

Gadama, L, Thakwalakwa, C, Mula, C, Mhango, V, Banda, C, Kewley, S, Hillis, A and Van Hout, M-C

Prison facilities were not built with a woman in mind': An exploratory multi-stakeholder study on women's situation in Malawi prisons

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Article

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Gadama, L, Thakwalakwa, C, Mula, C, Mhango, V, Banda, C, Kewley, S, Hillis, A and Van Hout, M-C Prison facilities were not built with a woman in mind': An exploratory multi-stakeholder study on women's situation in Malawi prisons. International Journal of Prisoner Health. ISSN 1744-9200

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Abstract

Purpose Sub-Saharan African prisons have seen a substantial increase in incarcerated women, including those incarcerated with children. There is very little strategic literature available on the health situation and needs of incarcerated women and their circumstantial children in Malawi.

Design/methodology/approach A qualitative exploratory study using in depth key informant interviews (KII) with senior correctional stakeholders (commissioner of prison farms, senior correctional management staff, senior health officials, and senior officers in charge) (n=5); and focus group discussions (FGD) with women in prison aged between 18 and 45 years (n=23), and two FGD with correctional staff (n=21) was conducted in two prisons in Malawi, *Chichiri* and *Zomba*. Narratives were transcribed and analysed using thematic analysis.

Findings Three key themes emerged: ‘*Hygiene and sanitary situation across multiple prison levels and subsequent health implications for women*’; ‘*Nutritional provision and diets of women and children in prison*’ and ‘*Women’s access to prison-based and external health services*’ Divergence or agreement across perspectives around sanitation and disease prevention, adequacy of nutrition for pregnant or breast feeding women, health status and access to prison based health care are presented.

Practical implications Garnering a contemporary understanding of women’s situation and their healthcare needs in Malawian prisons can inform policy and correctional health practice change, the adaptation of technical guidance and improve standards for women and their children incarcerated in Malawi.

Originality/value There is a strong need for continued research to garner insight into the experiences of incarcerated women and their children, with a particular emphasis on health situation.

Key Words

Prison, sexual and reproductive health, women, Malawi

Introduction

The Sub Saharan African (SSA) region remains at the epicentre of the HIV epidemic with two thirds of all people infected with HIV living in SSA member states, and with the epidemic disproportionately affecting women (Telisinghe *et al.*, 2016). Key vulnerable populations at risk of HIV acquisition are women and girls, and incarcerated people (UNODC/UNAIDS/WB, 2007; Todrys *et al.*, 2011; UNAIDS, 2014; National AIDS Commission, 2014; UNODC, 2017). HIV prevalence in incarcerated women is higher than for men because of limited access to sexual and reproductive health services, interruption of the necessary health services, sub-standards in hygiene and risk of mother to child transmission of HIV whilst in prison (UNODC, 2017; 2019). Women remain a minority group in SSA prison systems by disadvantage due to their gender and their incarcerated status, lower numbers of incarcerated women compared to their male counterparts, with most prison facilities designed for incarcerated men, and with their distinct health and sexual and reproductive health needs neglected (Van den Bergh *et al.*, 2011; WHO, 2009; Dolan *et al.*, 2006; Van Hout and Mhlanga-Gunda, 2018; 2019a,b). Adequate health services in prisons for women are mandated under the Sustainable Development Goals (SDG 3, 5, and 16), as well as under the ‘*Nelson Mandela Rules*’ and the ‘*Bangkok Rules*’ covering the UN Standard Minimum Rules for the Treatment of Prisoners (A/RES/70/175) and the *United Nations Rules for the Treatment of Women Prisoners and Non-custodial Measures for Women Offenders* (A/RES/65/229). The Southern African Development Community *Minimum Standards for HIV in Prisons* have additionally mandated minimum requirements for prisons to be able to effectively prevent, treat and control HIV/AIDS in prisons.

Malawi recognises these standards and has binding domestic standards that are pertinent to the treatment of incarcerated women, including constitutional provisions (see the case of *Gable Masangano v The Attorney General, Constitutional Case 15 of 2007* in 2009 where Gable Masangano, an incarcerated male serving a twelve-year prison term in Malawi, brought suit against Malawian government officials claiming the conditions of his and his fellow prisoners’ imprisonment violated the Republic of Malawi’s Constitution and the Prison Regulations of the Prisons Act (“Prison Regulations”). This case states: “*Prisoners may have their right to liberty curtailed by reason of lawful incarceration. Prisoners’ rights must be understood to mean the rights that prisoners have as human beings as they remain incarcerated in a prison. According to the Applicants the Regulations under the Prisons Act Cap 9:02 of the Laws of Malawi are in tandem with the Standard Minimum Rules for the Treatment of Prisoner. It is the right of every prisoner to access medical treatment and such prisoner should not be asked what offence he/she committed as a precondition for getting the medical attention or treatment. Parliament should therefore make available to the Respondents adequate financial resources to enable them meet their obligations under the law to comply with this judgment and the minimum standards set in the Prisons Act and Prison Regulations.*”

According to the Malawi Prison Service, Ministry of Home Affairs and Internal Security as of September 2019, the official prison population in Malawi (including pre-trial detainees and remand was

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14,778, with a prison population rate of 76 per 100,000 of the national population (19 million). Of these 17.9% were pre-trial detainees, and 1.1% were women. There are 30 prisons, with an official capacity of 7000. Zomba Central Prison built in 1935 is the only maximum-security prison in the country, holding incarcerated people with long sentences or serious offences. Among the other large prisons are Maula prison built in the 1960s in Lilongwe and Chichiri Prison in Blantyre. Currently the Malawian prison system is operating at 199% occupancy level. The most recent inspection of prisons and prison service cells conducted by the Malawi Inspectorate of Prisons in March 2018 made no reference to the situation of women, but revealed severe human rights breaches pertaining to extremely poor building infrastructure, overcrowded cells with poor ventilation, inhumane treatment of incarcerated people, serious contraventions of criminal procedures underpinned by bribery and corruption, failures to provide adequate food and medical care; and adequate rehabilitative facilities, and extremely poor working conditions for staff. Overcrowding creates a conducive environment for the rapid spread of HIV, sexually transmitted infections, scabies and (TB in Malawian prisons (Banerjee et al., 2000; Zachariah et al, 2002; Banda et al., 2009). The national HIV programme of the Malawian Ministry of Health provides anti-retroviral treatment (ART) under challenging circumstances of shortage of medical staff, poor nutrition and sanitation and overcrowding with some success (Makombe et al., 2007; Mpawa et al., 2017). TB surveillance in prisons is poor, with TB case notifications in Malawian prisons higher than the general population, and with less favourable treatment outcomes relating to treatment success rate and high transfer out rates (Harries et al., 2004; Banda et al., 2009; Kanyerere et al., 2012). High death rates of incarcerated people are reported due to lack of medical attention, quarantine, weak immunity caused by poor nutrition and lack of ART. High incidence of TB among prison officers is equally concerning (Kachisi et al., 2002).

There is very little strategic literature available on the health situation of women in prison in Malawi (UNODC, 2017; Van Hout and Mhlanga-Gunda, 2018; 2019 a:b). Chimphambano et al., (2007a:b) reported on high female HIV infection rates with a 50% rate of HIV among incarcerated women compared to 29.8% in males. Hence, our study aimed to respond to this need, by investigating women’s health related experiences in prison and particularly their access to prison health care, sexual and reproductive health services and HIV prevention, treatment, support and care in Malawian prisons.

Methods

A qualitative exploratory study using key informant interviews (KII) and focus group discussions (FGDs) was conducted in two female prisons, Chichiri and Zomba. KIIs were conducted with senior correctional stakeholders (commissioner of prison farms, senior correctional management staff, senior health officials, prison health staff, officers in charge); and FGDs were conducted with incarcerated women in Chichiri prison aged between 18 and 45 years, and correctional staff directly involved in the female section of the prison. Data collection instruments (FGD and KII) were derived from the recent

scoping review conducted by last author (Van Hout and Mhlanga-Gunda, 2018; 2019a) for correctional staff and other KIIs, and were administered in their original English format. For women in prison, these were translated into one major indigenous local language (Chichewa) and back translated into English to ensure original meaning was not lost during the translation. Key themes for FGD and KIIs centred on correctional officers and incarcerated women's experiences around awareness of human rights, sexual and reproductive health and HIV/AIDS, blocks and barriers to accessing sexual and reproductive health and HIV services, attitudes and stigma, and unique sexual and reproductive health needs of women when incarcerated.

Ethical approval was granted by the University Research Ethics Committee, Liverpool John Moores University United Kingdom, and the College of Medicine Research Ethics Committee in Malawi (P.10/18/2497). All participants were fully informed both in written and verbal formats, were provided with opportunity to ask questions prior to consent, and participated voluntarily with option to withdraw. All participant data was made anonymous through decoding.

FGDs and KIIs were conducted by academics from the University of Malawi and the Centre for Human Rights Education Advice Assistance. Identification of a listing of KII was conducted by a senior correctional officer in the health directorate who shared the list of names with the study team, and who subsequently arranged face to face interviews. Inclusion criteria centred on the participants being senior level correctional facility policy makers who were knowledgeable about women's health policies and situation in prisons and willing to participate in the study. A total of 5 KIIs were conducted including the prison health directorate, correctional services staff, senior management, senior health officials and senior prison health staff. KIIs were conducted during working hours, face to face at participant offices. KII are not disaggregated by profession when providing illustrative quotes in order to protect anonymity.

Two FGD were conducted with incarcerated women composing of 11 and 12 participants per group ($n=23$) plus two FGD were conducted with correctional officers ($n=21$) during working hours. FGD comprised of 11 and 10 correctional officers respectively. Mobilisation and recruitment of participants for the FGD was operationalised by the prison officer in charge of the female prison section. All incarcerated women were invited and briefed about the study. Then those willing remained and were categorised into two groups according to their age. For correctional staff, willingness to participate in the study informed their inclusion, having lived or worked in at the prison for three months or more prior to the study and willing to provide informed verbal consent. Exclusion criteria comprised of those under 18 and above 45 years of age, unwilling to voluntarily participate and unable to give consent. All FGDs lasted an average of 54 minutes per group. See **Table One**.

Insert **Table One** about here

All FGD and KII were transcribed and translated verbatim in a single step. The data was managed using the software program QSR NVivo 12. Data were analysed using thematic analysis

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(Braun *et al.*, 2019). This approach was deemed suited to garner an in-depth understanding of incarcerated women’s health situation and sexual and reproductive health care in Malawian prisons from a variety of triangulated perspectives, and a range of multi-disciplinary perspectives, realities and meanings. In order to ensure scientific rigour, a quality framework in analysis was used (Braun and Clarke, 2006). This involved several key steps: (1) reading and re-reading the transcription, individually and in pairs to note early ideas; (2) coding in a systematic and logical manner using a data-driven approach supported by QSR NVivo 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 super-ordinate and sub-ordinate themes; (4) refining and reviewing of these themes by the team as a collective in terms of internal homogeneity and external heterogeneity, examination of coherence of patterns across these themes and development of athematic map; and (5) final clear definition and naming of super-ordinate and sub-ordinate themes, with data extracts representing and articulating the essence of these, and overall analysis. Further to this, a code frequency query was generated using the software, comparing the number of participant statements allocated to specific codes, with each group of participants. A separate query was run for each theme.

Results

Three key super-ordinate themes emerged from the content analysis of data and include: *‘Hygiene and sanitary situation across multiple prison levels and subsequent health implications for women’*; *‘Nutritional provision and diets of women and children in prison’* and *‘Women’s access to prison-based and external health services’*. These, along with their sub-ordinate 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 (Foster, 1997; Erzerberger and Perin, 1997; Farmer *et al*, 2006) an individual graph summarising the quantity of code frequency, by each group, and each super-ordinate, and sub-ordinate themes are presented as illustration (see **Graphs One to Three**).

Insert **Table Two** about here

Hygiene and sanitary situation across multiple prison levels and subsequent health implications for women

Insert **Graph One** about here.

The theme describes views pertaining to the hygiene and sanitation of female prisons, with particular focus on accessing clean water and tailoring healthcare to the woman’s needs. A lack of access to clean, safe, running water that is used for washing, cooking, drinking, toilets and draining was reported across all FGD and KIIs. Correctional staff and incarcerated women reported that the main water supplier

would stop the water for up to three days with shortages lasting a week long (Correctional staff FGD2; Women in prison FGD2). Although there are water tanks on site to accommodate shortages, *'they work only when we have electricity to pump'* (Correctional staff FGD2), thus an unreliable energy source. The water tanks are initiated during the night *'when we are asleep. When we wake up 6:30 we find the water has stopped'* (Women in prison FGD2) before women are able to leave their cells in the mornings. It was also noted that water from the tanks is firstly directed to the kitchen so incarcerated males can prepare the food (Women in prison FGD2) but then redirected to women's bathrooms and toilets. Bathing water is *'mostly contaminated with our utensils which are dirty'* (Women in prison FGD2), resulting in an unsanitary environment with some women in prison experiencing diarrhoea. Women in prison resorted to storing water in pails and sourcing it from *"the well or swamps"* in the prison grounds as well as using buckets to help flush the toilet water (Correctional staff FGD2). Alternatively, as storage containers are not provided in the prison, *'we try to fetch bottles from the waste bins'* to fill and use in their own time (Women in prison FGD2). KIIs argued one of the reasons for water rationing is a result of poor infrastructure needing restoration *"to resolve water issues and blockages"*. Correctional staff corroborated this, as they discussed the need for *"prison facilities and buildings need to be renovated"* (Correctional staff FGD1), as large scale repair and maintenance work in Chichiri prison is needed to address waste disposal, especially for sanitary pads and *"for prevention of various diseases"* (Correctional staff FGD1). Incarcerated women are using toilets to dispose of all products, which further contributes to the system's blockages. One member of staff advised, *'we need to have the big waste bins and together with the other dry waste they can burn them in the pit that we have here'* (Correctional staff FGD2). In the interim, women in prison are given products to clean the cells and toilets themselves and, it appeared they were duly following correctional staffs' instructions, who advised them that they should *'take care of the environment'* and consider *'[the] place as [their] home'* to help *'prevent diseases'* (Women in prison FGD2).

Disease transmission remains a concern of the women in prison. Women discussed the unsanitary environment in which they are housed due to dirty water, overcrowding, lack of clean clothes or ability to wash belongings, sharing of bathing water and insufficient sleeping space. Both FGD with women reported the spread of various diseases such as skin rashes, TB, diarrhoea and chlamydia. Correctional staff in contrast commented on the significant improvements that have been made over the last few months. One participant mentioned how *'before the donors came in death rate was high but now 4 to 5 months elapse without any death showing that issues of health hygiene are working well'*, whilst another stated that, *'Now we don't experience diarrhoea diseases. ...showing improved hygiene'* (Correctional staff FGD2). They described the lack of sanitation, placing it in the context of a single bathroom with only two or three functioning basins for over 60 women, some who may be menstruating, pregnant or caring for a child. *'The drainage system in the bathrooms is poor and some incarcerated women step on other peoples' menses which puts others at a higher risk of contracting various diseases.'* (Women in prison FGD1).

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The FGD and KIIs highlighted the insufficient provision of basic hygiene and bathing products. Basics such as soap, toothbrushes, toothpaste and sanitary pads are not in consistent supply. One correctional staff noted *‘some do not have tooth brushes and are unable to clean their teeth’* (Correctional staff FGD2). The Church and well-wishers *‘help to bridge the gap that cannot be filled by the prison’* and *‘most weekends, people from various churches come with soap and other toiletries so incarcerated women can take a bath daily and wear clean clothes as well as sleep on clean linen’* (Correctional staff FGD1). The KIIs provided a national perspective, describing a bleaker picture in which the *‘prison does nothing’*, incarcerated women have to buy certain bathing products for themselves and that *‘prison facilities were not built with a woman in mind’* (KII). Due to the lack of provision and funding for female hygiene during menstruation, KIIs describe how *‘women in prison end up using the available resources although some of those materials such as pieces of worn cloth can expose them to some health risk’* (Women in prison FGD2). The KIIs are aware of these issues and aside from requesting more funding, they are also *‘advocating for re-usables on menstrual issues’* and considering creating female related programmes that focus on topics such as menstrual hygiene and cervical cancer.

Aside from the infrastructural problems compounding sanitation, overcrowding is a problem at Chichiri prison, with correctional staff calling for more *‘cells to avoid congestion’* (Correctional staff FGD2). The high ratio of incarcerated women to toilet and bathing facility creates an environment in which disease and infections such as TB can rapidly spread; *‘we are all in one place. [incarcerated women with TB] are given a mask to cover the mouth. But sometimes they remove the mask and sit together with us’* (Women in prison FGD2). Likewise, a lack of sleep is also a serious issue, with one KII noting how *‘prison capacity is 800 but now we have about 2000 making it difficult for people to sleep’*. In Chichiri, incarcerated women reiterate this health issue describing how there is not *‘enough sleeping space as two or three incarcerated women have to share a bed which results in the fast spread of diseases for examples the common cold and cough, skin rashes’* (Women in prison FGD1).

Alternatives to imprisonment for women were also discussed; *‘those with smaller offenses should be doing community activities rather than bringing them here. Health personnel should be coming to teach the women’*. (Correctional staff FGD2). Both KII and an incarcerated woman reiterated this and said: *‘some convictions are not worthy imprisonment. There is need for the system to be looked into again’* (KII).

Nutritional provision and diets of women and children in prison

Insert **Graph Two** about here.

The theme describes views pertaining to the health outcomes of incarcerated women and children in relation to their nutritional standards. The FGD and KII highlighted the inadequate quality and quantity of food provided to women in prison. It was reported that due to limited government funding, the variety of food produced is minimal, with only simple provisions of ‘nsima’ (thick maize porridge) and

cowpeas or pigeon peas or beans and they are not given any fruit' (Correctional staff FG1) available. Correctional staff and KIIs reported that meat and vegetables are only available two or three times a month. Indeed, *'fish is supposed to be given twice per month but this year no fish has been bought'* (Correctional staff FGD2). While there is a vegetable garden at Chichiri prison, which grows onions and tomatoes *'this does not reach the minimum food requirement and they are served in very small portions'* (Correctional staff FGD1). Furthermore the garden's purpose appears more recreational rather than as a source of sustainable nutrition for women in prison. Incarcerated women rely on supplies (uncooked foods) donated from outside of the prison as *'Churches, organizations and well-wishers are aware of these problems and they come to help the prisoners'* (Correctional staff FGD1). One participant reported how *'here on your own you cannot find something to eat'* (Women in prison FGD2). Poor quality of foods have health implications for women in prison, *'sometimes the maize that is used contains pesticides so [incarcerated women] develop diarrhoea'* and the *'whole grain for pap [can be] a problem for those with ulcers'* (Correctional staff FGD2). Women in prison also described food contamination: *'they don't wash [relish] prior to cooking. When eating you have to select picking stones, stool from insects from the cooked relish'* (Women in prison FGD2). When relish is brought into prisons by relatives, it is shared amongst the other incarcerated women. The KIIs pointed out that the Prison Act stipulates the minimum provision for incarcerated people is three meals per day. However, due to *'firewood and electricity issues, ...some incarcerated women ration their share for lunch and supper'*. Incarcerated males cook for all prisoners across the prison, with correctional staff claiming, *'[women in prison] were advised to be cooking but they refused maybe because of laziness...and opted to get the cooked meal from men'* (Correctional staff FGD2); whereas, the women in prison feel that *'men should not be cooking for us'*, *'[the food] is not well cooked'* and *'So sometimes we try to find money and buy tomatoes and we cook it again'* (Women in prison FG1; Women in prison FGD2).

Both women in prison FGDs observed the implications of poor timing and food quality on HIV positive individuals taking ART or those on other forms of medication. People living with HIV require a nutritious and balanced diet. This was not provided by the prison, with participants noting the consequences of inadequate medication distribution and the timing of meals; *'as a result of the food being served at different times, it makes it difficult for those who are taking ARTs since they have to take the medication at the same times every day.'* (Women in prison FGD1). This can cause significant side effects because *'you need to eat first before medications. We feel dizzy after taking medicines without eating'* (Women in prison FGD2). One participant reported after eating in the afternoon the next meal is not provided until the following day and so they *'eat a small portion and keep the other for night'* (Women in prison FGD2). These issues were also highlighted by KIIs; *'There is need to improve on the prisoners' diet so they are given nutritious, balanced and adequate diet to improve their health and also for those taking drugs to help the medicines to be effective'* (KII).

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The situation for children in *Chichiri* prison is similar to that of their mother in prison. Correctional staff and women in prison expressed that children and pregnant mothers have a greater quantity of food than other women prisoners due to donations from relatives, the Church and well-wishers. Donations for the children *‘are taken care of by well-wishers who come from outside the prison and they bring them most if not all the necessary things needed for new children to grow for example, baby blankets, diapers, lotion, soap, flour for making porridge, baby basin and pailst’* (Women in prison FGD1). Donations are usually provided on a monthly basis, with correctional staff and the government relying on this generosity. Correctional staff reported that women in *Chichiri* prison are permitted to breastfeed, are provided with extra food and encouraged to eat well for *‘effective’* breastfeeding and that they *‘monitor the care that the mother gives to the child e.g. bathing them’* (Correctional staff FGD1). While this was not reported by correctional staff, KIIs disclosed that the *‘poor nutrition of the mother affects the nutrient content of the milk hence making the whole essence of exclusive breast feeding ineffective’*. This view was shared with incarcerated women who stated that due to insufficient diets, *‘it is difficult for the child to get enough breast milk’* (Women in prison FGD2). Regardless of the donations, women in prison described their child’s hunger, stating that as *‘food comes once a day and the child is hungry most of the times’* (Women in prison FGD2); and described how *‘you can see that the children look malnourished because we lack some food’* (Women in prison FGD2).

Women’s access to prison-based and external health services

Insert **Graph Three** about here.

This theme outlines views pertaining to women in prisons access to medical staff, specialist and emergency services, on-going healthcare and the continuum of care upon release. Access to healthcare in prison is often better than in the community. At a national level, *‘there is coordination of partners dealing with health of incarcerated women.’* (KII). Correctional staff reported that *‘the prison ensures incarcerated women are healthy when they stay in prison’* and *‘every incarcerated woman has a right to medical care’* (Correctional staff FGD1). One member of correctional staff stated that incarcerated women’s health is in fact better while they are in prison than in the community as they are *‘forced’* to go seek healthcare, which is not necessarily the case when they are *‘free’* (Correctional staff FGD1). A incarcerated woman expressed, *‘even myself I am healthier, when relatives come to see me they say that I look healthy’* (Women in prison FGD2). However, other women in prison and KIIs expressed different sentiments. Overall, they do not perceive their health in prison is good and that *‘life in prison...is difficult and different from outside’* (Women in prison FGD2). With regard to those on remand, they have relatively similar experiences to those completing a sentence, with the screening process and access to external healthcare similar, including through the night, however it is the police that escort women on remand to the hospital or health centre. Police care is not necessarily to the same standard as in the prison itself. One KI expressed how those on remand *‘can be kept a week without medication or given the chance to take medication and this sometimes worsens their health status’*.

Qualified nurses and physicians provide access to healthcare in *Chichiri* prison, *'the doctor is available at all times and the incarcerated woman's health is always a priority for the wardens'* (Correctional staff FGD2) and *'The prison has a hospital where every new incarcerated woman is taken upon arrival for a thorough checkup where they are tested and are given guidance on how they can live with others in prison'* (Correctional staff FGD1). Women in prison receive daily health monitoring *'every morning the [officer] in charge of the cells bring reports to the clinic on patients in cells'* with more in depth inspections intermittently scheduled (KII). Participants across all FGD commented on the availability of on-call staff during the night, with services available inside the prison as well as access to additional care from outside the hospital if necessary. Prison welfare officers and *'peer educators'* also support the women in prison and conduct health checks and screening. In general, correctional staff perceive incarcerated women as advocates of their own health and safety. If staff members are not present, *'peers are able to identify those not well and write them down. When officers come they just take them to the hospital'* (Correctional staff FGD2). Some incarcerated women described how *'peer or prison wardens are able to ask if they don't see one of us [taking medication]. And we tell them she is sick and they go get medicine and give. We keep the medicine'* (Women in prison FGD2). If a woman is pregnant when they are first incarcerated, they are supported accordingly, *'If she brings a newly born baby she first goes to the hospital before going to prison cell. She is asked about the birth of the baby and the health passport book. So the health workers are able to continue with the remaining vaccines.'* (Correctional staff FG2). Vaccination and paediatric services are also accessible, with babies and children *'taken to a bigger facility to access these services'* (Women in prison FGD1) outside of the prison. One staff member suggested that the clinicians from local health centres who visit children in the community through *'mobile clinics'* could also plan visitations to the prison (Correctional staff FGD2).

Women in prison and correctional staff reported that mass screenings are carried out at regular intervals (commencing on entry), testing for various diseases such as HIV and TB (Women in prison FG1). Conversely, KIIs described a different screening regime in that *'screening is done at entry, after 6 months and another comprehensive one is done two weeks before one is discharged'*. If any diseases are diagnosed during the screening process, they are treated and monitored immediately. One incarcerated woman described how they did not know they had a sexually transmitted infection when they entered *Chichiri* prison, *'I came here and explained the problems, I have the doctor tested me and found the disease. I have received enough injections. When it comes to sickness we get adequate care'* (Women in prison FG2). Church organisations donated *'TB screeners'* and health workers visit to conduct chest x-rays on patients to aid in diagnosis. One incarcerated woman described her experience: *'When I came, I didn't know I had TB. I received medicine immediately now I am taking TB drugs, I see that in terms of getting medicine here in prison they try their best. Outside prison I could just be thinking I don't have TB and would be discovered late while here in prison within two or three days you are screened from any disease and given medicine'* (Women in prison FG2). One member of staff

however, noted discrepancies between the incarcerated male and female access to services for communicable diseases, *'after improvement from hospital she comes back. Unlike men who have a basic care facility here where incarcerated males after discharge are isolated to prevent spread'* (Correctional staff FGD2). Correctional staff commented on recent changes such as the provision of x-rays as well as prescribed medication, *'There were no X-rays before but now we have them here. There were no strong medicines, but we now have. We can also now admit some patient's right here'* (Correctional staff FGD1). Health workers also visit the prison to conduct chest x-rays and cancer screenings for the entire female prison population, *'They told us about health workers coming for chest x rays, VDRL (venereal disease research laboratory test), cancer so they did screen us all'* (Women in prison FGD2) and *'health talks are provided to the incarcerated individuals (both male and female) by nurses'* (KII). The staff, incarcerated women and KIIs all described how HIV, TB and sexual and reproductive health information is delivered to women in prison through different media outlets (television, health talks, brochures) and by partner organisations, well-wishers and peer educators, in order to encourage a healthy lifestyle while in prison. *'The DHOs office, Medicins sans Frontiers and EGPATh also provide the incarcerated women with health related services'* (Correctional staff FG1).

KIIs concluded that specialty services are still needed in prisons, especially to accommodate those that are serving longer sentences. At present, they are *'denied access to some services because of their situation'* (KII). Across FGD and KIIs, there were mixed messages regarding the amount of medication available to incarcerated women. From one incarcerated woman's perspective, *'we sometimes do run out of medication and sometimes the doctor at the clinic cannot treat that particular illness as it is a small clinic'* (Women in prison FGD1). This was supported by KIIs stating *'there are not enough medicines at the prison'* and correctional staff noted how *'there are times when the clinic does not enough medicine'* (Correctional staff FGD1). As a result, incarcerated women are referred to local hospitals to receive additional medication and treatment. Conversely, comments were made suggesting access to medication particularly ART was not a problem, as *'there is good coordination between prison clinics and public hospitals which enables good supply of drugs to the prison'* (KII), and *'when it comes to ART, every individual has enough for him/herself because they order enough for each and every person'* (Women in prison FGD1). Correctional staff noted how medication is stocked and supplied by *Medicines Sans Frontier (MSF)* and as a result, medication provisions are *'even better than outside prison'* (Correctional staff FGD2).

In the event of lack of effective prison-based services, particularly for acute care, access to certain medications, and treatment for some conditions, incarcerated women are taken to the local hospital to access treatment. This experience can be disturbing for women in prison as they *'feel uncomfortable with the escort of prison warders'* (Women in prison FGD1). One correctional staff commented that *'we have to fuel cars to take them to the hospital as well as assign some officers to escort them'* (Correctional staff FGD1). KIIs reported similar problems across other areas of Malawi in that they *'rely on administration vehicles to be used as ambulance. Availability of vehicles and fuel are*

major challenges.’ KIIs discussed ‘*building capacity to ensure qualified medical personnel to help in health provision*’, including training correctional staff so the prison is not entirely dependent on medical experts when an incarcerated woman falls ill.

HIV medical records are maintained for the duration of the woman’s sentence. Upon release, the ART computerised systems allows the data to be transferred to cards, women are ‘*given these cards and medicine to continue with and are advised to take their cards with them and report to a health facility which is near their homes where they will be helped accordingly*’ that can be used in the local community and health centres (KII), the degree to which women access treatment beyond prison is unknown. Upon release, ‘*it is easy for incarcerated women to continue with treatment because those being released go to the prison clinic and peer educators who get the patient documents ready for them. They are advised to take the documents to their nearest hospital*’ (Correctional staff FGD1). One member of staff described how ‘*some [incarcerated women] from Ndirande and some from Thyolo prefer to leave their master cards at the prison and keep receiving treatment from here. This is possible because we do not remove their names from our records so the supply depends on the names in the system*’ (Correctional staff FGD1). This approach was welcomed by one woman in prison, who declared that upon her release, she would prefer to continue receiving her healthcare through the prison ‘*because you get everything needed, while, outside prison services you are told there is no medicine*’ (Women in prison FGD2).

Discussion

Research activity on prison health in the SSA region is historically of low priority and generally restricted to rapid situational assessment of HIV and TB in selected prisons, human rights, UN and African Union country missions, MSc and PhD thesis, documentation of good practices, some qualitative studies and books (Telisinghe *et al.*, 2016; Mhlanga-Gunda *et al.*, 2019). Lengthy and often difficult bureaucratic procedures governing access to and conducting of research in prisons in Malawi, as in other SSA countries has contributed to the low coverage of routine or academic enquiry into health of persons incarcerated in prisons, and health situation (Mhlanga-Gunda *et al.*, 2019). Hence, our study presents a contemporary insight into health situation and experiences of healthcare, both within the prison and in tertiary care for women (and their circumstantial children) incarcerated in Malawi. It makes a strong contribution to literature on Malawian and SSA prisons, a research area with very little available strategic literature (CYC-Net, 2000; ACHPR, 2002, Chimphambano *et al.*, 2007a:b; Twea, 2013; Van Hout and Mhlanga-Gunda, 2018; 2019a:b). The paper is unique in its contribution to our understanding of the challenges in healthcare provision for women in Malawi prisons. Its findings likely extend beyond Malawi and set a foundation for further exploration into these issues.

Overall, the study highlights continued operation of Malawian prisons at over capacity, even in female prisons; with female prison environments generally characterised by lack of safe water, congested cells, poor ventilation and inadequate sanitation compounding the risk of illness (for example

diarrhoea, skin rashes), food contamination and spread of infectious disease (chlamydia, TB). This is similar to previous studies (ACHPR, 2002, Twea, 2013) and elsewhere in the SSA region, where prison infrastructure remains old and dilapidated, and where high pre-trial rates fuel overcrowding (UNODC, 2017; Van Hout and Mhlanga-Gunda, 2018; 2019a:b). Recommendations include the further discussions around alternatives to incarceration for women as a way of tackling congested prisons, and in prevention of infectious disease. Reducing imprisonment and pre-trial detention of women, and the incorporation of alternatives to incarceration for women, pregnant women and women who have committed minor and non-violent offences where possible is warranted. Custodial sentences for young women and mothers with infants should be avoided, except as last resort by developing and implementing prison reform initiatives (UNODC, 2019). This is in line with the *United Nations Rules for the Treatment of Women Prisoners and Non-custodial Measures for Women Offenders* (the Bangkok Rules).

Gender specific health challenges for women in Malawian prisons are similar to that reported elsewhere in SSA prisons (Ackerman, 2014; Dixey et al., 2015; Van Hout and Mhlanga-Gunda, 2018). There is strong reliance on donors (faith based organisations, well-wishers and non-governmental organisations, NGO) providing female sanitary wear, clothes, cleaning products, nutrition and health support. The study reveals a series of divergences across stakeholder perspectives at national and prison levels around the adequacy of nutrition (quality, quantity, timing of meals) for those special conditions (for example HIV) and pregnant/breastfeeding mothers, and a reliance on donor support in the absence of government allocations (children's food). This despite the case of *Masangano v the Attorney General* in 2009, which stated 'We wish however to note that the minimum standards set by the Prisons Act have outlived their time and ought to be amended to raise those minimum standards to meet nutritional needs of the prisoners to address new health challenges of inmates'. SSA prisons generally do not have a special budget for the cost of looking after circumstantial children in prison (Van Hout and Mhlanga-Gunda, 2018:2019a). The support of universal breastfeeding is encouraging, despite compromised by lack of sufficient nutrition for women and children, and is in line with the WHO recommendations of exclusive breastfeeding for the first six months of life, followed by continued breastfeeding with appropriate complementary foods for up to two years or beyond. In resource-poor settings (such as prisons), when formula feeding is not a viable option, women living with HIV are advised to exclusively breastfeed (rather than mixed feeding) in the first six months, providing that they are on ART (Tsague and Abrams, 2014; Ngoma-Hazemba and Ncama, 2016). It is therefore important they receive sufficient nutrition at the correct times in order to breastfeed adequately, prevent child malnutrition in prison, and adhere to their ART regime if living with HIV.

Improvements in healthcare provision coincides with the robust investment in upscaling prison based prevention of mother-to-child transmission of HIV in low resource countries such as Malawi, as since May 2017, when the UN Commission on Crime Prevention and Criminal Justice adopted a resolution (UNODC, 2019) requesting Member States in close cooperation with UNODC and other

relevant United Nations entities and other relevant stakeholders, to increase their capacity to eliminate mother-to-child transmission of HIV, and support HIV prevention and treatment programming in prisons, particularly in countries such as Malawi with a high-burden TB/HIV co-infection. Improvements may also have incurred due to the Malawi courts authoritative decision on health in prisons in the case of *Masangano v AG*, and domestic laws imposing obligations on various stakeholders including the Constitution, the Prison Act and Regulations. The study underscores how despite the difficulties of living in a closed setting leading to poor health, access to health care is better in prison than in the community for these women, even though there are expected difficulties in accessing tertiary care via prison ambulance (for example requiring prison escort and fuel) for further investigations or on emergencies (Van Hout and Mhlanga-Gunda, 2018: 2019a:b). For many this appeared to be their first point of contact with health screening. In terms of sexual and reproductive health care in prison, it was encouraging to note the robust attempt to support women's gender specific needs relating to health information, contraception, HIV and TB screening and care, screening of STI, breast and cervical cancers. Of note are the gaps in the system for those on remand, whose care falls under the police system, with some issues observed around availability of medicines threatening continuity of care for those on remand. There was some divergence around medicines stockouts, these were generally not reported for ART. The World Health Organization (WHO) 2016 updated guidelines recommend lifelong ART for all from the time when any adult (including pregnant and breastfeeding women) or child is first diagnosed with HIV infection ("Option B+") (WHO, 2016). Given the revolving door of incarceration and the return to communities, the continuity of care is vitally important. Those discharged from the prison were able to continue receiving care from prison health staff, despite the efficient health passporting system in place on release. Given that failure to initiate, engage and be retained in HIV prevention, treatment and care is associated with negative outcomes for women living with HIV, her infant and the community (Kim et al., 2016; Nachega et al., 2012) this is most encouraging.

Conclusion

Garnering a contemporary understanding of prison environmental cultures which shape correctional staff understanding and responsiveness to incarcerated women's situation and their healthcare needs can inform continual policy and correctional health practice reform, and ultimately standards of care women and their children incarcerated in Malawian prisons. This study shines a light on issues relevant not only to Malawi, but beyond, related to challenges in providing healthcare to incarcerated women, especially in SSA countries. It provides implications related to addressing healthcare deficiencies within the Malawi prison system, as well as the underpinning need for further research into the health needs of incarcerated women with cognisance on the continuum of care between prison health and public or

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community health not only within Malawi, but across the SSA region and beyond. Notwithstanding improvements in healthcare provision, one could argue for further investigation into the extent to which authorities are compliant with these laws, and the requirement to expedite revision of laws and regulations in order to ensure full compliance with international standards. There is always risk that whilst international standards are important, they are soft law and are likely to be ignored by duty-bearers.

Funding Acknowledgement

The work was funded by the Medical Research Council Grant Ref: MC_PC_MR/R024278/1 as part of the AHRC-MRC Global Public Health Partnership ‘grant entitled *‘Promoting positive sexual and reproductive health and accessible HIV Prevention, Treatment, Care and Support (PTC&S) services for women prisoners in Zimbabwe and Malawi’*. The funder was not involved in the design of the scoping review protocol, data collection and analysis, interpretation of the data or writing of the manuscript.

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Table One *'Profile of Participants'*

Data Collection	Number of Participants	Type of Participants	Length in minutes	Location
FGD 1	12	Women prisoners (18-25)	68	Chichiri Prison
FGD 2	11	Women prisoners (26-45)	55	Chichiri Prison
FGD 3	11	Correctional staff	47	Chichiri Prison
FGD 4	10	Correctional staff	46	Chichiri Prison
KII		Commissioner of prison farms	45	Prison Headquarters
KII		Senior Nurse Official	45	Prison Headquarters
KII		Senior HIV counsellor	45	Zomba Prison
KII		Senior Officer in charge	45	Zomba Prison
KII		Senior Officer in charge	28	Zomba Prison

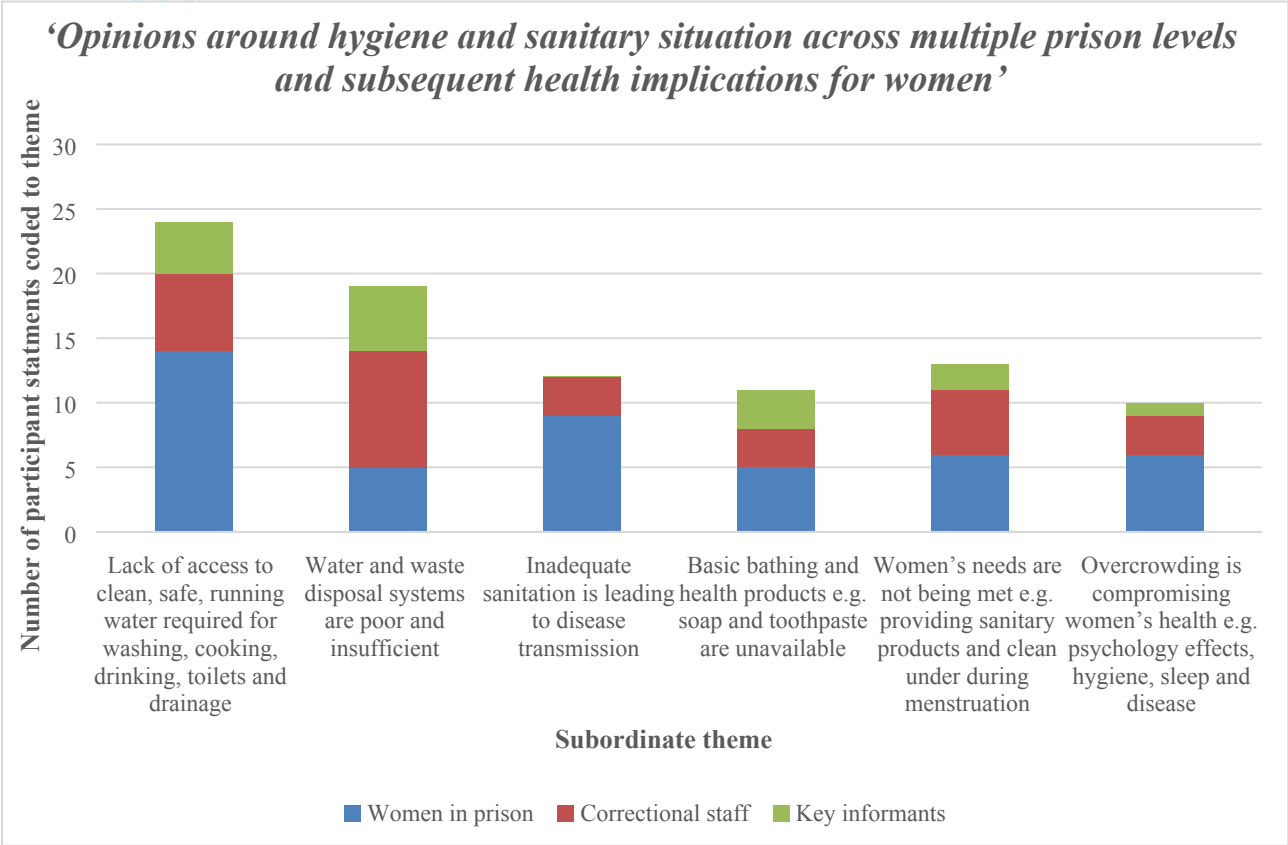
Table Two ‘Supplemental Table’

Superordinate Theme	Subordinate Theme	Diverging opinions of participants
Hygiene and sanitary situation across multiple prison levels and subsequent health implications for women	<ul style="list-style-type: none">Lack of access to clean, safe, running water required for washing, cooking, drinking and drainageWater and waste disposal systems are poor and insufficientInadequate sanitation is leading to disease transmissionBasic bathing and health products e.g. soap and toothpaste are unavailableWomen’s needs are not being met e.g. providing sanitary products and clean underwearOvercrowding is compromising women’s health e.g. psychology effects, hygiene, sleep and disease	<ul style="list-style-type: none">Improvements to sanitation have been made and diseases are being prevented and treated
Nutritional provision and diet of women and children in prison	<ul style="list-style-type: none">Food quality, quantity and nutritional value is poor for women prisonersTimings of meals is problematic for prisoners on HIV treatment and other medicationsPregnant women and children receive sufficient food as stocks are replenished by donorsBreastfeeding mothers receive additional quantities of food	<ul style="list-style-type: none">Pregnant women and children get food once a dayNew mothers are not producing enough breast milk
Women’s access to prison-based and external health services	<ul style="list-style-type: none">Access to care in prison is often better than in the communityPrison welfare officers, nurses and clinicians are available 24/7 to assist women prisonersHealth screening is conducted upon entry and through the duration of the prison sentenceMedication stock is limited, prisoners are transferred to hospitals to access necessary treatmentEmergency and specialty (cancer, antenatal) medical care is accessible 24/7HIV, TB and SRH preventative, screening and treatment services are available to prisonersPrisoners on remand access healthcare through police servicesWhen released, prisoners are provided with documentation to continue accessing health services	<ul style="list-style-type: none">Prison health is poor and access is restrictedAccess to medication in prison is better than in the community due to donorsFunding is limited so access to certain specialities is unavailableLevel of health for women on remand is poor

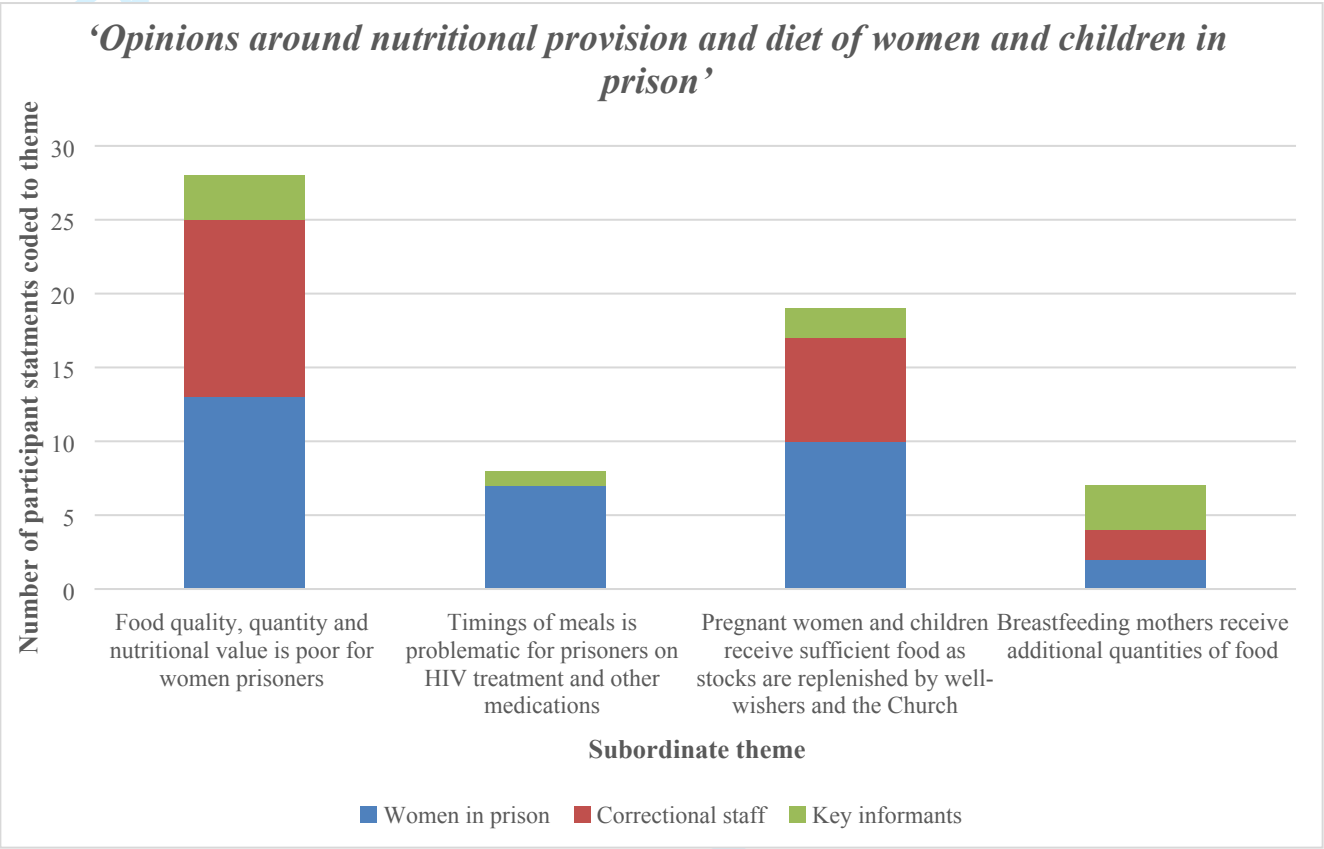
Key: HIV – human immunodeficiency virus; TB – tuberculosis; SRH – sexual and reproductive health

International Journal of Prisoner Health

Graph One ‘Opinions around hygiene and sanitary situation across multiple prison levels and subsequent health implications for women’



Graph Two *‘Opinions around nutritional provision and diet of women and children in prison’*



Graph Three ‘Opinions around women’s access to prison-based and external health services’

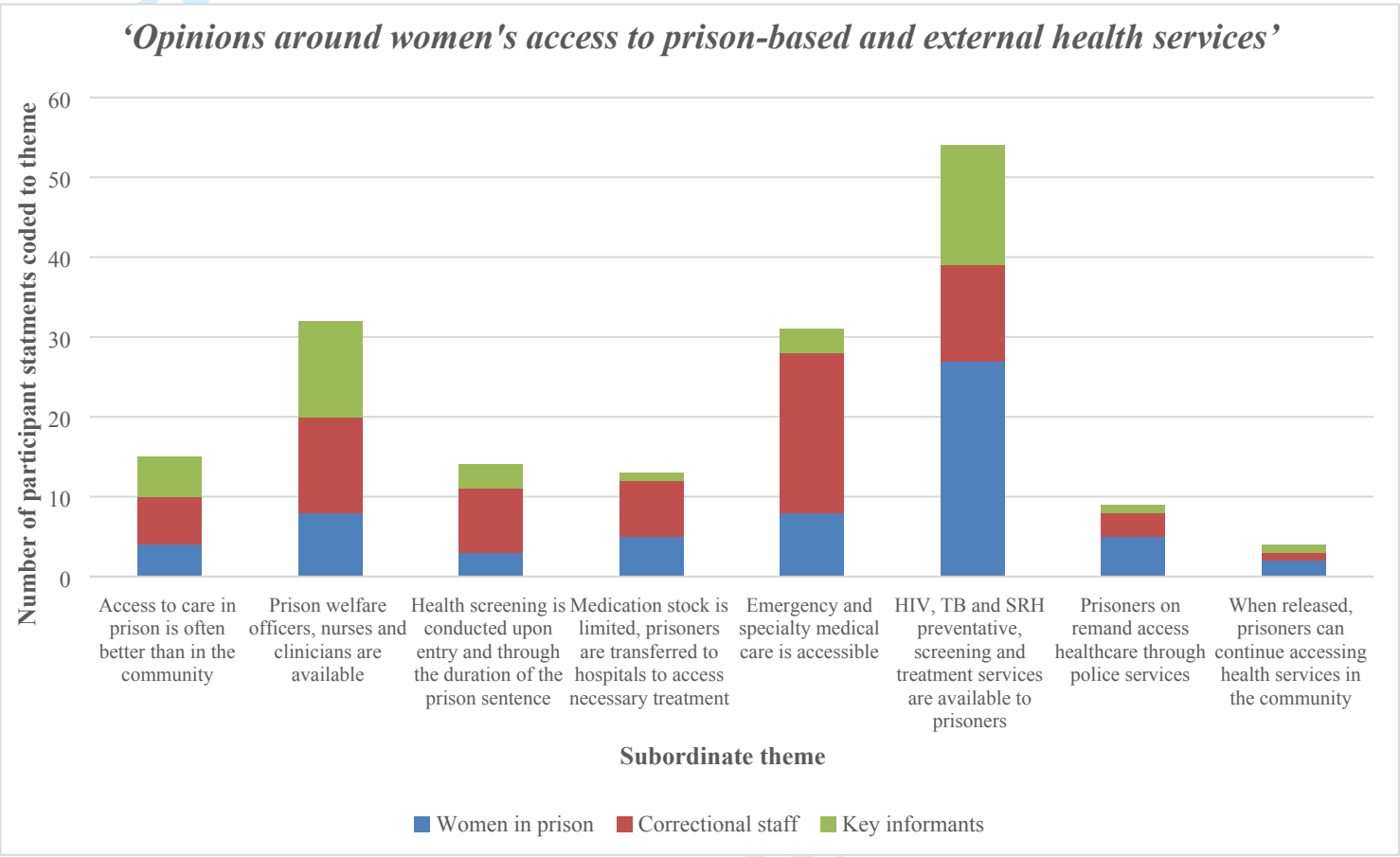


Table One *'Profile of Participants'*

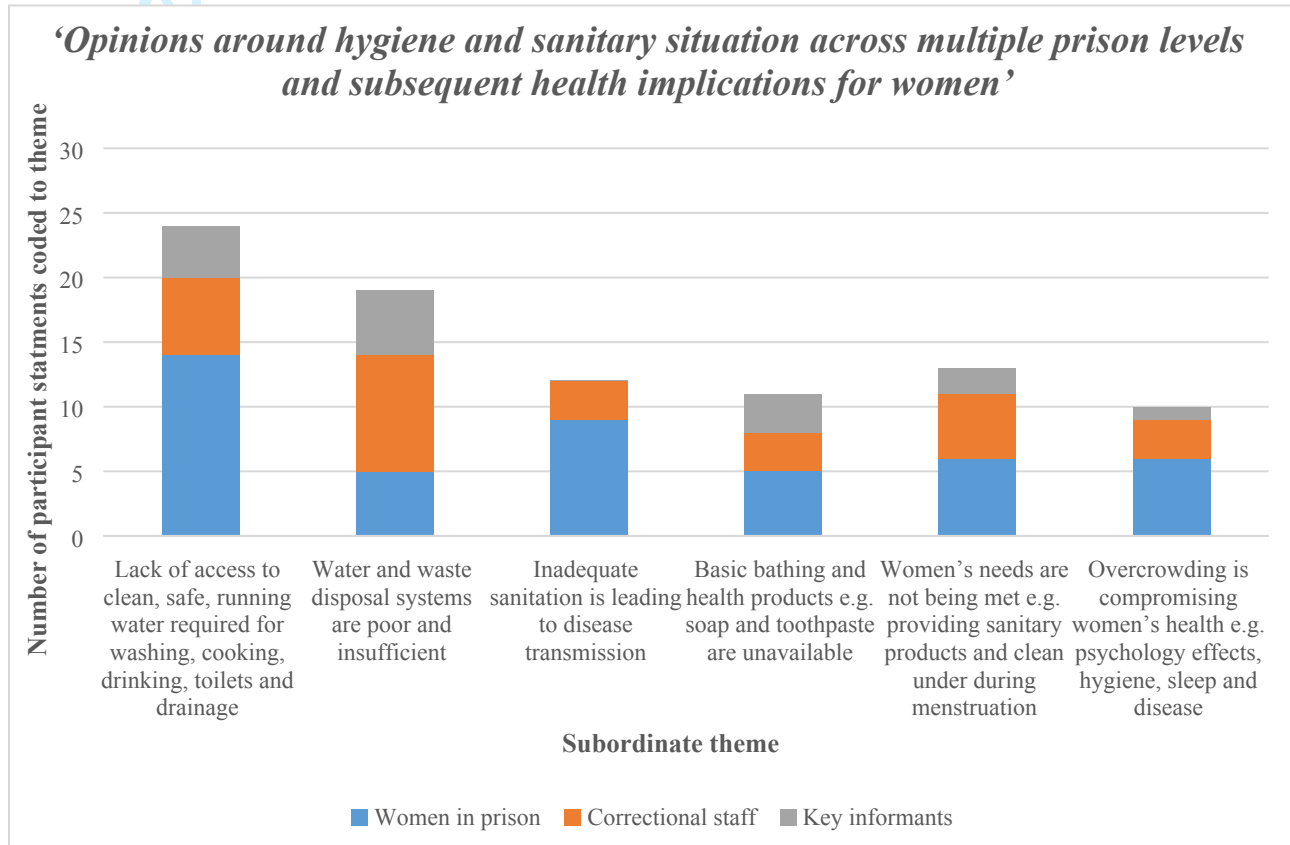
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KII		Senior HIV counsellor	45	Zomba Prison
KII		Senior Officer in charge	45	Zomba Prison
KII		Senior Officer in charge	28	Zomba Prison

Table Two ‘Supplemental Table’

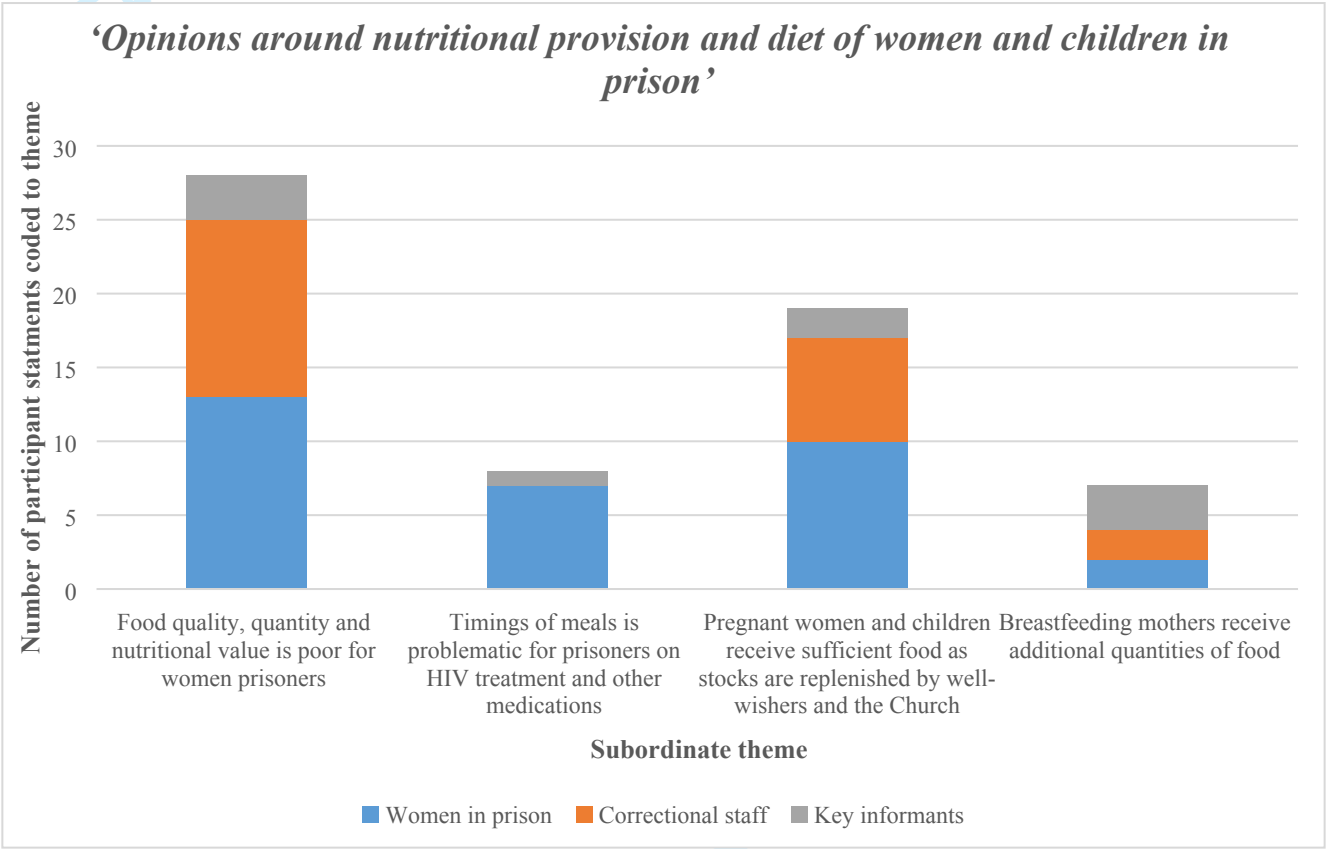
Superordinate Theme	Subordinate Theme	Diverging opinions of participants
Hygiene and sanitary situation across multiple prison levels and subsequent health implications for women	<ul style="list-style-type: none">Lack of access to clean, safe, running water required for washing, cooking, drinking and drainageWater and waste disposal systems are poor and insufficientInadequate sanitation is leading to disease transmissionBasic bathing and health products e.g. soap and toothpaste are unavailableWomen’s needs are not being met e.g. providing sanitary products and clean underwearOvercrowding is compromising women’s health e.g. psychology effects, hygiene, sleep and disease	<ul style="list-style-type: none">Improvements to sanitation have been made and diseases are being prevented and treated
Nutritional provision and diet of women and children in prison	<ul style="list-style-type: none">Food quality, quantity and nutritional value is poor for women prisonersTimings of meals is problematic for prisoners on HIV treatment and other medicationsPregnant women and children receive sufficient food as stocks are replenished by donorsBreastfeeding mothers receive additional quantities of food	<ul style="list-style-type: none">Pregnant women and children get food once a dayNew mothers are not producing enough breast milk
Women’s access to prison-based and external health services	<ul style="list-style-type: none">Access to care in prison is often better than in the communityPrison welfare officers, nurses and clinicians are available 24/7 to assist women prisonersHealth screening is conducted upon entry and through the duration of the prison sentenceMedication stock is limited, prisoners are transferred to hospitals to access necessary treatmentEmergency and specialty (cancer, antenatal) medical care is accessible 24/7HIV, TB and SRH preventative, screening and treatment services are available to prisonersPrisoners on remand access healthcare through police servicesWhen released, prisoners are provided with documentation to continue accessing health services	<ul style="list-style-type: none">Prison health is poor and access is restrictedAccess to medication in prison is better than in the community due to donorsFunding is limited so access to certain specialities is unavailableLevel of health for women on remand is poor

Key: HIV – human immunodeficiency virus; TB – tuberculosis; SRH – sexual and reproductive health

Graph One *‘Opinions around hygiene and sanitary situation across multiple prison levels and subsequent health implications for women’*



Graph Two *‘Opinions around nutritional provision and diet of women and children in prison’*



Graph Three *'Opinions around women's access to prison-based and external health services'*