



## REPORT

# SEXUAL AND REPRODUCTIVE HEALTH COMMODITIES IN TANZANIA: AVAILABILITY, STOCKOUTS AND AFFORDABILITY



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# 1. EXECUTIVE SUMMARY

Access to medicines and medical commodities forms a crucial building block of health systems, and sexual and reproductive health (SRH) is a field of care which lies at the basis of healthy societies. Unfortunately, Tanzania, with a maternal mortality rate of 556 per 100,000 live births and a low modern contraceptive use rate, experiences challenges with the adequate provision of SRH services and commodities. Therefore, this study was conducted to measure the availability, stockouts and affordability of 50 SRH commodities in 144 health facilities from the public, private and faith-based sectors across three provinces (Dodoma rural, Manyara and Morogoro). Stockouts were defined as the number of days during a 12-month period that a commodity that is normally available and stocked, was not available at the facility. Affordability was calculated using the international poverty line (IPL) of 5095.32 TSH (2.15 USD) per day. If the treatment or cure cost more than a day of income for someone living on the IPL, it was considered unaffordable. The findings of this study can be used to develop evidence-based policies to improve the SRH of women and adolescents.

## Availability

Family planning commodities had an extremely low availability in the private and faith-based sector, and a better, but still inadequate availability in the public sector. Availability of maternal health commodities, overall, was better compared to family planning commodities. Despite this, only oxytocin and magnesium sulphate made the 80% availability threshold as set by the World Health Organization (WHO) in the public sector. None made this threshold in the private and faith-based sectors. Commodities for the treatment of sexually transmitted infections (STIs) overall had the best availability, with four out of nine making the 80% availability threshold. Availability of HIV/AIDS commodities was generally poor: in total only one commodity in the private sector (Atazanavir/ritonavir) and one in the faith-based sector (Lopinavir/ritonavir) were available in at least 80% of health facilities.

## Stockouts

Every family planning commodity had experienced a stock out in at least some health facilities in the public sector. Stockouts generally lasted long, up to 106 days for ethinylestradiol + levonorgestrel. Regarding maternal health commodities, misoprostol and folic acid tablets had high numbers of lengthy stockouts in the public sector. None of the commodities had a stockout in the private and faith-based sectors, except for folic acid tablets at one health facility. Stockouts of STI commodities were relatively common in the public and faith-based sectors, and less common in the private sector. Stockouts for HIV/AIDS commodities occurred sometimes in the public sector and weren't recorded for the private and faith-based sector. However, especially in the private sector, availability of stock cards was low. Nevirapine had been stocked out at many health facilities (18%) for an average of 107 days.

## Affordability

Affordability of family planning commodities was good as they were generally offered for free across the sectors. One maternal health commodity was unaffordable in the public sector, compared to four in the private and faith-based sectors. Methyldopa was the most expensive maternal health commodity across sectors. Affordability of STI commodities was especially problematic in the public and private sectors, with 3 STI commodities being considered unaffordable in both of these sectors. HIV commodities were all offered for free to patients.

## Recommendations

A multitude of recommendations are made to improve access to SRH commodities, including: setting minimum requirements (including FP Services) for the establishment of a health facility; establishment of a joint committee to ensure availability, affordability and accessibility of SRH commodities; setting a standard cost to all SRH commodities to ensure equal affordability and; installing a digital commodity tracking system.

## 2. BACKGROUND

Access to medicines and medical commodities forms a crucial building block of health systems. Without proper access to quality assured and safe medicines, people are not able to live in optimal health. Sexual and reproductive health (SRH) is a field of care which lies at the basis of healthy societies. The WHO Model List of Essential Medicines details medicines and commodities which are essential to the provision of quality SRH care.<sup>1</sup>

When the health system is well equipped to provide SRH commodities and services, it means people are enabled to decide if and when they want to become pregnant, to have a healthy pregnancy and safe childbirth, and to protect themselves against STIs and HIV/AIDS. They will also receive timely and proper treatment in case they do contract HIV/AIDS or an STI.

Unfortunately, Tanzania experiences challenges with the adequate provision of SRH services and commodities. The maternal mortality rate is estimated to be 556 per 100,000 live births, while the prevalence of modern contraceptive use continues to be low, with about 31% and 36% of married and unmarried women aged 15-49 years, respectively, using a modern contraceptive.<sup>2,3</sup> This research was conducted to study the availability, affordability and stockouts of 50 SRH commodities which are used for family planning, maternal healthcare, and treatment of sexually transmitted infections (STIs), and HIV/AIDS in addition to several test kits and menstrual products, in Dodoma rural, Manyara and Morogoro in Tanzania. This research is essential as it creates a clear overview of the availability and affordability of a comprehensive package of essential SRH commodities in Tanzania, which will contribute to the development of evidence-based policies to improve the SRH of women and adolescents.

## 3. RESEARCH METHODOLOGY

This study was conducted by The Eastern Africa National Networks of AIDS and Health Service Organizations (EANNASO) and Health Action International (HAI) as part of the Solutions for Supporting Healthy Adolescents and Rights Protection (SHARP) programme, funded by the European Union. The research was approved by the National Institute for Medical Research (NIMR) ethical clearance number: NIMR/HQ/R.8a/Vol.IX/4208.

It used an adapted version of the HAI/WHO Methodology.<sup>4</sup> Teams of data collectors visited 144 health facilities from the public, private and faith-based sectors to survey the availability, stockouts and patient prices of 50 medicines and test kits. An overview of all surveyed commodities can be found in Annex 1.

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1. World Health Organization Model List of Essential Medicines. 22nd List. World Health Organization. (2021). Geneva: Switzerland.

2. Ministry of Health, Community Development, Gender, Elderly and Children. National Plan for Reproductive, Maternal, Newborn, Child and Adolescent Health & Nutrition. (2021/2022-2025/2026). One Plan III. (2021). Dodoma: Tanzania.

3. Ministry of Health Dodoma, Ministry of Health Zanzibar, National Bureau of Statistics, Office of Chief Government Statistician, DHS Program. Demographic and Health Survey and Malaria Indicator Survey 2022. Key Indicators Report. (2023). Dodoma: Tanzania.

4. Measuring Medicine Prices, Availability, Affordability and Price Components. 2nd edition. World Health Organization, Health Action International. (2008). Geneva: Switzerland.

**Public Sector:** Facilities that are run and funded by the national government. Medicines in this sector are often low cost or free of charge.

**Private Sector:** Licensed retail pharmacies, private healthcare centres and private hospitals. The private sector does not include unlicensed drug stores, drug sellers in the informal sector, or health facilities operated by private companies, such as mining companies.

**Faith-based Sector:** Facilities that are run by religious organisations, such as church missions.

The study sample included health facilities from urban as well as rural areas, ranging from dispensaries to referral hospitals. Availability was only measured for commodities based on the health facility level where they should be available. For example, carbetocin is available from district hospitals and up. In addition, stock cards or stock databases were reviewed to record information on stockouts of the surveyed products over a 12-month period prior to data collection. Finally, price information, in combination with the international poverty line (IPL) of 5,095.32 TSH (2.15 USD) per day, was used to calculate affordability of commodities. If a commodity cost more than a day's IPL 'income', it was considered unaffordable. Table 1 provides an overview of the study sample.

**Table 1. Study sample.**

	Public	Private	Faith-based	Total
Urban	7	5	3	15
Rural	86	20	23	129
Total	93	25	26	144

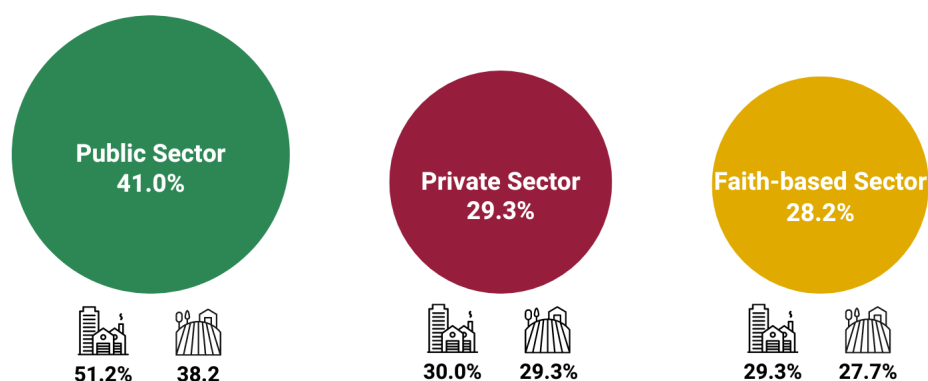
## 4. FINDINGS

Pages 6-7 of the report present the findings on the availability of all 50 surveyed commodities combined, and compares the different sectors. Pages 7-19 provide the availability and affordability for individual commodities, per commodity group. A detailed overview of average availability, stockouts, and affordability of all surveyed commodities, across sector and location, can be found in Annex 2.

### SRH COMMODITY AVAILABILITY A GLANCE

In Tanzania, the public sector had, in general, the best availability of all surveyed commodities (41.0%), followed by the private sector (29.3%), and lastly the faith-based sector (28.2%) (see Figure 1). In the public sector, availability differed significantly between urban and rural locations (51.2% vs. 38.2%, respectively). In the private and faith-based sectors availability was more or less similar between urban and rural locations.

**Figure 1. Overall availability comparing the public, private and faith-based sectors and urban and rural locations.**



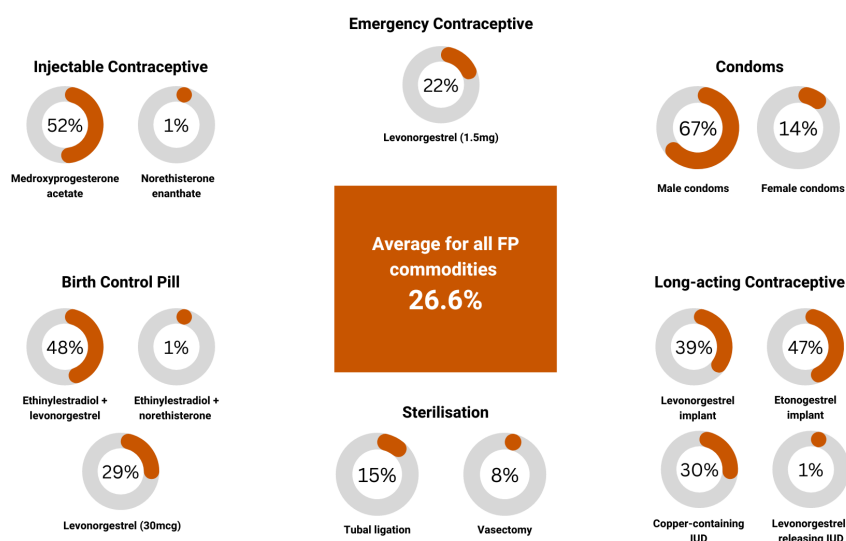
## FAMILY PLANNING

Family planning (FP) commodities are products which allow individuals to plan their pregnancy. To have the choice and freedom to decide on pregnancy upholds several human rights and advances health outcomes (Cook, 1983; WHO, 2014). FP commodities have varying regimens and lengths of effectiveness: e.g., the birth control pill needs to be taken daily, injectables need one injection every two or three months, while implants and intra uterine devices (IUDs) are effective for a long time and can stay in situ for about five years. Condoms are the only contraceptives which protect against both pregnancy and STIs at the same time (WHO, 2020). Vasectomy and tubal ligation are services that allow people the decision to not have any (more) children.<sup>5</sup>

### Availability

When looking at availability of FP commodities taken together, none had an availability of 80% or higher in Tanzania (see Figure 2). Highest availability was found for male condoms (67%), and medroxyprogesterone acetate (52%). Twelve of the 14 FP commodities had an availability of less than 50%.

5. Although vasectomy and tubal ligation are in principle reversible, it is not the intention, and there's no guarantee that it will be successful.

**Figure 2. Availability of FP commodities**

In the public sector, only male condoms had an 80% or higher availability (see Table 2). Next to male condoms, only medroxyprogesterone acetate (74.2%), etonogestrel implants (66.7%), ethinylestradiol + levonorgestrel (65.6%) and levonorgestrel implants (58.1%) were available at more than 50% of health facilities; Nine of 14 family planning commodities in the public sector were available at less than 50% of the facilities.

In the private and faith-based sectors availability was low for all family planning commodities. In the private sector only vasectomy services were found at 50.0% of facilities, but these services are only offered at district hospitals and up. Even male condoms were available at only 36.0% of health facilities in the private sector. In the faith-based sector, six of 14 family planning commodities were unavailable at all health facilities, while the remainder were available at 20% or less of facilities. Highest availability was found for vasectomy services (20.0%) and male condoms (15.4%).

**Table 2. Availability of family planning commodities, per sector.**

	Public (%)	Private (%)	Faith-based (%)
Ethinylestradiol + levonorgestrel	65.6	28.0	3.8
Ethinylestradiol + norethisterone	2.2	0.0	0.0
Levonorgestrel (30 mcg)	43.0	4.0	0.0
Levonorgestrel (1.5 mg)	30.1	8.0	3.8
Medroxyprogesterone acetate	74.2	16.0	7.7
Norethisterone enanthate	1.1	0.0	0.0
Implants: levonorgestrel	58.1	8.0	0.0
Implants: etonogestrel	66.7	20.0	3.8
Copper-containing IUD	44.1	4.0	3.8
Levonorgestrel-releasing IUD	1.1	0.0	0.0
Male condoms	89.2	36.0	15.4
Female condoms	20.4	4.0	3.8
Vasectomy services <sup>a</sup>	0.0	50.0	20.0
Tubal ligation services <sup>a</sup>	16.7	0.0	0.0

<sup>a</sup>Available from district hospitals and higher.



## Stockouts

A stockout is defined as the number of days during a 12-month period that a commodity that is normally available and stocked, was not available at the facility. Stock information was recorded in 78.2% of all surveyed facilities. Broken down into the surveyed sectors, the percentages are 68.8% for public, 68.0% for private, and 80.8% for faith-based facilities. In the public sector, all FP commodities, with the exception of ethinylestradiol + norethisterone, experienced stockouts (see Table 3). Levonorgestrel-releasing IUDs (50.0%), medroxyprogesterone acetate (16.1%) and ethinylestradiol + levonorgestrel (14.3%) were most often stocked out. Female condoms were on average stocked out the longest (112 days), followed by ethinylestradiol + levonorgestrel, for which stockouts lasted on average 106 days. In the private and faith-based sectors, only a few health facilities had stock cards for family planning commodities. It is therefore difficult to determine the stockout situation in these sectors.

**Table 3. Stockouts of family planning commodities at health facilities, and average number of stockout days per stockout, per sector.**

	Public			Private			Faith-Based		
	Facilities with stock card (#)	Facilities with stockout (%)	Average # of stockout days	Facilities with stock card (#)	Facilities with stockout (%)	Average # of stockout days	HFs with stock card (#)	HFs with stock-out (%)	Average # of stockout days
Ethinylestradiol + levonorgestrel	49	14.3	106	5	0.0	-	1	0.0	-
Ethinylestradiol + norethisterone	2	0.0	-	0	ND	ND	0	ND	ND
Levonorgestrel (30 mcg)	32	6.3	77	1	0.0	-	0	ND	ND
Levonorgestrel (1.5 mg)	29	6.9	81	1	0.0	-	1	0.0	-
Medroxyprogesterone acetate	56	16.1	69	3	0.0	-	2	0.0	-
Norethisterone enanthate	0	ND	ND	0	ND	ND	0	ND	ND
Implants: levonorgestrel	46	8.7	69	1	0.0	-	0	ND	ND
Implants: etonogestrel	56	8.9	28	4	25.0	102	0	ND	ND
Copper-containing IUD	34	5.9	30	1	0.0	-	1	0.0	-
Levonorgestrel-releasing IUD	2	50.0	19	0	ND	ND	0	ND	ND
Male condoms	67	4.5	15	5	20.0	13	3	0.0	-
Female condoms	18	5.6	112	1	0.0	-	0	ND	ND

HFs: Health facilities. ND: No data available.

## Affordability

All FP commodities, with the exception of norethisterone acetate, were free to the patients in health facilities from the public sector (see Table 4). Norethisterone acetate cost 0.20 days of IPL 'income' in the public sector. In the private sector, ethinylestradiol + levonorgestrel cost 0.01 days of IPL 'income', and male condoms 0.02 days. The other commodities were free for patients in all private health facilities surveyed. In the faith-based sector, male condoms cost 0.05 days of IPL 'income' on average. The remaining commodities were provided for free.

**Table 4. Affordability of FP commodities.**

	Public	Private	Faith-Based
Ethinylestradiol + levonorgestrel	0 days	0.01 days	0 days
Ethinylestradiol + norethisterone	0 days	-	-
Levonorgestrel (30 mcg)	0 days	0 days	-
Levonorgestrel (1.5 mg)	0 days	0 days	-
Medroxyprogesterone acetate	0 days	0 days	0 days
Norethisterone enanthate	0.20 days	-	-
Implants: levonorgestrel	0 days	0 days	-
Implants: etonogestrel	0 days	0 days	0 days
Copper-containing IUD	0 days	0 days	0 days
Levonorgestrel-releasing IUD	0 days	-	-
Male condoms	0 days	0.02 days	0.05 days
Female condoms	0 days	0 days	-

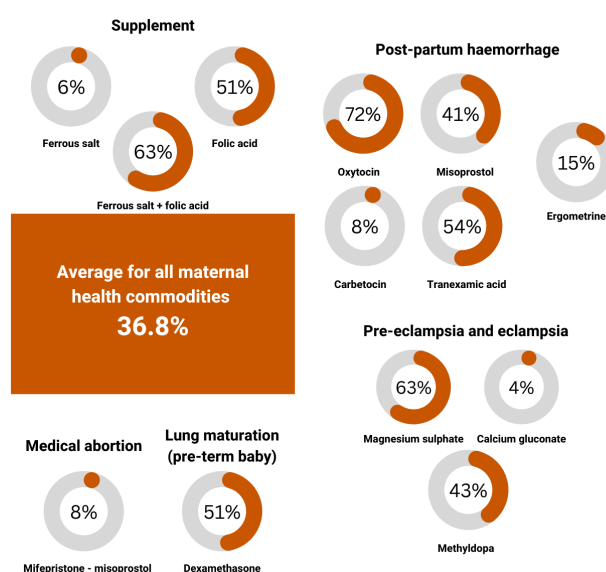
-: No pricing data available.

## MATERNAL HEALTH

Maternal health commodities represent a diverse group of products which are used to treat health conditions that affect women during pregnancy, childbearing, and postnatally. In many contexts, during this period women are at an increased risk of negative health outcomes that can be avoided with the right treatment and care (WHO, 2023). Under maternal health commodities fall diverse medicines with different uses; examples are supplements which are used to prevent iron and folic acid deficiencies, conditions which are associated with adverse pregnancy outcomes to the mother and foetus (WHO, 2012); medicines such as oxytocin and misoprostol, used to prevent post-partum haemorrhage, the leading cause of maternal deaths in the Sub-Saharan Africa region (Say, 2014); and medicines to treat pregnancy-related hypertension, also called (pre)-eclampsia, including methyldopa and magnesium sulphate.

## Availability

The average availability of maternal health commodities was 36.8% (see Figure 3). None of the commodities had an 80% or higher availability. Carbetocin, mifepristone – misoprostol, ferrous salt, and calcium gluconate were available at less than 10% of health facilities.

**Figure 3. Availability of maternal health commodities.**

When looking at the availability per sector, some differences in availability are apparent, with the public sector doing better than the private and faith-based sectors (see Table 5). In the public sector, oxytocin was the only commodity with an 80% or higher availability. Magnesium sulphate was available at 79.6% of facilities. Ferrous salt + folic acid tablets (61.3%), folic acid tablets (58.1%), misoprostol (51.6%), and tranexamic acid (50.0%) were available at 50% or more of public facilities. Carbetocin, calcium gluconate and ferrous salt had especially low availabilities in the public sector. In the private sector, none of the commodities reached an 80% or higher availability. Highest availability was found for dexamethasone (75.0%) and ferrous salt + folic acid tablets (68.0%). Oxytocin (40%), misoprostol (16.0%) and magnesium sulphate (20.0%), critical in preventing complications during childbirth, had a low availability. In the faith-based sector, none of the maternal health commodities reached the 80% availability either, and availability was comparable to the private sector.

**Table 5. Availability of maternal health commodities, per sector.**

	Public (%)	Private (%)	Faith-based* (%)
Oxytocin	83.9	40.0	57.7
Misoprostol	51.6	16.0	26.9
Carbetocin <sup>a</sup>	0.0	0.0	20.0
Tranexamic acid <sup>a</sup>	50.0	50.0	60.0
(methyl)ergometrine <sup>a</sup>	16.7	0.0	20.0
Mifepristone - misoprostol <sup>a</sup>	16.7	0.0	0.0
Magnesium sulphate	79.6	20.0	42.3
Calcium gluconate	2.2	4.0	11.5
Ferrous salt	5.4	8.0	7.7
Folic acid tablet	58.1	36.0	42.3
Ferrous salt and folic acid	61.3	68.0	61.5
Dexamethasone	48.8	75.0	50.0
Methyldopa	49.5	28.0	34.6

<sup>a</sup>Available from district hospitals and higher.

## Stockouts

Stockouts of maternal health commodities were common in the public sector (see Table 6). Carbetocin was stocked out at the one health facility that had a stock card for it, while mifepristone – misoprostol was stocked out at one of two health facilities that kept a stock card for it. Calcium gluconate and misoprostol were a few of the most commonly stocked out commodities, with stockouts recorded at 33.3% and 22.5% of health facilities, respectively. These stockouts were also lengthy: calcium gluconate was stocked out for 109 days on average, and misoprostol 85 days. Other maternal health commodities that were stocked out at 10% or more of facilities in the public sector were: ferrous salt + folic acid tablets, folic acid tablets, methyldopa and dexamethasone. Longest stockouts were found for methyldopa (129 days) and tranexamic acid (120 days).

In the private and faith-based sectors, stockouts were less common. The private sector recorded no stockouts of any maternal health commodities. In the faith-based sector, only stockouts for folic acid tablets were recorded, which lasted on average 68 days.

**Table 6. Stockouts of maternal health commodities at health facilities, and average number of stockout days per stockout, per sector.**

	Public			Private			Faith-based		
	HFs with stock card (#)	HFs with stock-out (%)	Average # of stockout days	HFs with stock card (#)	HFs with stock-out (%)	Average # of stockout days	Facilities with stock card (#)	Facilities with stockout (%)	Average # of stockout days
Oxytocin	60	5.0	45	6	0.0	-	10	0.0	-
Misoprostol	40	22.5	85	4	0.0	-	7	0.0	-
Carbetocin	1	100.0	18	0	ND	ND	2	0.0	-
Tranexamic acid	16	6.3	120	2	0.0	-	5	0.0	-
(Methyl) ergometrine	5	0.0	-	0	ND	ND	1	0.0	-
Mifepristone - misoprostol	2	50.0	30	0	ND	ND	0	ND	ND
Magnesium sulphate	62	3.2	56	4	0.0	-	7	0.0	-
Calcium gluconate	3	33.3	109	1	0.0	-	3	0.0	-
Ferrous salt	5	0.0	-	2	0.0	-	1	0.0	-
Folic acid tablet	45	17.8	104	7	0.0	-	9	11.1	68
Ferrous salt and folic acid	50	18.0	83	11	0.0	-	12	0.0	-
Dexamethasone	20	10.0	28	6	0.0	-	4	0.0	-
Methyldopa	40	12.5	129	6	0.0	-	8	0.0	-

HFs: health facilities; ND: No data available.

## Affordability

In the public sector nine of 10 maternal health commodities were affordable (see Table 7). Oxytocin, misoprostol, calcium gluconate and ferrous salt were free to the patients. Only methyldopa was unaffordable: it cost 3.15 days of IPL 'income'. In the private sector, five of nine maternal health commodities were affordable. Ferrous salt + folic acid tablets (1.06 days), calcium gluconate (1.37 days), tranexamic acid (2.94 days) and methyldopa (15.70 days) were all unaffordable. In the faith-based sector, four of 10 commodities were unaffordable: dexamethasone (1.47 days), tranexamic acid (2.75 days), magnesium sulphate (3.77 days), and methyldopa (6.84 days).

**Table 7. Affordability of maternal health commodities.**

	Public	Private	Faith-based
Oxytocin (10 IU in 1ml)	0 days	0.21 days	0.23 days
Misoprostol (200mcg)	0 days	0.98 days	0.74 days
Tranexamic acid (100mg/ml in 10ml)	0.71 days	2.94 days	2.75 days
Magnesium sulphate (0.5mg/ml)	0.22 days	0 days	3.77 days
Calcium gluconate (100mg/ml in 10ml)	0 days	1.37 days	0 days
Ferrous salt (200mg)	0 days	-	0 days
Folic acid (5mg)	0.04 days	0.79 days	0.40 days
Ferrous salt and folic acid (60mg + 400mcg)	0.08 days	1.06 days	0.42 days
Dexamethasone (4mg/ml)	0.33 days	0.61 days	1.47 days
Methyldopa (250mg)	3.15 days	15.70 days	6.84 days

NB: Pricing information for carbetocin, (methyl)ergometrine and mifepristone – misoprostol was unavailable in all three sectors and is therefore not shown.

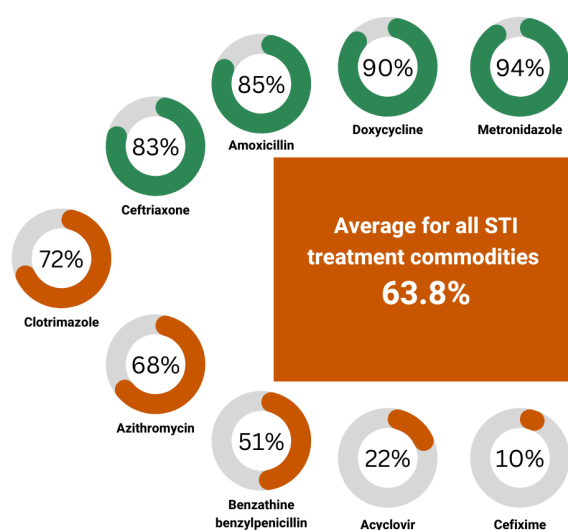
-: No pricing data available.

## STI TREATMENT

A basket of commodities for the treatment of STIs, such as chlamydia, gonorrhoea and syphilis, were surveyed. Since a number of common STIs are caused by bacteria, the majority of surveyed medicines are antibiotics (WHO, 2022). Often, multiple types of antibiotics can be used to treat a certain STI. In addition, one antiviral and one antifungal medicine were surveyed, which can be used to treat genital herpes and *Candida albicans* (yeast infection), respectively.

### Availability

In Tanzania, the average availability of STI treatment commodities was 63.8% (see Figure 4). Four of the STI treatment commodities, ceftriaxone, amoxicillin, doxycycline and metronidazole, were available at more than 80% of the facilities.

**Figure 4. Availability of STI treatment commodities.**

In the public sector, four of nine STI treatment commodities were available at 80% or more of facilities (see Table 8). These were metronidazole, doxycycline, amoxicillin, and ceftriaxone. Metronidazole was available at almost all public facilities (97.8%). Acyclovir and cefixime were available at only 18.6% and 8.6% of health facilities, respectively. In the private sector, availability of the STI treatment commodities was high too. Doxycycline, amoxicillin, ceftriaxone, metronidazole and clotrimazole had an availability of 80% or higher, with benzathine benzylpenicillin and azithromycin available at 68.0%. Acyclovir and cefixime had a low availability (25.0% and 20.0%, respectively). In the faith-based sector availability was slightly lower: two of nine commodities had an availability of 80% or higher, namely metronidazole and doxycycline, with five additional commodities having an availability of more than 50%.

**Table 8. Availability of STI treatment commodities, per sector.**

	Public (%)	Private (%)	Faith-based* (%)
Metronidazole	97.8	88.0	84.6
Clotrimazole	71.0	80.0	65.4
Benzathine benzylpenicillin	44.1	68.0	57.7
Amoxicillin	87.1	88.0	76.9
Acyclovir	18.6	25.0	37.5
Azithromycin	67.7	68.0	69.2
Ceftriaxone	84.9	88.0	73.1
Doxycycline	91.4	92.0	80.8
Cefixime	8.6	20.0	7.7

## Stockouts

Stockouts of the STI treatment commodities were common in the public sector (see Table 9). Acyclovir was stocked out at 33.3% of health facilities, and cefixime at 25.0%. Stockouts for acyclovir lasted on average 99 days, and for cefixime on average 100 days. All the other STI treatment commodities, with the exception of doxycycline, experienced stockouts at more than 10% of facilities. The longest stockouts were found for clotrimazole: they lasted on average 146 days.

In the private sector stockouts were far less common than in the private sector. Only metronidazole, amoxicillin and acyclovir experienced stockouts at private health facilities. These stockouts occurred at 6.3% to 11.1% of facilities, and lasted on average 32 to 60 days. In the faith-based sector stockouts were more common than in the private sector. Azithromycin (11.8%), doxycycline (11.1%) and amoxicillin (11.1%) experienced the most stockouts, with stockouts for amoxicillin also lasting the longest (70 days).

**Table 9. Stockouts of STI treatment commodities at health facilities, and average number of stockout days per stockout, per sector.**

	Public			Private			Faith-based		
	HFs with stock card (#)	HFs with stock-out (%)	Average # of stockout days	HFs with stock card (#)	HFs with stock-out (%)	Average # of stockout days	Facilities with stock card (#)	Facilities with stockout (%)	Average # of stockout days
Metronidazole	74	12.2	70	16	6.3	60	18	5.6	1
Clotrimazole	58	10.3	146	13	0.0	-	16	6.3	25
Benzathine benzylpenicillin	36	11.1	45	13	0.0	-	14	7.1	12
Amoxicillin	68	16.2	47	13	7.7	32	18	11.1	70
Acyclovir	9	33.3	99	9	11.1	60	3	0.0	-
Azithromycin	58	15.5	78	12	0.0	-	17	11.8	23
Ceftriaxone	70	11.4	40	14	0.0	-	16	6.3	45
Doxycycline	73	8.2	100	16	0.0	-	18	11.1	53
Cefixime	8	25.0	100	4	0.0	-	2	0.0	-

## Affordability

In the public sector, a treatment of acyclovir (1.64 days), metronidazole (1.69 days) and amoxicillin (2.64 days) were unaffordable (see Table 10). In the private sector, three commodities cost more than a day's IPL 'income': a treatment of doxycycline 1.55 days, a treatment of amoxicillin cost 1.80 days, and a treatment of acyclovir cost as much as 13.18 days. In the faith-based sector all commodities were affordable, with the exception of a treatment of acyclovir, which cost 1.72 days of IPL 'income'.

**Table 10. Affordability of STI treatment commodities.**

	Public	Private	Faith-based
Metronidazole (250mg)	1.69 days	0.91 days	0.52 days
Clotrimazole (500mg)	0.18 days	0.21 days	0.11 days
Benzathine benzylpenicillin (2.4 mil IU)	0.25 days	0.52 days	0.59 days
Amoxicillin (250mg)	2.64 days	1.80 days	0.47 days
Acyclovir (200mg)	1.64 days	13.18 days	1.72 days
Azithromycin (500mg)	0.94 days	0.85 days	0.70 days
Ceftriaxone (1g in vial)	0.45 days	0.62 days	0.67 days
Doxycycline (100mg)	0.90 days	1.55 days	0.40 days

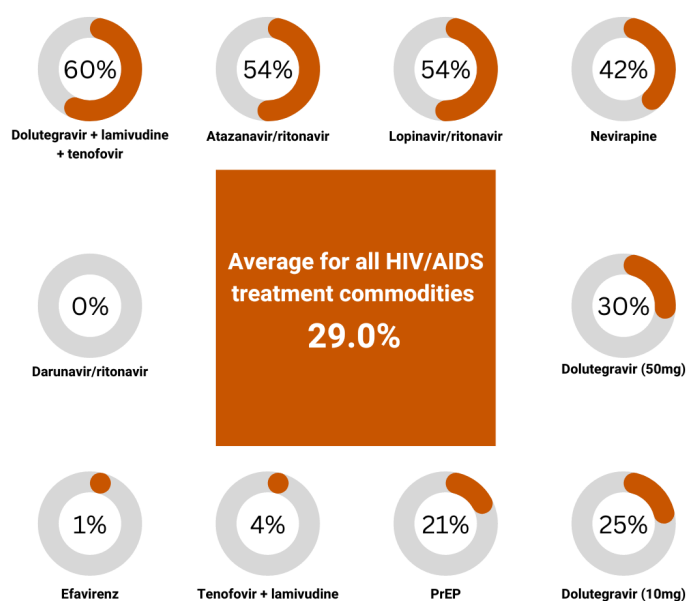
## HIV/AIDS

Sub-Saharan Africa still faces the highest burden of HIV/AIDS globally. The condition, which is caused by a virus, is incurable. That said, highly effective antiretroviral therapies are on the market, which can minimise symptoms for many years, and which can prevent pregnant women living with HIV from transmitting the disease to their children. With proper disease management and treatment, people living with HIV/AIDS are able to live a normal life.

### Availability

None of the commodities for the treatment of HIV/AIDS had an availability of 80% or higher in Tanzania (see Figure 5). Darunavir/ritonavir was unavailable at all health facilities, efavirenz and tenofovir + lamivudine were available at only 1% and 4% of health facilities, respectively.

**Figure 5. Availability of HIV/AIDS treatment commodities.**



None of the HIV/AIDS treatment commodities had an availability of 80% or higher in the public sector (see Table 11). Highest availability was found for dolutedegravir + lamivudine + tenofovir (74.2%), followed by nevirapine (53.8%). Six of 10 HIV/AIDS treatment commodities were available at less than one-third of facilities. PrEP was available at only 23.7% of facilities.

In the private sector atazanavir/ritonavir was available at all facilities. Lopinavir/ritonavir was available at 50% of facilities, while seven were available at less than 25% of facilities. In the faith-based sector, highest availability was found for lopinavir/ritonavir (80%), followed by atazanavir/ritonavir (60.0%). Seven of 10 commodities were available at less than 25% of facilities.



**Table 11. Availability of HIV/AIDS treatment commodities, per sector.**

	Public (%)	Private (%)	Faith-based (%)
PrEP (emtricitabine + tenofovir)	23.7	12.0	19.2
Dolutegravir + lamivudine + tenofovir	74.2	24.0	46.2
Tenofovir + lamivudine	5.4	0.0	3.8
Atazanavir/ritonavir	33.3	100.0	60.0
Darunavir/ritonavir	0.0	0.0	0.0
Lopinavir/ritonavir	33.3	50.0	80.0
Raltegravir	-	-	-
Dolutegravir (50mg)	36.6	12.0	23.1
Pediatric dolutegravir (10mg)	29.0	12.0	23.1
Efavirenz	1.1	0.0	0.0
Nevirapine	53.8	20.0	19.2

-- No data available. No health facilities were surveyed that ought to supply this commodity.

### Stockouts

In the public sector, stockouts of HIV/AIDS treatment commodities were not as common as for other SRH commodities. Darunavir/ritonavir experienced a stockout at the one facility that had a stock card for it (see Table 12). Nevirapine was stocked out commonly in public facilities (18.4%), with these stockouts lasting on average 107 days. The longest stockout was found for lopinavir/ritonavir, lasting 365 days on average. In the private and faith-based sectors no stockouts were recorded for any of the HIV/AIDS treatment commodities.

**Table 12. Stockouts of HIV/AIDS treatment commodities at health facilities, and average number of stockout days per stockout, per sector.**

	Public			Private			Faith-based		
	HFs with stock card (#)	HFs with stock-out (%)	Average # of stockout days	HFs with stock card (#)	HFs with stock-out (%)	Average # of stockout days	Facilities with stock card (#)	Facilities with stockout (%)	Average # of stockout days
PrEP (emtricitabine + tenofovir)	19	5.3	59	3	0.0	-	3	0.0	-
Dolutegravir + lamivudine + tenofovir	54	5.6	22	6	0.0	-	8	0.0	-
Tenofovir + lamivudine	2	0.0	-	0	ND	ND	2	0.0	-
Atazanavir/ritonavir	8	0.0	-	3	0.0	-	4	0.0	-
Darunavir/ritonavir	1	100.0	12	0	ND	ND	1	0.0	-
Lopinavir/ritonavir	19	5.3	365	1	0.0	-	4	0.0	-
Dolutegravir (50mg)	29	3.4	89	3	0.0	-	5	0.0	-
Pediatric dolutegravir (10mg)	22	4.5	8	3	0.0	-	5	0.0	-
Efavirenz	0	ND	ND	0	ND	ND	0	ND	ND
Nevirapine	38	18.4	107	5	0.0	-	3	0.0	-

NB: Stock information for raltegravir was unavailable in all three sectors and is therefore not shown.

ND: No data available.

## Affordability

In all three sectors, all HIV/AIDS treatment commodities were free to the patient (see Table 13).

**Table 13. Affordability of HIV/AIDS treatment commodities.**

	Public	Private	Faith-based
PrEP (emtricitabine + tenofovir) (200mg + 300mg)	0 days	0 days	0 days
Dolutegravir + lamivudine + tenofovir (50mg + 300mg + 300mg)	0 days	0 days	0 days
Tenofovir + lamivudine (300mg + 300mg)	0 days	-	-
Atazanavir/ritonavir (300mg + 100mg)	0 days	0 days	0 days
Lopinavir/ritonavir (200mg + 50mg)	0 days	0 days	0 days
Dolutegravir (50mg)	0 days	0 days	0 days
pediatric dolutegravir (10mg)	0 days	0 days	0 days
Efavirenz	0 days	-	-
Nevirapine	0 days	0 days	0 days

NB: Pricing information for darunavir/ritonavir was unavailable in all three sectors and is therefore not shown.

-: No pricing data available.

## PERSONAL HYGIENE PRODUCTS AND KITS

Pregnancy tests and HIV self-tests enable people to know about their health status and in line with that, receive the appropriate care or treatment for their condition. Safe delivery kits help women deliver their babies safely.

### Availability and Stockouts

Overall, availability of pregnancy test kits was 26.4% in surveyed facilities, availability of safe delivery kits was 23.6%, and availability of HIV self-test kits was 45.1%. Pregnancy tests had a low availability across the sectors: they were available at 22.6% of public sector facilities, 30.8% of faith-based facilities, and 36.0% of private facilities (see Table 14). HIV self-tests were more commonly available in the public sector (55.9%), than in the private (24.0%) or faith-based sector (26.9%). Safe delivery kits were also more available in the public sector than in the other sectors.

**Table 14. Availability of kits, per sector.**

	Public (%)	Private (%)	Faith-based (%)
Pregnancy test kit	22.6	36.0	30.8
Safe delivery kit	33.3	8.0	3.8
HIV self-test kit	55.9	24.0	26.9

In the public sector pregnancy tests were commonly stocked out (30.8% of facilities) (see Table 15). These stockouts were also lengthy, lasting on average 54 days. In both the public and private sector, stockouts of HIV self-tests were also reported: they occurred in 6.1% of public facilities, and 33.3% of private facilities.

**Table 15. Stockouts of personal hygiene products and kits at health facilities, and average number of stockout days per stockout, per sector.**

	Public			Private			Faith-based		
	HFs with stock card (#)	HFs with stock-out (%)	Average # of stockout days	HFs with stock card (#)	HFs with stock-out (%)	Average # of stockout days	HFs with stock card (#)	HFs with stockout (%)	Average # of stockout days
Pregnancy test kit	26	30.8	54	6	0.0	-	5	0.0	-
Safe delivery kit	28	0.0	-	2	0.0	-	0	-	ND
HIV self-test kit	49	6.1	21	6	0.0	-	3	33.3	56

HFs: health facilities; ND: No data available.

### Affordability

In all three sectors, the safe delivery kit and HIV self-test kits were free to the patient (see Table 16). In the public and private sectors, a pregnancy test kit was unaffordable: it cost 1.09 days of IPL 'income' and 1.24 days of IPL 'income', respectively. In the faith-based sector, a pregnancy test was affordable.

**Table 16. Affordability of menstrual hygiene products and kits.**

	Public	Private	Faith-based
Pregnancy test kit	1.09 days	1.24 days	0.37 days
Safe delivery kit	0 days	0 days	0 days
HIV self-test kit	0 days	0 days	0 days

## 5. CONCLUSIONS AND RECOMMENDATIONS

This research has shown severe gaps in access to essential SRH commodities in Tanzania. Especially availability is a major problem. Overall, availability is better in public health facilities, compared to private and faith-based health facilities. In addition, in the public sector, stockouts are a common issue. The following recommendations are made to improve access to SRH commodities in Tanzania.

### Availability and stockouts of SRH Commodities

- This study found a lack of adequate SRH commodity availability across the three surveyed sectors. The availability of SRH commodities does not reach the 80% target set by the WHO. Notably, there were fewer SRH commodity supplies in public sector facilities in rural areas, compared to urban areas. We recommend increasing the availability of SRH commodities in all three sectors, with a specific focus on rural areas. Further, the government should increase youth participation in Community Health Management Teams (CHMTs) and health facility meetings to identify gaps and ways to address them. The government could also invest in strengthening Public Private Partnerships.
- Faith-based health facilities had very low availability of family planning commodities. The government should invest in improving availability of these commodities in faith-based facilities. This could be done in the following ways: 1) Set minimum requirement (including FP Services) for establishment of a health facility. This would make faith-based facilities obliged to provide FP services as part of the requirements and compliance. 2) Sensitise religious leaders to support FP services availability in faith-based health facilities.
- Oxytocin and magnesium sulphate in the public sector were the only maternal health commodities that reached the threshold of 80% availability across the sectors. Therefore, the government should 1) set a target in each health facility to reach a consistent availability of 50% of all maternal health commodities by 2026, as an intermediate step toward 80% availability, 2) should amend the minimum standards on the establishment and licensing of health facilities.
- Commodities for the treatment of STIs in general had a better availability compared to the other medicines. Four out of nine made the 80% availability threshold.
- Availability of HIV/AIDS commodities in the regular health system is erratic and suboptimal. The government should bring the availability of HIV commodities in line with their ambitions towards ending the HIV epidemic.
- Availability of pregnancy tests was low across the sectors (22-36%). This is an essential instrument to know about pregnancy, and availability should therefore be increased to 80%.
- Government should ensure stable supply of commodities by increasing domestic financing and health co-financing for SRH commodities.

### Affordability of SRH commodities

- Family planning and HIV/AIDS commodities are affordable across the three sectors and are usually provided for free to clients. These commodities are subsidised by the government together with external donors.
- However, the other SRH commodity groups do have affordability issues. Maternal health commodities are mostly affordable in the public sector (except for Methyldopa). However, they are more costly in the private and faith-based sectors as four out of 10 commodities are unaffordable. Interestingly, STI commodities mostly have affordability issues in the public and private sector, and are more affordable in the faith-based sector. Therefore, the government should 1) subsidise the public, as well as the private and faith-based sector on essential SRH commodities so that all facilities can offer these commodities at affordable prices, 2) set a standard cost to all SRH commodities to ensure equal affordability. The regulatory board under the Ministry should be responsible for setting the prices instead of leaving the market free for every sector to have its own price, 3) review and reduction of taxes of essential SRH commodities.

### Commodities management

- There is no advanced Health Information System, specifically a Digitalised Commodities tracking system, for the management of commodities. In addition, there is insufficient capacity in the health system to effectively manage commodities. Therefore, the Ministry of Health (MoH) should establish an advanced Health Information System which can track the use of commodities, including stock taking and ordering to improve the supply chain system. This can also facilitate re-distribution of commodities to facilities with high demand.
- Finally, the MoH should establish a joint committee to ensure availability, affordability and accessibility of all SRH Commodities.

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# ANNEX 1

#	Commodity	Use
<b>FAMILY PLANNING</b>		
1	Ethinylestradiol + levonorgestrel	Birth control pill; contraceptive
2	Ethinylestradiol + norethisterone	Birth control pill; contraceptive
3	Levonorgestrel (30 mcg)	Birth control pill; contraceptive
4	Levonorgestrel (1.5 mg)	Emergency contraceptive
5	Medroxyprogesterone acetate	Injectable contraceptive
6	Norethisterone enanthate	Injectable contraceptive
7	Implants: levonorgestrel	Long-acting contraceptive
8	Implants: etonogestrel	Long-acting contraceptive
9	Copper-containing IUD	Long-acting contraceptive
10	Levonorgestrel-releasing IUD	Long-acting contraceptive
11	Male condoms	Contraceptive; STI protection
12	Female condoms	Contraceptive; STI protection
<b>MATERNAL HEALTH</b>		
13	Oxytocin	Prevention of post-partum haemorrhage
14	Misoprostol	Prevention of post-partum haemorrhage; induce labour; induce medical abortion
15	Carbetocin	Prevention of post-partum haemorrhage; induce labour
16	Tranexamic acid	Prevention of post-partum haemorrhage
17	(methyl)ergometrine	Prevention of post-partum haemorrhage
18	Mifepristone - misoprostol	Medical abortion
19	Magnesium sulphate	Treatment of pre-eclampsia and eclampsia
20	Calcium gluconate	Antidote for magnesium toxicity (used in combination with magnesium sulphate)
21	Ferrous salt	Supplement, prevent iron deficiency
22	Folic acid tablet	Supplement, prevent folic acid deficiency
23	Ferrous salt and folic acid	Supplement, prevent iron and folic acid deficiency
24	Dexamethasone	Accelerating lung maturation in preterm babies
25	Methyldopa	Management of pregnancy-induced hypertension
<b>SEXUALLY TRANSMITTED INFECTIONS</b>		
26	Metronidazole	Antibiotic, STI treatment
27	Clotrimazole	Antifungal, STI treatment
28	Benzathine benzylpenicillin	Antibiotic, STI treatment
29	Amoxicillin	Antibiotic, STI treatment
30	Acyclovir	Antiviral, STI treatment
31	Azithromycin	Antibiotic, STI treatment
32	Ceftriaxone	Antibiotic, STI treatment
33	Doxycycline	Antibiotic, STI treatment
34	Cefixime	Antibiotic, STI treatment
<b>HIV/AIDS</b>		
35	Pre-Exposure Prophylaxis (PrEP): (emtricitabine (FTC) + tenofovir (TDF))	Prevention of HIV acquisition
36	Dolutegravir + lamivudine + tenofovir (DTG + 3TC + TDF)	Antiretroviral, management of HIV/AIDS

37	Tenofovir + lamivudine (TDF + 3TC)	Antiretroviral, management of HIV/AIDS
38	Atazanavir/ritonavir (ATV/r)	Antiretroviral, management of HIV/AIDS
39	Darunavir/ritonavir (DRV/r)	Antiretroviral, management of HIV/AIDS
40	Lopinavir/ritonavir (LPV/r)	Antiretroviral, management of HIV/AIDS
41	Raltegravir (RAL)	Antiretroviral, management of HIV/AIDS
42	Dolutegravir (DTG)	Antiretroviral, management of HIV/AIDS
43	Paediatric dolutegravir (DTG)	Antiretroviral, management of HIV/AIDS
44	Efavirenz (EFV)	Antiretroviral, management of HIV/AIDS
45	Nevirapine	Antiretroviral, management of HIV/AIDS
<b>PERSONAL HYGIENE &amp; KITS</b>		
46	Vasectomy kit	Male sterilisation
47	Tubal ligation kit	Female sterilisation
48	Pregnancy test kit	-
49	Safe delivery kit	-
50	HIV self-test kit	-



## ANNEX 2

Table 1. Availability per sector and location.

	PUBLIC SECTOR			PRIVATE SECTOR			FAITH-BASED SECTOR		
	Overall (%)	Urban (%)	Rural (%)	Overall (%)	Urban (%)	Rural (%)	Overall (%)	Urban (%)	Rural (%)
Ethinylestradiol + levonorgestrel	65.6	42.9	67.4	28.0	40.0	25.0	3.8	0.0	4.3
Ethinylestradiol + norethisterone	2.2	14.3	1.2	0.0	0.0	0.0	0.0	0.0	0.0
Levonorgestrel (30 mcg)	43.0	71.4	40.7	4.0	0.0	5.0	0.0	0.0	0.0
Levonorgestrel (1.5mg)	30.1	42.9	29.1	8.0	20.0	5.0	3.8	0.0	4.3
Medroxyprogesterone acetate	74.2	85.7	73.3	16.0	20.0	15.0	7.7	33.3	4.3
Norethisterone enanthate	1.1	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0
Implants: levonorgestrel	58.1	57.1	58.1	8.0	20.0	5.0	0.0	0.0	0.0
Implants: etonogestrel	66.7	71.4	66.3	20.0	20.0	20.0	3.8	0.0	4.3
Copper-containing IUD	44.1	71.4	41.9	4.0	0.0	5.0	3.8	33.3	0.0
Levonorgestrel-releasing IUD	1.1	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0
Male condoms	89.2	57.1	91.9	36.0	40.0	35.0	15.4	33.3	13.0
Female condoms	20.4	14.3	20.9	4.0	0.0	5.0	0.0	0.0	0.0
Oxytocin	83.9	71.4	84.9	40.0	20.0	45.0	57.7	33.3	60.9
Misoprostol	51.6	100.0	47.7	16.0	0.0	20.0	26.9	33.3	26.1
Carbetocin	0.0	0.0	0.0	0.0	-	0.0	20.0	0.0	25.0
Tranexamic acid	50.0	100.0	0.0	50.0	-	50.0	60.0	100.0	50.0
(methyl)ergometrine	16.7	33.3	0.0	0.0	-	0.0	20.0	0.0	25.0
Mifepristone - misoprostol	16.7	33.3	0.0	0.0	-	0.0	0.0	0.0	0.0
Magnesium sulphate	79.6	100.0	77.9	20.0	20.0	20.0	42.3	0.0	47.8

Calcium gluconate	2.2	0.0	2.3	4.0	0.0	5.0	11.5	0.0	13.0
Ferrous salt	5.4	14.3	4.7	8.0	20.0	5.0	7.7	0.0	8.7
Folic acid tablet	58.1	85.7	55.8	36.0	40.0	35.0	42.3	33.3	43.5
Ferrous salt and folic acid	61.3	85.7	59.3	68.0	60.0	70.0	61.5	33.3	65.2
Dexamethasone	48.8	85.7	41.7	75.0	100.0	66.7	50.0	0.0	57.1
Methyldopa	49.5	85.7	46.5	28.0	20.0	30.0	34.6	0.0	39.1
Metronidazole	97.8	100.0	97.7	88.0	100.0	85.0	84.6	66.7	87.0
Clotrimazole	71.0	85.7	69.8	80.0	80.0	80.0	65.4	100.0	60.9
Benzathine benzylpenicillin	44.1	42.9	44.2	68.0	60.0	70.0	57.7	66.7	56.5
Amoxicillin	87.1	85.7	87.2	88.0	100.0	85.0	76.9	66.7	78.3
Acyclovir	18.6	14.3	19.4	25.0	0.0	33.3	37.5	100.0	28.6
Azithromycin	67.7	71.4	67.4	68.0	60.0	70.0	69.2	100.0	65.2
Ceftriaxone	84.9	100.0	83.7	88.0	100.0	85.0	73.1	66.7	73.9
Doxycycline	91.4	71.4	93.0	92.0	80.0	95.0	80.8	66.7	82.6
Cefixime	8.6	14.3	8.1	20.0	20.0	20.0	7.7	0.0	8.7
Pre-Exposure Prophylaxis: (emtricitabine (FTC) + tenofovir (TDF))	23.7	42.9	22.1	12.0	20.0	10.0	19.2	33.3	17.4
Dolutegravir + lamivudine + tenofovir (DTG + 3TC + TDF)	74.2	71.4	74.4	24.0	20.0	25.0	46.2	33.3	47.8
Pre-Exposure Prophylaxis: Tenofovir + lamivudine (TDF + 3TC)	5.4	0.0	5.8	0.0	0.0	0.0	3.8	0.0	4.3
Atazanavir/ritonavir (ATV/r)	33.3	33.3	33.3	100.0	-	100.0	60.0	100.0	50.0

Darunavir/ritonavir (DRV/r)	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0
Lopinavir/ritonavir (LPV/r)	33.3	33.3	33.3	50.0	-	50.0	80.0	100.0	75.0
Raltegravir (RAL)	-	-	-	-	-	-	-	-	-
Dolutegravir (DTG)	36.6	71.4	33.7	12.0	20.0	10.0	23.1	33.3	21.7
pediatric dolutegravir (DTG)	29.0	57.1	26.7	12.0	20.0	10.0	23.1	33.3	21.7
Efavirenz (EFV)	1.1	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0
Nevirapine	53.8	71.4	52.3	20.0	20.0	20.0	19.2	33.3	17.4
Vasectomy kit	0.0	0.0	0.0	50.0	-	50.0	20.0	100.0	0.0
Tubal ligation kit	16.7	33.3	0.0	0.0	-	0.0	0.0	0.0	0.0
Pregnancy test kit	22.6	71.4	18.6	36.0	40.0	35.0	30.8	0.0	34.8
Safe delivery kit	33.3	28.6	33.7	8.0	0.0	10.0	3.8	0.0	4.3
HIV self-test kit	55.9	85.7	53.5	24.0	20.0	25.0	26.9	0.0	30.4

**Table 2. Stockouts per sector and location.**

	Facilities reporting a stockout in a 12-month period (%)					
Number of facilities with stock cards (%)	7 (100)	57 (66)	3 (60)	14 (70)	3 (100)	18 (78)
	Public urban	Public rural	Private urban	Private rural	Faith-based urban	Faith-based rural
Ethinylestradiol + levonorgestrel	33.3	13.0	0.0	0.0	-	0.0
Ethinylestradiol + norethisterone	-	0.0	-	-	-	-
Levonorgestrel	20.0	3.7	-	0.0	-	-
Levonorgestrel	0.0	7.7	-	0.0	-	0.0
Medroxyprogesterone acetate	33.3	14.0	-	0.0	0.0	0.0
Norethisterone enanthate	-	-	-	-	-	-
Implants: levonorgestrel	25.0	7.1	-	0.0	-	-
Implants: etonogestrel	20.0	7.8	-	25.0	-	-
Copper-containing IUD	0.0	6.7	-	0.0	0.0	-
Levonorgestrel-releasing IUD	-	50.0	-	-	-	-
Male condoms	0.0	4.8	-	20.0	0.0	0.0
Female condoms	0.0	5.9	-	0.0	-	-
Oxytocin	20.0	3.6	-	0.0	0.0	0.0
Misoprostol	50.0	17.6	-	0.0	0.0	0.0
Carbetocin	-	100.0	-	-	-	0.0
Tranexamic acid	0.0	9.1	0.0	0.0	0.0	0.0
(methyl)ergometrine	0.0	0.0	-	-	-	0.0
Mifepristone - misoprostol	100.0	0.0	-	-	-	-
Magnesium sulphate	0.0	3.6	-	0.0	-	0.0

Calcium gluconate	-	33.3	-	0.0	-	0.0
Ferrous salt	0.0	0.0	0.0	0.0	-	0.0
Folic acid tablet	16.7	17.9	0.0	0.0	0.0	12.5
Ferrous salt and folic acid	33.3	15.9	0.0	0.0	0.0	0.0
Dexamethasone	16.7	7.1	0.0	0.0	-	0.0
Methyldopa	16.7	11.8	0.0	0.0	-	0.0
Metronidazole	0.0	13.4	0.0	7.1	50.0	0.0
Clotrimazole	16.7	9.6	0.0	0.0	0.0	7.7
Benzathine benzylpenicillin	33.3	9.1	0.0	0.0	0.0	8.3
Amoxicillin	16.7	16.1	0.0	9.1	50.0	6.3
Acyclovir	100.0	25.0	0.0	12.5	0.0	0.0
Azithromycin	20.0	15.1	0.0	0.0	33.3	7.1
Ceftriaxone	28.6	9.5	0.0	0.0	0.0	6.7
Doxycycline	20.0	7.4	0.0	0.0	50.0	6.3
Cefixime	100.0	14.3	0.0	0.0	-	0.0
Pre-Exposure Prophylaxis: (emtricitabine (FTC) + tenofovir (TDF))	33.3	0.0	0.0	0.0	0.0	0.0
Dolutegravir + lamivudine + tenofovir (DTG + 3TC + TDF)	20.0	4.1	0.0	0.0	0.0	0.0
Tenofovir + lamivudine (TDF + 3TC)	-	0.0	-	-	-	0.0
Atazanavir/ritonavir (ATV/r)	0.0	0.0	0.0	0.0	0.0	0.0
Darunavir/ritonavir (DRV/r)	-	100.0	-	-	-	0.0
Lopinavir/ritonavir (LPV/r)	25.0	0.0	-	0.0	0.0	0.0

Raltegravir (RAL)	-	-	-	-	-	-
Dolutegravir (DTG)	20.0	0.0	0.0	0.0	0.0	0.0
pediatric dolutegravir (DTG)	0.0	5.6	0.0	0.0	0.0	0.0
Efavirenz (EFV)	-	-	-	-	-	-
Nevirapine	40.0	15.2	0.0	0.0	0.0	0.0
Pregnancy test kit	40.0	28.6	0.0	0.0	-	0.0
HIV self-test kit	16.7	4.7	0.0	0.0	-	33.3
HPV DNA test kit	0.0	5.9	-	0.0	-	100.0

**Table 3. Price and affordability per sector, with treatment regimens.**

	Average Unit Price (ZKW)			Treatment	Treatment	Mean Treatment Cost			Affordability (days of wages)		
	Public	Private	Faith-based	Units	Days	Public	Private	Faith-based	Public	Private	Faith-based
Ethinylestradiol + levonorgestrel (30mcg + 150 mcg)	0.00	43.20	0.00	1	1	0.00	43.20	0.00	0.00	0.01	0.00
Ethinylestradiol + norethisterone (35mcg + 1.0 mg)	0.00	-	-	1	1	0.00	-	-	0.00	-	-
Levonorgestrel (30 mcg)	0.00	0.00	-	1	1	0.00	0.00	-	0.00	0.00	-
Levonorgestrel (1.5 mg)	0.00	0.00	-	1	1	0.00	0.00	-	0.00	0.00	-
Medroxyprogesterone acetate (150 mg/ml)	0.00	0.00	0.00	1	1	0.00	0.00	0.00	0.00	0.00	0.00
Norethisterone enanthate (200mg/ml)	1000.00	-	-	1	1	1000.00	-	-	0.20	-	-
Implants: levonorgestrel	0.00	0.00	-	1	1	0.00	0.00	-	0.00	0.00	-
Implants: etonogestrel	0.00	0.00	0.00	1	1	0.00	0.00	0.00	0.00	0.00	0.00
Copper-containing IUD	0.00	0.00	0.00	1	1	0.00	0.00	0.00	0.00	0.00	0.00
Levonorgestrel-releasing IUD	0.00	-	-	1	1	0.00	-	-	0.00	-	-
Male condoms	0.00	111.11	250.00	1	1	0.00	111.11	250.00	0.00	0.02	0.05
Female condoms	0.00	0.00	-	1	1	0.00	0.00	-	0.00	0.00	-
Oxytocin (10 IU in 1ml)	0.00	1050.00	1166.67	1	1	0.00	1050.00	1166.67	0.00	0.21	0.23
Misoprostol (200mcg)	0.00	1000.00	750.00	5	1	0.00	5000.00	3750.00	0.00	0.98	0.74
Carbetocin (100mcg/ml)	-	-	-	1	1	-	-	-	-	-	-
Tranexamic acid (100mg/ml in 5ml)	1800.00	7500.00	7000.00	2	1	3600.00	15000.00	14000.00	0.71	2.94	2.75
Ergometrine (200mcg in 1ml)	-	-	-	3	1	-	-	-	-	-	-
Mifepristone - misoprostol (200mg + 200mcg)	-	-	-	1	1	-	-	-	-	-	-
Magnesium sulphate (0.5mg/ml)	123.29	0.00	2136.36	9	1	1109.59	0.00	19227.27	0.22	0.00	3.77
Calcium gluconate (100mg/ml in 10ml)	0.00	7000.00	0.00	1	1	0.00	7000.00	0.00	0.00	1.37	0.00
Ferrous salt (equiv 60mg iron)	0.00	-	0.00	1	30	0.00	-	0.00	0.00	-	0.00
Folic acid tablet (5mg)	6.47	134.44	67.10	1	30	193.98	4033.33	2013.00	0.04	0.79	0.40
Ferrous salt and folic acid (60mg + 400mcg)	14.35	180.67	70.67	1	30	430.58	5420.00	2120.00	0.08	1.06	0.42
Dexamethasone (4mg/ml)	555.56	1036.67	2500.00	3	1	1666.67	3110.00	7500.00	0.33	0.61	1.47
Methylidopa (250mg)	89.09	444.29	193.75	6	30	16036.00	79971.43	34875.00	3.15	15.70	6.84
Metronidazole (250mg)	307.21	166.18	94.00	4	7	8601.80	4653.09	2632.00	1.69	0.91	0.52
Clotrimazole (500mg)	930.90	1090.00	583.20	1	1	930.90	1090.00	583.20	0.18	0.21	0.11
Benzathine benzylpenicillin (2.4 million IU)	1259.83	2666.67	3000.00	1	1	1259.83	2666.67	3000.00	0.25	0.52	0.59

Amoxicillin (250mg)	641.63	435.81	114.78	3	7	13474.13	9152.06	2410.33	2.64	1.80	0.47
Acyclovir (200mg)	167.29	1342.86	175.00	5	10	8364.29	67142.86	8750.00	1.64	13.18	1.72
Azithromycin (500mg)	1597.31	1445.77	1190.72	1	3	4791.92	4337.31	3572.17	0.94	0.85	0.70
Ceftriaxone (1g in vial)	2285.37	3161.11	3428.57	1	1	2285.37	3161.11	3428.57	0.45	0.62	0.67
Doxycycline (100mg)	328.24	562.50	147.06	2	7	4595.32	7875.00	2058.82	0.90	1.55	0.40
Cefixime (400mg)	1000.00	702.50	2000.00	1	1	1000.00	702.50	2000.00	0.20	0.14	0.39
Pre-Exposure Prophylaxis (PrEP): (emtricitabine (FTC) + tenofovir (TDF)) (200mg +300mg)	0.00	0.00	0.00	1	30	0.00	0.00	0.00	0.00	0.00	0.00
Dolutegravir + lamivudine + tenofovir (DTG + 3TC + TDF) (50mg + 300mg + 300mg)	0.00	0.00	0.00	1	30	0.00	0.00	0.00	0.00	0.00	0.00
Pre-Exposure Prophylaxis: Tenofovir + lamivudine (TDF + 3TC) (300mg + 300mg)	0.00	-	-	1	30	0.00	-	-	0.00	-	-
Atazanavir/ritonavir (ATV/r) (300mg + 100mg)	0.00	0.00	0.00	1	30	0.00	0.00	0.00	0.00	0.00	0.00
Darunavir/ritonavir (DRV/r) (800mg + 100mg)	-	-	-	1	30	-	-	-	-	-	-
Lopinavir/ritonavir (LPV/r) (200mg + 50mg)	0.00	0.00	0.00	4	30	0.00	0.00	0.00	0.00	0.00	0.00
Raltegravir (RAL) (400mg)	-	-	-	1	30	-	-	-	-	-	-
Dolutegravir (DTG) (50mg)	0.00	0.00	0.00	1	30	0.00	0.00	0.00	0.00	0.00	0.00
pediatric dolutegravir (DTG) (10mg)	0.00	0.00	0.00	1	30	0.00	0.00	0.00	0.00	0.00	0.00
Efavirenz (EFV) (600mg)	0.00	-	-	1	30	0.00	-	-	0.00	-	-
Nevirapine (50mg/5ml)	0.00	0.00	0.00	1	30	0.00	0.00	0.00	0.00	0.00	0.00
Pregnancy test kit	5547.62	6333.33	1875.00	1	1	5547.62	6333.33	1875.00	1.09	1.24	0.37
HIV self-test kit	0.00	0.00	0.00	1	1	0.00	0.00	0.00	0.00	0.00	0.00





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