women and children*

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17 Insert **Graph Two** ‘Divergent opinions around standards of nutrition for women and children’ about
18 here
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21 The theme describes views and issues pertaining to standards of nutrition for women and their
22 children in the prison. Divergent opinions across groups are illustrated in **Graph Two**. The food
23 quality, quantity and nutritional value within the prison was described as very poor and inadequate for
24 women in prison and their children. There is agreement with this point across most groups:
25 Throughout nearly all narratives, it was repeated that *“meat is very rare, if we get meat we can have*
26 *say once in three months”* (FG1-WiP), that women in prison receive the *“same food throughout the*
27 *year...not well balanced...sometimes we can go up to six months without meat in the diet* (FG2-WiP)
28 and *Sunday to Monday everyday...bread is not always available”* (FG3-WiP). The lack of nutritional
29 variety is echoed across KIIs and prison staff FGD;
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41 *“the diet should be balanced as meat is a rarity and inmates can go up to sometimes two*
42 *to three months without having meat in their diet”* (FG3-CS)

43
44 *“Quality would be improved with addition of more protein instead of beans all the time*
45 *to make the diet more balanced”* (FG1-CS).
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49 Quality was observed to be compromised to such a degree that;

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51 *“the beans served sometimes are not cooked, diet is not balanced and lacks*
52 *protein...lacks protein different kinds of meat and fruits”* (KII H).
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56 However, some divergence of opinion regarding food quality was observed by a small number of
57 correctional staff who reported no issues with the food quality, arguing that the food provided was of
58 nutritional and good quality, instead, they blamed the poor food quality on the cooking process:
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3 *“Ah that they complain that the beans are not cooked is no one’s fault. They only have*
4 *themselves to blame. They are supposed to add firewood to the fire to make sure the*
5 *beans cook but they do not do that”* (FG4-CS).
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10 Yet, women in prisons’ inability to prepare the food well was reported to be a result of poor quality
11 and/or availability of basic provisions;

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13 *“food is not well-prepared no tomatoes or onions in the relish. Sometimes the vegetables*
14 *are plain with little or no cooking oil at all”* (FG1-WiP).
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18 They described prison jokes about the inedible beans known as ‘gunners’, described as *“beans that*
19 *are not well cooked. We call them gunners because they don’t cook that easily”* (FG2-WiP). Across
20 all FGD there was general agreement that lunch mainly consisted of **Sadza** (porridge made of ground
21 maize) and vegetables cooked with very little fat. There was a vegetable garden just outside the prison
22 fence and in an interview with an NGO representative from Voluntary Service Organization (VSO)
23 the representative indicated the NGO was supporting Chikurubi farm and nutritional gardens to ensure
24 food availability.
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33 There were divergent perspectives across groups whether children in the prison appeared to
34 receive better quality and nutritious food compared to the women in prison. Women in prison
35 observed that;
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39 *“the diet for children is different...They get all their three meals a day, porridge, with*
40 *peanut butter or sour porridge, sometimes cereal that is donated in the morning and*
41 *Sadza and soya chunks as well and sometimes **Sadza** with beans, kapenta fish or meat (if*
42 *available) for dinner... Their meals are prepared separately”* (FG1-WiP).
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48 Most prison health professionals and correctional staff support this viewpoint, stating
49 *“children are fed on a different diet”* (KII-SHO), and with observing relief that *“at least food for the*
50 *children is better they use cooking oil”* (FG1-CS). However, several health professionals disagreed
51 and said whilst the dietary scale was in place, the lack of governmental resources impeded
52 implementation and said;
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58 *“children do not have a special diet. I doubt it exists...The budget from the fiscus does*
59 *not include children...Children will eat what is available”* (KII-H)
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3 *“the prison does not have a budget for children... There is nothing allocated to children*
4 *in the budget... The dietary scale is in place but there is simply no budget to ensure this*
5 *is implemented”* (KII-H).
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9 Special diets for those with health needs or health conditions such as HIV/TB were not in
10 place according to all groups. There were however reports that the timing of meals was adapted to
11 accommodate the women’s needs, for example, when;
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15 *“patients on TB treatment are given **Sadza** and tea in the morning so that they can take*
16 *their medication”* (FG1-CS)
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18
19 *“at times those with special conditions get milk and eggs from the prison farm or*
20 *donations from some NGO. . But that is very rare”* (FG1-WiP).
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24 It was described that pregnant women and nursing mothers *“all eat from the same pot”* (FG2-WiP).
25

26 There was one isolated comment of a correctional officer stating pregnant women will get *“milk*
27 *everyday depending on the availability and the eggs twice a week if there is a supply”* (FG1-CS).
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30 Breastfeeding provision was reported as well supported across all populations, with women in prison
31 observing;
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34 *“we are allowed to exclusively breast feed in this jail. There are no big problems. To*
35 *ensure that we have access to our children whenever we want to breastfeed them we are*
36 *given duties within the fence to be near them The nurses and midwives really*
37 *emphasize on this issue... The prisons is very supportive of exclusive breast feeding...”*
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43 (FG1-WiP).
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45 Equally, correctional staff noted;
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47 *“duties for nursing inmate mothers are much more flexible to allow for breastfeeding.*
48 *They have to work within the fence to allow them easy access to their children whenever*
49 *they have to breast feed”* (FG4-CS).
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53 Prison health professionals also agreed and said;
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55 *“Zimbabwe is a breast-feeding country. The breast-feeding policy is in place and*
56 *practiced. Babies are exclusively breast fed up to first six months and no water or solids*
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3 *are given to the baby. After 6 months solids and other fluids can be introduced, and*
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5 *mothers are encouraged to continue breast feeding beyond 6 months” (KII-SHO).*
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7 One social worker during KII however raised concerns that while breast feeding practice and policy
8 was in place in the prison, incarcerated mothers did not have much choice;
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11 *“but to breast feed their children because there are no other alternatives or supplements*
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13 *that provide nutrition for their babies/children” (KII-SW).*
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16 17 18 ***Prison based health services and health care*** 19

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21 Insert Graph Three ‘*Divergent Opinions around standards of prison based health services and health*
22 *care*’ about here
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26 The theme describes views and issues pertaining to standards of prison-based health service and
27 health care for women and their children in the prison. There was agreement across all groups that
28 access to healthcare in prison for female prisoners was reported positively and of a good standard
29 across all groups, and was viewed as generally better than in the community. This was due to
30 increased technical assistance and donor support. Women in prison and correctional officers reported
31 across all FGD how;
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39 *“services are quite impressive” (FG4-CS), with several women reporting how: “access is even*
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41 *easier compared to those of people outside.’ ... Prisoners do not have to worry about transport*
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43 *or the bills.’ (FG1-CS).*
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46 This was viewed as particularly encouraging with regard to those diagnosed with HIV, where it was
47 reported that all women could access treatment, and there are no barriers compared to in the
48 community;
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52 *“HIV testing and counselling is much more effective here than in the communities that*
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54 *we come from. Many inmates have been persuaded to get tested and the results have*
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56 *been impressive because, some of them discover that they are HIV positive here, and they*
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58 *immediately get medication” (FG1-WiP).*
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3 ART medicines were described as available all the time.
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5 Prison staff stated that *“there are no rules regarding access to health care. Health care*
6 *access is available anytime for them as long as they are inmates in this prison”* (FG1-CS). Women in
7 prison appeared to support this claim and described that *“anytime you want to see the nurses, you can*
8 *see them, and they will really attend to you”* (FG1-WiP). It was only in more serious or complex cases
9 when the *“nurse refers to the Doctor who writes a letter for transfer and as long there is transport,*
10 *you can go to Parirenyatwa hospital within hours”* (FG1-WiP). In the hospital it was observed that,
11 *‘the inmates get special treatment in that they do not have to wait in the queue. They get first*
12 *preference even if there is a long queue”* (FG1-CS). Getting to the hospital was however described as
13 problematic due to poor transport availability pertaining to lack of prison vehicles or lack of fuel,
14 described by the Officer in Charge;

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“on several occasions when inmates are referred and they need to be transported
sometimes there are no cars available and the ambulance has broken down. Prison cars
are few and there is shortage of fuel. These issues all result in delays in reaching the next
level of care” (KII-OiC).

When at the hospital there were sometimes, issues around payment of medical fees when the prison
account was in debt. One prison staff remarked;

‘The hurdles though come when we reach the hospital and they inform us that the prison
is in debt and we have come back before being attended to...Also the setbacks are
sometimes on fuel and transport notwithstanding that, the health care is better for the
inmates than for people out there” (FG1-CS).

This breach in connectivity between the prison health clinic and tertiary care was also observed in
KII;

“further delays are also experienced at tertiary referral hospitals if investigative
procedures are ordered and they need to be paid for. In such cases an application has to
be made to prisons authorities and the process to get the money released takes too long”
(KII-SHO)

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3 *“in the event that these are not available it is the duty of the welfare officer to phone the*
4 *relatives and ask them to buy the drugs for the inmate”* (KII-SSWO).

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7 A woman in prison said: *‘We end up asking family to help but most of our families are poor and the*
8 *state of poverty in this country health access is delayed while your condition deteriorates”* (FG2-
9 WiP).

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12 The prison clinic was described as providing a range of SRH services to women in prison and
13 underpinned by infectious disease screening, treatment and care for women and children (HIV, TB),
14 pregnancy and contraception on discharge (condoms). A prison health professional described how
15 screening was conducted;

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18 *“Screening of inmates is done through history taking. Depending on the history given*
19 *then we further manage the inmate per history given and some might even have their*
20 *medical records with them’* (KII-H).

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23 Another highlighted the challenges and limitations of the realities of this process;

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26 *“It is not possible to screen and medically exam inmates on admission as there is only*
27 *one resident Doctor for three clinics... I do not think inmates are examined on admission.*
28 *Nurses will take history but there is a limit to what they can do... They are not trained to*
29 *screen and palpate for such abnormalities as enlarged liver...”* (KII-H).

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32 It was noted that prison health clinics did not have cancer screening equipment (breast and cervical)
33 requiring referrals to tertiary care. While women in prison appeared to recognise the value in some of
34 the services, they receive through the screening process, particularly given the wider socio-economic
35 challenges in the region *“we hear that the economic situation even outside of prison is bad”* (FG1-
36 WiP) they were concerned that not all diseases or conditions were screened for, for example; *“cancer*
37 *screening is not readily available ... I want to talk about cancer. One of us died”* (FG2-WiP).

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40 Some senior health officials and correctional staff observed the need to improve antenatal
41 care. Deliveries of infants was described as possible in emergency situations, but that the prison clinic
42 lacked the requisite equipment. Paediatric care for children in prison was generally reported to be
43 adequate, but with room for improvement regarding consistent supply of paediatric medicines,
44 *“medicines for children are not enough and sometimes we are referred to tertiary hospitals to get*
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3 *them which are about 20km from the prison*” (FG1-CS). There was some recognition that this issue
4 was not isolated to the prison, with women stating that they *“hear from relatives who visit us that even*
5 *clinics outside of the prison are facing the same challenges”* (FG2-WiP). Apart from the medicine
6 shortage, incarcerated mothers described their satisfaction with prison health care for their children,
7 reporting, *“generally, the services are good. They take the health of the child very seriously”* (FG3-
8 WiP). Correctional officers stated that the provision of health education information was
9 adequate;

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18 *“they get so much information on transmissible diseases from many sources such as*
19 *officers, nurses and donor organizations who partner the prison services to provide*
20 *health education to inmates, peer educators”* (FG3-PS).

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25 During FGD peer educators indicated that they had received training on SRH, HIV prevention,
26 treatment and care from a VSO , with this observation corroborated by the NGO in a KII. The VSO
27 also reported that they were facilitating incarcerated womens’ access to primary health care including
28 improving access to HIV services. A representative of an international organisation reported;

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33 *“that as an organization we are not implementing interventions per se, but we work*
34 *through partners in the provision of SRH, HIV&AIDS, TB and prevention, treatment care*
35 *and support. We compliment government effort and have partnered with the Ministry of*
36 *Health and Child care in training of health staff in integrated management of HIV, Rapid*
37 *HIV testing, Nurses’ training in ART initiation as well as technical assistance”*.

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43 However, senior health officials expressed some concern around efficacy;

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46 *“I observed that some of the information given to inmates for example, use of self-testing*
47 *kits in HIV diagnosis left a lot of inmates on ART confused. After the testing some*
48 *inmates perceived themselves as now cured and negative because inadequate*
49 *information had been given”* (KII-SHO) .

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54 Women in prison reported that whilst receiving adequate information *“on transmissible diseases such*
55 *as STIs/HIV, TB and prevention methods”* (FG2-WiP) the information was often only imparted
56 verbally, and not on the day of entry, thus *“might be too late for an inmate”*. Health information was
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3 not provided at reception but on Sundays by health staff and peer educators after admission. Women
4 reported;

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7 *“they would prefer that this information is given on first day of admission and also in*
8 *written form...Educational videos could also help by providing both entertainment and*
9 *education at the same time” (FG2-WiP).*

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14 With regard to connectivity between prison health and community health, and the continuum
15 of care from prison to community, concerns were evident across all groups with regard to inefficient
16 referral systems and follow up on discharge;

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20 *“We see inmates when they are readmitted into prison after reoffending, because they*
21 *lack strong family support... Sometimes their health will have deteriorated between the*
22 *time of discharge, reoffending and readmission” (KII-SW).*

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26 This is because;

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28 *“the continuum of care outside prison is a huge challenge because it is not easy for an*
29 *ex-convict to readily access primary health services once discharged. The challenges*
30 *range from incapacity to pay for consultation fees and medication to inmates’ own health*
31 *seeking behaviour and attitude...for example, if an inmate had an HIV positive diagnosis*
32 *made in prison and ART is commenced the female ex-inmate will find it extremely*
33 *difficult to disclose the HIV status to her husband upon release resulting in them*
34 *defaulting in taking ART...We only discover they had defaulted treatment when they re-*
35 *offend and are imprisoned again as they come back with AIDS defining symptoms such*
36 *as severe loss of weight” (KII-H).*

47 48 49 **Discussion**

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51 The study presents a contemporary insight into perceived standards of prison environments, basic
52 health rights and health care experiences of women in prison (and their children) situated in a large
53 female prison in Zimbabwe. It contributes to the scant literature base on women (and their children’s)
54 situation in prisons in Zimbabwe (Samakaya-Makarati, 2003; Matsika *et al.*, 2013, Shout Africa,
55 2015; Newsday, 2017). Narratives across diverse perspectives ranging from women incarcerated, to

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3 those working in the prison at senior levels, illustrate the poor environmental conditions for women
4 incarcerated in Chikurubi, similar to that reported in other male and female SSA prisons (UNODC,
5 2017; Van Hout and Mhlanga-Gunda, 2018, 2019a:b). Both male and female prisons in the SSA
6 region remain compromised by failing prison infrastructure, overcrowding due to high rates of pre-
7 trial detention, inadequate nutrition, poor sanitation and hygiene (UNODC, 2017; Van Hout and
8 Mhlanga-Gunda, 2018, 2019a:b). The study reflects findings from the USSD (2016) report which
9 described how women in prison generally experienced better conditions than males, but with lack of
10 additional food rationing for pregnant or nursing mothers, and for children (USSD, 2016). However,
11 the study reveals a series of direct contradictions between perspectives of women in prison,
12 correctional staff (ground level wardens), prison health professionals, and non-governmental
13 organisations; highlighting the complexities experienced in conducting prison health research in SSA
14 whereby professional, humanitarian and prisoner voices often differ or complement each other
15 (Mhlanga-Gunda *et al.*, 2019). For example, concerns around lack of consistent supply of safe
16 drinking water due to power outages, poor sanitation and hygiene, and inadequate provision of
17 sufficient soap, detergent and bleach were voiced by women in prison and in direct contradiction to
18 that of senior officials. This was also observed around the issue of lack of adequate nutrition for
19 women and their children in terms of quantity and quality of food. Contradictions centered on whether
20 or not pregnant or nursing women, and children were allocated additional food. SSA prisons generally
21 do not budget for the cost of looking after children born in prison and/or incarcerated with their
22 mothers (Van Hout and Mhlanga-Gunda, 2018). It was encouraging to hear that breastfeeding was
23 now supported, given that an earlier study in Chikurubi prison by Matsika *et al.*, (2013) , and earlier
24 visit to Chikurubi prison by authors in 2017 (UNODC, 2017) observed that breastfeeding was
25 restricted to periods when female prisoners were not working. The support of universal breastfeeding
26 in Chikurubi is encouraging, and in line with the World Health Organisation (WHO)
27 recommendations of exclusive breastfeeding for the first six months of life, followed by continued
28 breastfeeding with appropriate complementary foods for up to two years or beyond. In resource-poor
29 settings (such as prisons), when formula feeding is not a viable option, women living with HIV are
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3 advised to exclusively breastfeed (rather than mixed feeding) in the first six months, providing that
4 they are on ART (Tsague and Abrams, 2014; Ngoma-Hazemba and Ncama, 2016).
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7 Gender specific health challenges for women in Chikurubi are similar to that reported
8 elsewhere in SSA prisons (Ackerman, 2014; Dixey *et al.*, 2015; Van Hout and Mhlanga-Gunda,
9 2018). It was very encouraging to report agreement that sanitary wear was freely provided by local
10 NGOs, and that access to medical and healthcare was generally good, with some intermittent levels of
11 pediatric medicines. Health education information provision was viewed as sufficient with some
12 recommendations to impact information on the day of admission to prison. Equally encouraging was
13 the strong point of access to screening (HIV, TB, with STI only screened in pregnancy through the
14 laboratory testing for syphilis and gonorrhoea) and the good availability of ART drugs for those
15 testing positive. The World Health Organization (WHO) 2016 updated guidelines recommend lifelong
16 ART for all from the time when any adult (including pregnant and breastfeeding women) or child is
17 first diagnosed with HIV infection. This infers that ART should be initiated in everyone living with
18 HIV at any CD4 cell count “*Option B+*” and that all children diagnosed with HIV should be offered
19 treatment (WHO, 2016). This improvement coincides with the robust investment in upscaling prison
20 based PMTCT in low resource countries, as since May 2017, when the UN Commission on Crime
21 Prevention and Criminal Justice (CCPCJ), adopted a resolution (UNODC, 2019) requesting Member
22 States in close cooperation with UNODC and other relevant United Nations entities and other relevant
23 stakeholders, to increase their capacity to eliminate mother-to-child transmission of HIV, and support
24 HIV prevention and treatment programming in prisons, particularly in countries with a high-burden
25 TB/HIV coinfection in the SSA region.
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47 Whilst the study shows positive receipt in healthcare access and prison health care standards
48 whilst incarcerated, the continuum of care between prison and tertiary care for emergencies and
49 cancer diagnosis and treatment, and between prison discharge and community care remains
50 vulnerable. We recognise that whilst within the prison, healthcare standards are aligned to
51 international mandates for equivalence of care, it appears here in Zimbabwe that the inverse has
52 occurred whereby the prison healthcare experience is optimal when incarcerated, and sub-standard at
53 country level. At the time of writing of this paper (November 2019), Zimbabwe’s health sector is in
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3 crisis with public health hospital doctors and nurses declaring themselves incapacitated to work and
4 on strike, with widespread reports of patient deaths in circumstances which could have been avoided
5 had patients received care. This is also very concerning given the complexities in ensuring adherence
6 to care on prison discharge (particularly for HIV and TB). Studies elsewhere in Africa have reported
7 that failure to initiate, engage and be retained in HIV PTC is associated with negative outcomes for
8 women living with HIV, her infant and the community (Kim *et al.*, 2016; Nachege *et al.*, 2012).
9
10 Despite best efforts in the prison to screen, treat and inform patients, the revolving door of
11 incarceration, fragmented health services and disconnect between prison and community public health
12 will continue to have significant public health consequences for those (and their families) who are
13 seriously ill requiring treatment and who cannot pay, and those who default from treatment.
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26 **Conclusion**

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28 Policy and technical guidance continues to emphasise the need for research in SSA prisons to garner
29 insight into the experiences of female prisoners and their children, with a particular emphasis on the
30 prison environment for them, their health outcomes and healthcare continuum. Our unique study in a
31 large female prison in Zimbabwe responded to this need, and represented diverse insights from
32 different stakeholders of this prison. The study reiterates that understanding prison environmental
33 cultures which shape correctional staff understanding and responsiveness to women's environmental
34 health conditions and access to healthcare is vital to improve conditions for incarcerated women and
35 their children and continuum of care in Zimbabwe. This is especially urgent given the current
36 economic situation in Zimbabwe, with low prioritisation of prison health on the government agendas.
37 Prisoners, especially women and their children who are not accounted for in the prison budget,
38 continue to be vulnerable to human rights abuses, and remain a key population at risk of HIV
39 acquisition.
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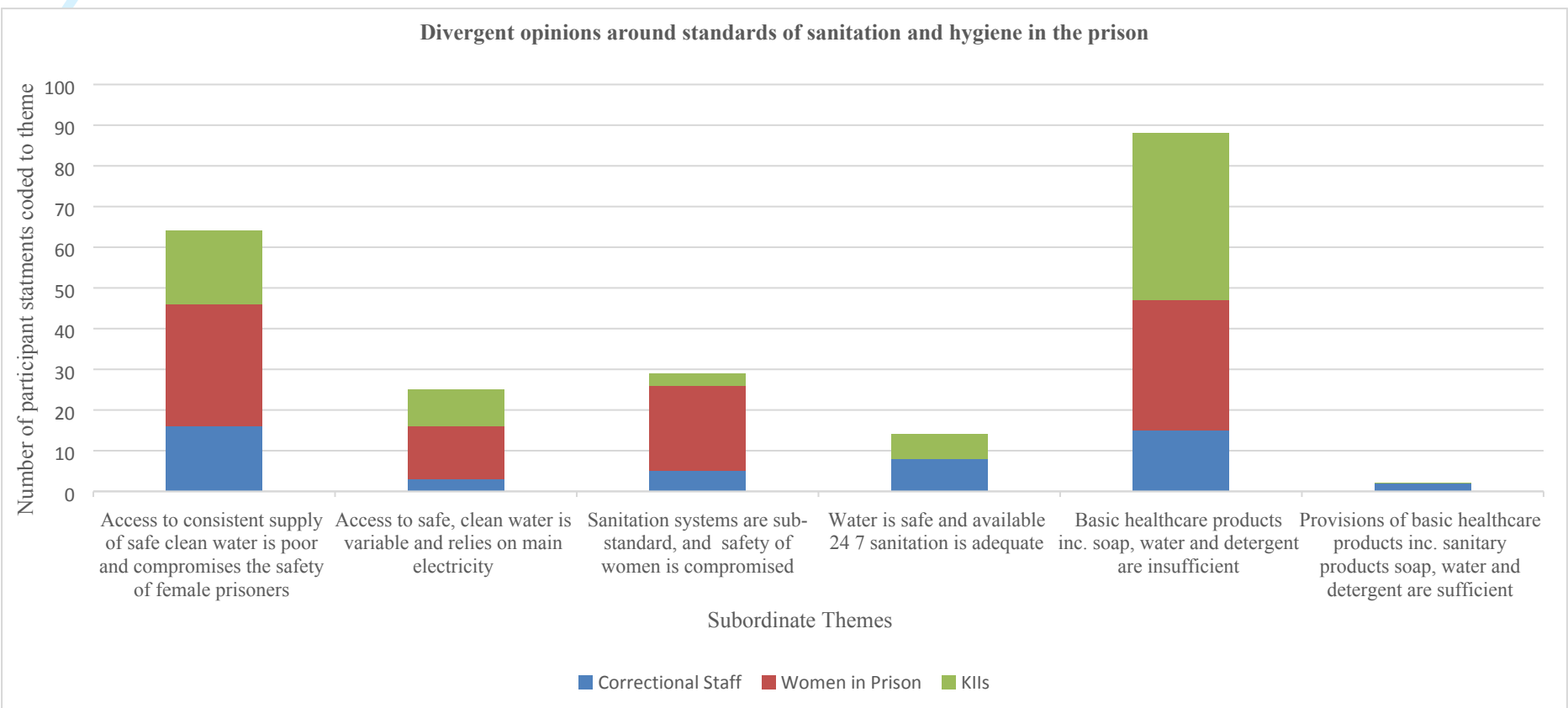
Table One. 'Participant Profile'

Method	Participant descriptor(n=sample size)	Duration (minutes)
13 KII	Health (H) (n=8)	30-45
	Social Work (SW) (n=1)	
	Officer In charge (OiC) (n=1)	
	NGO (NGO) (n=3)	
8 structured FGD, with 6 participants in each group	Women in prison (WiP) (n=24)	60-120
	Correctional Staff (CS) (n=24)	

Table Two 'Supplemental Table'

Superordinate Theme	Subordinate Theme
<i>Sanitation and hygiene in the prison</i>	<ul style="list-style-type: none"> • Access to consistent supply of safe clean water is poor and compromise the safety of female prisoners • Access to safe, clean water is variable and relies on main electricity • Sanitation systems are sub-standard, and safety of women is compromised <ul style="list-style-type: none"> ○ Water is safe and available 24/7 sanitation is adequate * • Basic healthcare products inc. soap, water and detergent are insufficient. <ul style="list-style-type: none"> ○ Provisions of basic healthcare products inc. sanitary products soap, water and detergent are sufficient *
<i>Nutrition for women and children</i>	<ul style="list-style-type: none"> • Food quality, quantity and nutritional value is substandard for female prisoners <ul style="list-style-type: none"> ○ Food quality, quantity and nutritional value is adequate for women * • Quality and nutrition of food for children is better compared to women <ul style="list-style-type: none"> ○ No special food given to children * • Women with specialist health needs or conditions on rare occasions receive specialist diet (not nursing or pregnant women) • Pregnant or nursing women do not get additional food • Breastfeeding provision is well supported <ul style="list-style-type: none"> ○ Concern breast feeding policy does not provide an alternative (i.e. supplement) to those mothers who cannot breastfeed *
<i>'Prison based health services and health care</i>	<ul style="list-style-type: none"> • Access to care in prison is often better than in the community • Access to health care staff in prison is very good with complex/serious cases referred to hospital • Access to hospital is and connectivity between the prison health clinic and tertiary care is problematic due to poor transport and prison debts around payment of medical costs whilst in the community hospital. • Access to services for children are good but could be improved • Healthcare screening at reception is routine. Inc. self-report history, voluntary HIV/pregnancy test, symptom checks. • Further screening or investigation occurs if needed for STIs but not cancers • Health information is provided at reception, in different formats however, information is not clear or continuous. • Access to medication is good although at times resources are low, family members have to cover prison costs of medicines.

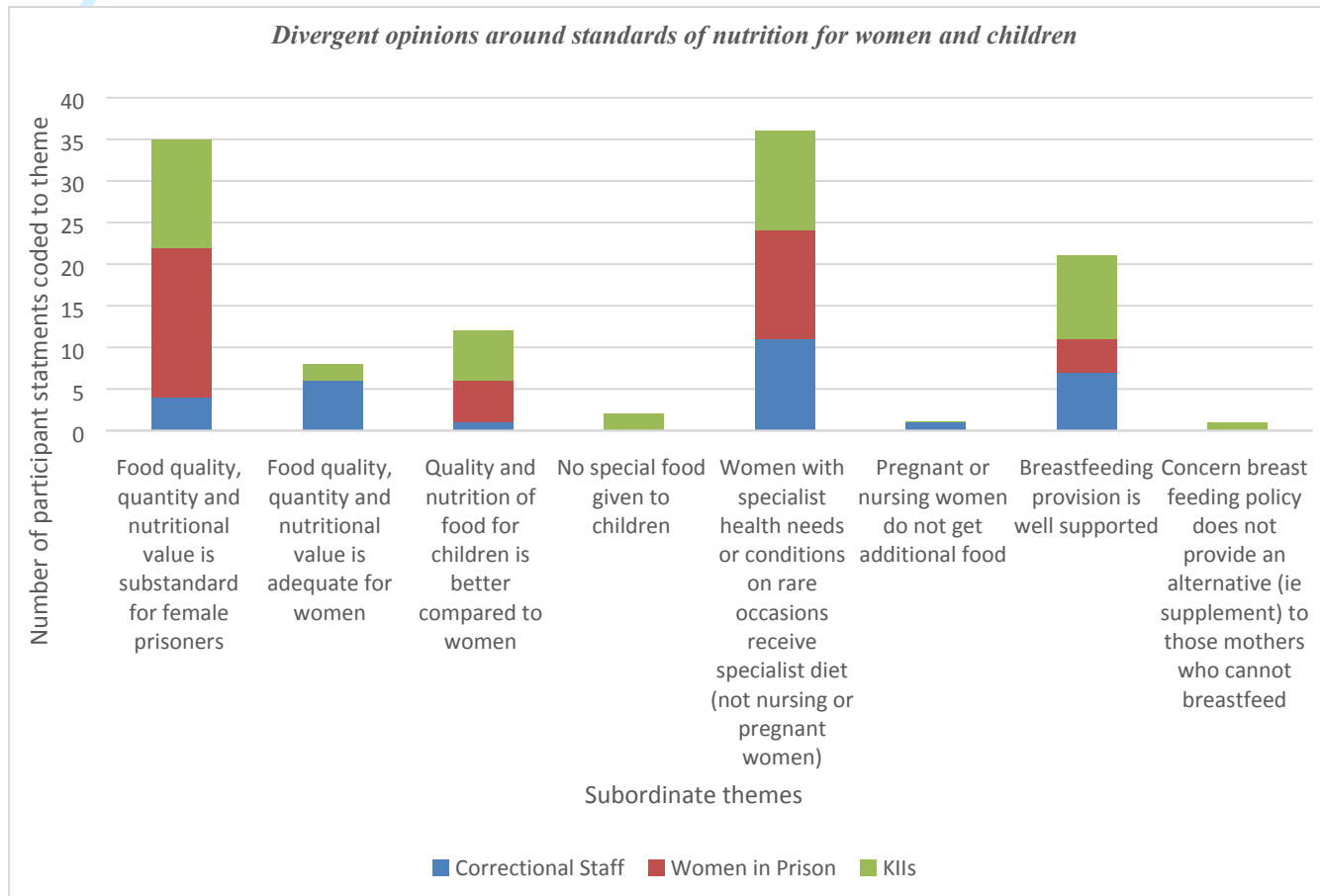
*Where highlighted in bold we illustrate the divergence illustrated in Graphs One to Three



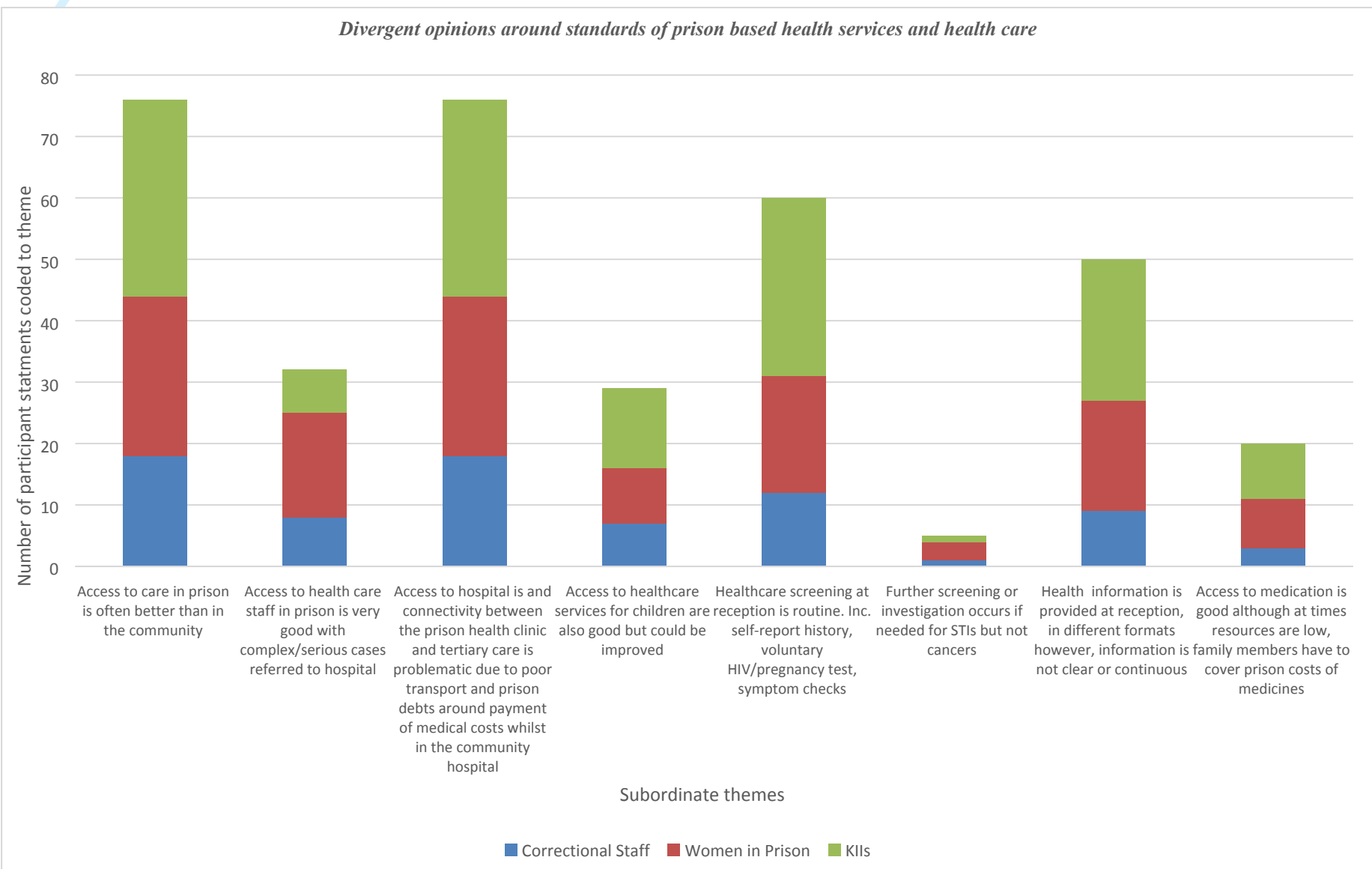
Graph One 'Divergent opinions around standards of sanitation and hygiene in the prison'

Prisoner Health

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Graph Two 'Divergent opinions around standards of nutrition for women and children'



Graph Three 'Divergent Opinions around standards of prison based health services and health care'

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