REPORT

SEXUAL AND REPRODUCTIVE HEALTH COMMODITIES IN MANDERA COUNTY, KENYA: AVAILABILITY, STOCKOUTS AND AFFORDABILITY

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Solutions for Supporting Healthy Adolescents

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SEXUAL AND REPRODUCTIVE HEALTH COMMODITIES IN MANDERA COUNTY, KENYA: AVAILABILITY, STOCKOUTS AND AFFORDABILITY

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1. 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 World Health Organization (WHO) Model List of Essential Medicines details medicines and commodities that are essential to the provision of quality SRH care (WHO, 2021).

When a 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 a sexually transmitted infection (STI).

Unfortunately, Kenya experiences challenges with the adequate provision of SRH services and commodities. The maternal mortality rate is estimated to be 362 per 100,000 live births, while the prevalence of modern contraceptive use continues to be low, with 56.9% of currently married women aged 15-49 years, and 59.2% of sexually active unmarried women aged 15-49 years, using a modern contraceptive.[1,2] However, modern contraceptive use among married women aged 15-49 years is much lower in Isiolo (28.7%), Mandera (1.8%) and Marsabit (5.6%) Counties, with unmet need ranging from 17.3% to 37.6% in these counties.[2] Among sexually active unmarried adolescents aged 15-19 years, there is an unmet need for family planning of 34.5%.[2] This research was conducted to study the availability, affordability and stockouts of 49 SRH commodities which are used for **family planning, maternal healthcare, STIs, treatment of HIV/AIDS**, in addition to several **test kits** and **menstrual products**, in Isiolo, Mandera and Marsabit Counties in Kenya. This research is essential as it creates a clear overview of the availability and affordability of a comprehensive package of essential SRH commodities in Kenya, which will contribute to the development of evidence-based policies to improve the SRH of women and adolescents.

2. RESEARCH METHODOLOGY

This study was conducted by Faith to Action Network Kenya 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 AMREF Ethics and Scientific Review Committee and National Commission for Science, Technology and Innovation (NACOSTI).

This study used an adapted version of the HAI/WHO Methodology (WHO/HAI 2008). Teams of data collectors visited 86 health facilities from the public, private and faith-based sectors to survey the availability, stockouts and patient prices of 49 medicines, test kits, and menstrual hygiene products. An overview of all surveyed commodities can be found in Annex 1.

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.

1. Kenya National Bureau of Statistics. Kenya Demographic and Health Survey 2014. (2015). Nairobi: Kenya.
2. Kenya National Bureau of Statistics. Kenya Demographic and Health Survey 2022: Key Indicators Report. (2023). Nairobi: Kenya.

The study sample included health facilities from urban as well as rural areas, ranging from dispensaries/clinics 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 primary 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 national rural poverty line of KES 3947 per month, or KES 131.6 per day[3], was used to calculate affordability of commodities. If a commodity cost more than a day's income, it was considered unaffordable. Table 1 provides an overview of the overall study sample. This report provides the results from Mandera County, in which 30 health facilities were surveyed: 22 from the public sector, and 8 from the private sector.

Table 1. Study sample.

	Public	Private	Faith-based	Total
Urban	8	19	3	**30**
Rural	41	5	10	**56**
Total	**49**	**24**	**13**	**86**

3. FINDINGS

Page 5 of the report presents the findings on the availability of all 49 surveyed commodities combined and compares the different sectors from which commodities may be obtained. Pages 6-11 provide the availability, stockouts and affordability for individual commodities, per commodity group.

SRH COMMODITY AVAILABILITY AT A GLANCE

In Mandera County, 14 of the 30 surveyed health facilities did not have any of the surveyed commodities in stock. Consequently, overall availability of the surveyed commodities was critically low at 7.9%. Public sector availability was 6.9% and private sector availability was 10.6%

Figure 1. Overall availability of the 49 surveyed SRH commodities, comparing the public and private sectors.

3. Kenya National Bureau of Statistics. The Kenya Poverty Report Based on the 2021 Kenya Continuous Household Survey.

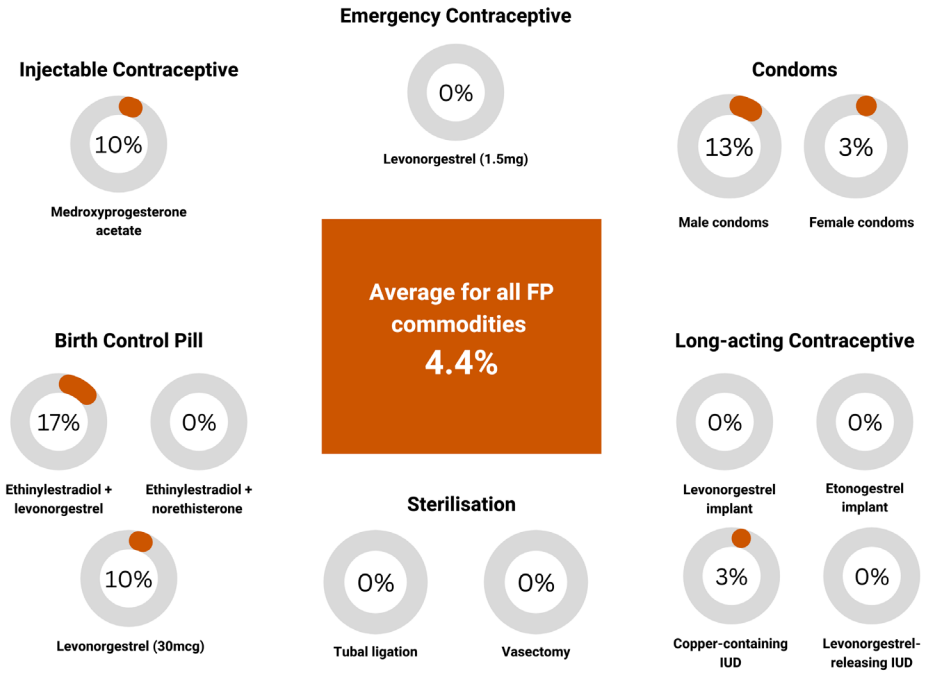
FAMILY PLANNING

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 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 procedures[4], that allow people the decision to not have any (more) children.

Availability

Only seven of the 30 health facilities (23%) stocked any FP commodities. The average availability of family planning commodities was critically low: 4.4% (see Figure 2). Highest availability was found for the birth control pill ethinylestradiol + levonorgestrel (17%). Seven of the 13 FP commodities, specifically ethinylestradiol + norethisterone, levonorgestrel (1.5mg), levonorgestrel and etonogestrel implants, levonorgestrel-releasing IUDs, and tubal ligation and vasectomy services, were unavailable at all surveyed health facilities.

Figure 2. Availability of FP commodities.



In the public sector, only six of the 13 surveyed FP commodities were available at the health facilities (see Table 2). The highest availability was found for ethinylestradiol + levonorgestrel, which was only available at 22.7% of the surveyed facilities. Levonorgestrel (30mcg) and male condoms were available at 13.6% of facilities, and medroxyprogesterone at 9.1%. Female condoms and copper-containing IUDs were available at 4.5% of facilities. In the private sector, only medroxyprogesterone (12.5%) and male condoms (12.5%) were available.

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

Table 2. Availability of FP commodities, per sector.

	Public (%)	Private (%)
Ethinylestradiol + levonorgestrel	22.7	0.0
Ethinylestradiol + norethisterone	0.0	0.0
Levonorgestrel (30 mcg)	13.6	0.0
Levonorgestrel (1.5 mg)	0.0	0.0
Medroxyprogesterone acetate	9.1	12.5
Implants: levonorgestrel	0.0	0.0
Implants: etonogestrel	0.0	0.0
Copper-containing IUD	4.5	0.0
Levonorgestrel-releasing IUD	0.0	0.0
Male condoms	13.6	12.5
Female condoms	4.5	0.0
Vasectomy services	0.0	0.0
Tubal ligation services	0.0	0.0

Affordability

An overview of all average prices and treatment regimens is given in Annex 2. All FP commodities were free to the patients in health facilities in the public sector (see Table 3). In the private sector pricing information was only available for medroxyprogesterone acetate and male condoms. Medroxyprogesterone acetate was unaffordable, costing 1.52 days of wages.

Table 3. Affordability of FP commodities.

	Public	Private
Ethinylestradiol + levonorgestrel (30mcg + 150 mcg)	0 days	-
Levonorgestrel (30 mcg)	0 days	-
Medroxyprogesterone acetate (150mg/ml)	0 days	1.52 days
Male condoms	0 days	0.04 days
Female condoms	0 days	-

NB: Pricing information for ethinylestradiol + norethisterone, levonorgestrel (1.5mg), levonorgestrel implants, etonogestrel implants, copper-containing IUDs and levonorgestrel-relaesing IUDs was unavailable in both sectors and is therefore not shown.

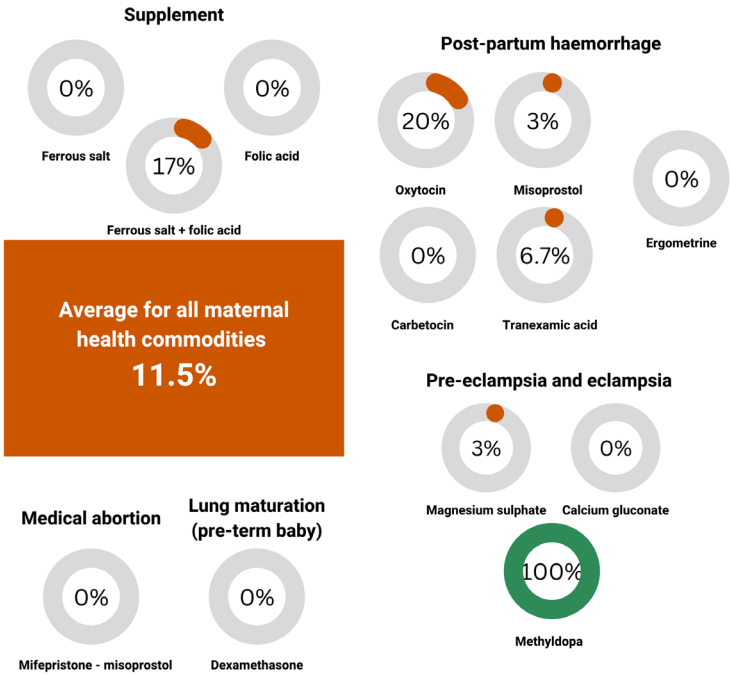
MATERNAL HEALTH

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, n.d.). Maternal health commodities include a diversity of medicines with different uses; examples are supplements which are used to prevent iron and folic acid deficiencies, which are associated with adverse pregnancy outcomes to both 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

Only nine of the 30 surveyed health facilities (30%) had any type of maternal health commodity in stock. The average availability of maternal health commodities was 11.5% (see Figure 3). Methyldopa was available at 100% of the facilities. However, this is because methyldopa is only available from the primary hospital level and up, and only one health facility like this was surveyed in Mandera County. Seven of the commodities were unavailable at all surveyed health facilities.

Figure 3. Availability of maternal health commodities.



In the public sector, seven maternal health commodities were unavailable at all health facilities (see Table 4). The highest availability was found for methyldopa (100%), but other commodities had a very low availability. Ferrous salt + folic acid tablets were available at 18.2% of the facilities, oxytocin at 13.6%, and misoprostol, tranexamic acid and magnesium sulphate at only 4.5%. In the private sector oxytocin was available in 37.5% of health facilities, and tranexamic acid and ferrous salt + folic acid at 12.5% of facilities.

Table 4. Availability of maternal health commodities, per sector.

	Public (%)	Private (%)
Oxytocin	13.6	37.5
Misoprostol	4.5	0.0
Carbetocin	0.0	-
Tranexamic acid	4.5	12.5
(methyl)ergometrine	0.0	-
Mifepristone - misoprostol	0.0	-
Magnesium sulphate	4.5	0.0
Calcium gluconate	0.0	-
Ferrous salt	0.0	0.0
Folic acid tablet	0.0	0.0
Ferrous salt and folic acid	18.2	12.5
Dexamethasone	0.0	-
Methyldopa	100.0	-

Affordability

In the public sector all maternal health commodities were free to the patient (see Table 5). In the private sector, pricing information was only available for oxytocin and methyldopa. A month's treatment with methyldopa was unaffordable, costing 1.14 days of wages.

Table 5. Affordability of maternal health commodities.

	Public	Private
Oxytocin (10 IU in 1ml)	0 days	0.76 days
Misoprostol (200mcg)	0 days	
Magnesium sulphate (0.5mg/ml)	0 days	-
Ferrous salt and folic acid (60mg + 400mcg)	0 days	-
Methyldopa (250mg)	0 days	1.14 days

NB: Pricing information for carbetocin, tranexamic acid, ergometrine, mifepristone – misoprostol, calcium gluconate, ferrous salt, folic acid and dexamethasone was unavailable in both sectors and is therefore not shown.

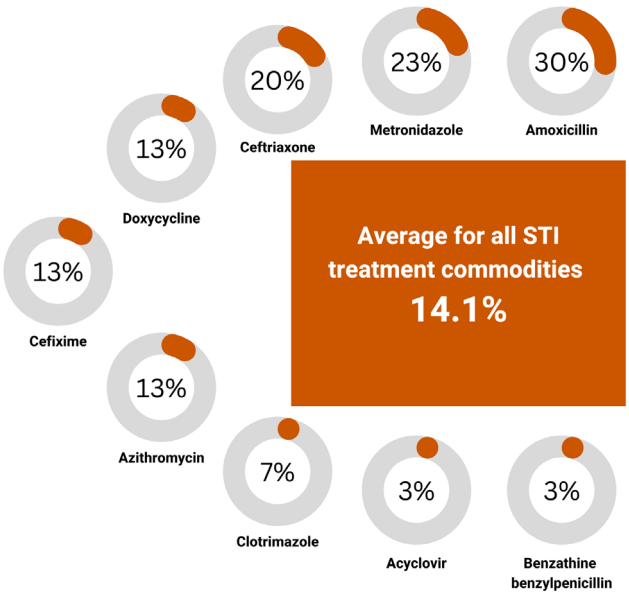
STI TREATMENT

A basket of commodities to treat common 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 single or combinations of STIs. 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

Only 14 of 30 surveyed health facilities (47%) had any type of STI treatment commodity available. Highest availability among the nine surveyed STI treatment commodities was found for amoxicillin: 30% of the surveyed facilities had amoxicillin in stock (see Figure 4). Three commodities, specifically clotrimazole, acyclovir and benzathine benzylpenicillin, were available at less than 10% of the facilities.

Figure 4. Availability of STI treatment commodities.



Availability of STI treatment commodities was especially low in the public sector (see Table 6). Highest availability was found for amoxicillin, even though it was available at only 18.2% of the facilities. Metronidazole was the only other commodity that was available at more than 10% of public facilities. In the private sector, availability of some of the STI treatment commodities was higher. Amoxicillin had an 62.5% availability, and metronidazole and ceftriaxone had a 50% availability. Clotrimazole and acyclovir were unavailable at all private facilities.

Table 6. Availability of STI treatment commodities, per sector.

	Public (%)	Private (%)
Metronidazole	13.6	50.0
Clotrimazole	9.1	0.0
Benzathine benzylpenicillin	0.0	12.5
Amoxicillin	18.2	62.5
Acyclovir	4.5	0.0
Azithromycin	9.1	25.0
Ceftriaxone	9.1	50.0
Doxycycline	9.1	25.0
Cefixime	4.5	37.5

Affordability

In the public sector, patients had to pay out-of-pocket for four of the seven STI treatment commodities with pricing information available (see Table 7). A treatment with acyclovir was unaffordable in the public sector, costing 1.14 days. In the private sector pricing information was available for seven of the commodities. Metronidazole (1.06 days), ceftriaxone (1.52 days), amoxicillin (1.60 days) and azithromycin (1.71 days) were all unaffordable.

Table 7. Affordability of STI treatment commodities.

	Public	Private
Metronidazole (250mg)	0 days	1.06 days
Clotrimazole (500mg)	0.15 days	-
Benzathine benzylpenicillin (1.2 million IU)	-	0.76 days
Amoxicillin (250mg)	0 days	1.60 days
Acyclovir (200mg)	1.14 days	-
Azithromycin (500mg)	0 days	1.71 days
Ceftriaxone (1g in vial)	0.19 days	1.52 days
Doxycycline (100mg)	0.05 days	0.64 days
Cefixime (400mg)	-	0.30 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

Only one of 30 surveyed health facilities (3%) stocked HIV/AIDS treatment commodities, which was a public facility. At this facility, six of the 10 surveyed commodities were available (see Table 8). Lopinavir/ritonavir, raltegravir, dolutegravir (10mg) and nevirapine were not in stock at this facility. All HIV/AIDS treatment commodities were free to the patient in this facility.

Table 8. Availability of HIV/AIDS treatment commodities, per sector.

	Public (%)	Private (%)
PrEP (emtricitabine + tenofovir)	4.5	0.0
Dolutegravir + lamivudine + tenofovir	4.5	0.0
Tenofovir + lamivudine	4.5	0.0
Atazanavir/ritonavir	4.5	0.0
Lopinavir/ritonavir	0.0	0.0
Raltegravir	0.0	0.0
Dolutegravir (50mg)	4.5	0.0
pediatric dolutegravir (10mg)	0.0	0.0
Efavirenz	4.5	0.0
Nevirapine	0.0	0.0

PERSONAL HYGIENE PRODUCTS AND KITS

Access to appropriate menstrual hygiene commodities enables women and girls to continue their daily life activities undisturbed during their menstruation, for example to go to work and school, and therefore might contribute to higher school attendance or participation in class (McMahon et al. 2011; Miiro et al. 2018;). 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.

Availability and Stockouts

Availability of personal hygiene products and kits was low in the public sector (see Table 9). Sanitary pads and pregnancy tests were found in 4.5% of public facilities, while HIV self-tests were found in 9.1% of facilities. In the private sector pregnancy tests had a higher availability (62.5%), but HIV self-tests had a low availability (12.5%).

Table 9. Availability of menstrual hygiene products and kits, per sector.

	Public (%)	Private (%)
Sanitary pads	4.5	0.0
Pregnancy test kit	4.5	62.5
HIV self-test kit	9.1	12.5
HPV DNA test kit	0.0	0.0

Affordability

No pricing information was available for any of the personal hygiene products or kits in the private or faith-based sectors. In the public sector information was only available for pregnancy tests and HIV self-tests; these tests were free to the patient.

STOCK INFORMATION

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. Only two of the 22 public health facilities had stock information available, and none of the private health facilities did. Subsequently, not much can be said about the data. Stock cards were only available for eleven of the 49 surveyed commodities (see Table 10).

Table 10. Stockouts of FP commodities at health facilities, and average number of stockout days per stockout, per sector.

	Public	
	Facilities with stockout (%)	Average # of stockout days
Ethinylestradiol + levonorgestrel	0.0	-
Medroxyprogesterone acetate	0.0	-
Oxytocin	50.0	20
Misoprostol	0.0	-
Tranexamic acid	0.0	-
Metronidazole	0.0	-
Clotrimazole	0.0	-
Amoxicillin	100.0	120
Acyclovir	0.0	-
Ceftriaxone	100.0	120
Doxycycline	100.0	360

NB: Only two health facilities had stock information available. These findings should therefore be interpreted with caution.

4. RECOMMENDATIONS

The Constitution of Kenya 2010 provides the overarching legal framework to ensure a comprehensive rights-based approach to health services delivery. It provides that every person has a right to the highest attainable standard of health, which includes reproductive health rights. The Kenya health policy goal is to attain the highest possible standard of health in a responsive manner. This is by supporting equitable, affordable, and high-quality health and related services at the highest attainable standards for all Kenyans. This is to be realized progressively during the policy period 2014 – 2030.

Access to medicines and medical commodities forms a crucial building block of health systems. Without proper access to quality assured and safe commodities, people, among them adolescents, are not able to live in optimal health. This research was conducted to study the availability, affordability and stockouts of 49 SRH commodities which are used for family planning, maternal healthcare, treatment of STIs, treatment of HIV/AIDS, in addition to several test kits and menstrual products. The study aimed at creating a clear overview of the availability and affordability of a comprehensive package of essential SRH commodities at the County level, which will contribute to the development of evidence-based policies to improve the SRH of women and adolescents.

In Mandera County, 14 of the 30 surveyed health facilities did not have any of the surveyed SRH commodities in stock. Subsequently, overall availability of the surveyed commodities was critically low at 7.9%. Public sector availability was 6.9% and private sector availability was 10.6%. Only seven of the 30 health facilities (23%) stocked any FP commodity. The average availability of family planning commodities was critically low at 4.4%. Only nine of the 30 surveyed health facilities (30%) had any type of maternal health commodity in stock. The average availability of maternal health commodities was 11.5%. Highest availability among the nine surveyed STI treatment commodities was found for amoxicillin: 30% of the surveyed facilities had amoxicillin in stock. Three commodities, specifically clotrimazole, acyclovir and benzathine benzylpenicillin, were available at less than 10% of the facilities. Availability of personal hygiene products and kits was low in the public sector. Sanitary pads and pregnancy tests were found in 4.5% of public facilities, while HIV self-tests were found in 9.1% of facilities. In the private sector pregnancy tests had a higher availability (62.5%).

Based on the Kenya Health Policy (2014-2030) policy orientations and principles, the below are some recommendations to the County leadership that if implemented, could contribute to improved availability and accessibility of quality assured SRH commodities and services. The recommendations are presented under seven different topics: health financing, health leadership, health products and technologies, health information, health workforce, service delivery systems, and research and development.

1. Health financing

This relates to the process of mobilising and managing required finances to ensure provision of health and related services and is attained through ensuring equity, efficiency, transparency, and accountability in resource mobilisation, allocation, and use.

- The County should increase financing for SRH commodities including self-test kits and menstrual health and hygiene products.
- The County should progressively work towards the elimination of payment at the point of use for SRH commodities, especially by the marginalised and indigent populations, through social health insurance and government subsidies to private and faith-based health facilities.
- The County should promote private sector participation in financing of healthcare through public-private partnerships and other mechanisms.
- Through effective multi-stakeholder coordination, resources available from various stakeholders supporting the County should be pooled to increase efficiency in utilisation.
- Community members should be supported to strengthen social accountability systems where public officials and service providers account for the use of already allocated resources and efficiency of the supply chain systems for SRH commodities.

2. Health leadership

This relates to how the oversight of the delivery of SRH and related services is provided by the County leaders responsible for health. The County executive committee (CEC) is responsible for the preparation of county policies, plans and budgets for approval from the County Assembly; and for the submission to external regulatory offices of the National Treasury and Office of the Controller of Budget. The CEC is responsible for implementation of all laws passed by the County Assembly and National Assembly and may also prepare laws for consideration by the County Assembly. The CEC provides regular non-financial and financial reports to the County Assembly; and to external regulatory and oversight offices of the Controller of Budget and the Office of the Auditor General.

The County Assembly roles are to represent citizens, exercise the legislative authority of the County Government and oversight the County Executive. The County Assembly makes and passes all county laws required for the effective performance and exercise of the powers of the County Government. It also approves county policies, plans and budgets and oversights implementation by the County Executive. The County health management teams (CHMT) have a responsibility to ensure that health policies are implemented and regulations and standards are adhered to in the delivery of healthcare.

National Policies, strategies and standards - Below are some of the documents that support availability of SRH commodities and services at the County and health facility level. The CHMT should disseminate them and utilize the standards in their supportive supervision activities.

- National Reproductive Health/Family Planning Commodity Security Strategy 2020/21 – 2024/24 - works towards elimination of stocks out at the facility level.
- Total Market Approach for Family Planning National Strategy 2020-2025 - public and non-profit sectors provide subsidised services for needy consumers while maintaining sustainable commercial provision for consumers who are able to pay.
- Revised FP standards – support availability of adequate and quality commodities and services.

Multi-stakeholder approach for SRH - The CHMT should budget for, convene and coordinate SRH Commodity Security technical working group meetings to support SRH commodity availability and accessibility. They should also facilitate multi-stakeholder collaboration and partnerships for harmonized and efficient use of resources.

Social Accountability - The CHMT should be receptive to the application of principles and practices of social accountability, including reporting on performance, creation of public awareness, fostering transparency, and public participation in decision making on SRH-related matters.

3. Health products and technologies

These include essential medicines, medical supplies, vaccines, health technologies, and public health commodities required for provision of services. The County should ensure that effective, safe, and affordable SRH commodities and products are available and rationally used at all times.

- The CHMT should maximise the use of existing commodities and products through redistribution from overstocked to understocked health facilities. This will promote availability.
- The CHMT should consider and apply technologies that are appropriate (accessible, affordable, feasible, and culturally acceptable to the community) in addressing SRH challenges. For example avail and train girls and women on the use of re-usable sanitary towels (also referred to as dignity kits) as these are more affordable than the disposable sanitary towels.
- To promote availability, the CHMT should ensure that the County and health facilities have the essential list of SRH commodities and products and refer to this in acquisition, financing, and other access-enhancing interventions.

4. Health information

This refers to the system for generation, collation, analysis, dissemination, and utilisation of health-related information required for provision of services. For effective monitoring and timely decision-making on SRH commodities, health facilities are obligated to report on information emanating from their activities through established channels in a manner that meets safety and confidentiality requirements.

- To improve availability, the CHMT should support health facilities to strengthen the accuracy, timeliness, and completeness of health information on stock status and consumption. This can be achieved through availing of data documentation, reporting and ordering tools.
- The County and Sub-county health management teams should conduct regular meetings with facility-in-charges on commodity management and data use for decision-making in order to avoid wastage and stock-out of commodities.
- The responsible CHMT officer should ensure timely reporting and requisition of SRH commodities through reminders and prompt follow-up on facilities with delays. This is due to the unique nature of the County where sometimes communication is a challenge and, in some cases, facilities close down due to insecurity or other reasons.
- The CHMT should strengthen mechanisms for health information dissemination to ensure information is available where and when needed. These include policies, guidelines and reports that support SRH commodities availability, affordability and quality.
- To support social accountability, the CHMT should facilitate access to information by the public while protecting privacy and confidentiality.

5. Health workforce

This refers to the human resources required for health facility operations.

- To improve management of SRH commodities, the CHMT should have a mechanism to identify commodity management and SRH service provision training needs and provide opportunities for training.
- The CHMT should be deliberate with needs-based SRH service provision and commodity management capacity strengthening (on-the-job training and mentorship) for HCWs in public as well as private and faith-based health facilities.
- CHMT should train and support health facility-linked community-based distributors (CBDs) in order to improve availability and accessibility of affordable commodities such as short-term contraceptives, menstrual hygiene products and self-test kits sourced through the public health facilities.

6. Service delivery systems

This refers to the organisational arrangements required for delivery of services including supervision and mentorship services.

- To identify gaps that might hinder availability and access, the CHMT should integrate supportive supervision for SRH commodities and services into their routine supportive supervision exercises. Integration of regular commodity assessments into supportive supervision visits to ensure proper commodity management practices can limit wastage and stock-outs.
- Facilities should be informed about the findings of research and data collected for continuous quality improvement and maintenance of the highest standards of SRH.
- To promote SRH commodities availability, accessibility and quality, the CHMT should ensure that SRH policies are implemented and regulations and standards adhered to in the delivery of healthcare.
- Counties should reach out to the National level and other relevant stakeholders/ partners for technical assistance in the form of specialised expertise and utilisation of new service delivery tools that support availability of SRH commodities and quality services.

7. Research and development

Research plays a significant role in guiding policy formulation and action to improve the health and development. Counties should utilise available research findings such as National surveys, the SHARP Project baseline evaluation report and other research reports to guide the development of County policies and laws that promote SRH commodity availability and affordability. The County should also budget for and partner with stakeholders to conduct further research as may be required.

The above recommendations, together with any additional recommendations that may be suggested by the County health leadership and all other stakeholders including adolescents, if implemented would have a positive impact in supporting the right to the highest attainable standard of health as envisioned by the Constitution of Kenya 2010 and the Kenya health policy (2014 – 2030).

REFERENCES

Cook RJ. The human right to family planning. Draper Fund report. 1983; 12:18-19.

McMahon SA, Winch PJ, Caruso BA, Obure AF, Ogutu EA, Ochari IA, Rheingans RD. 'The girl with her period is the one to hang her head' Reflections on menstrual management among schoolgirls in rural Kenya. BMC international health and human rights. 2011 ;11:1-10.

Miiro G, Rutakumwa R, Nakiyingi-Miiro J, Nakuya K, Musoke S, Namakula J, Francis S, Torondel B, Gibson LJ, Ross DA, Weiss HA. Menstrual health and school absenteeism among adolescent girls in Uganda (MENISCUS): a feasibility study. BMC women's health. 2018 ;18:1-13.

Say L, Chou D, Gemmill A, Tunçalp O, Moller A, Daniels P, Gulmezoglu A, Temmerman M, Alkema L. Global Causes of Maternal Death: a WHO Systematic Analysis. (2014). The Lancet Global Health, 2(6): E323-E333.

World Health Organization. Daily iron and folic acid supplementation in pregnant women. (2012). Geneva: World Health Organization.

World Health Organization. Family planning/contraception methods. 2020 [cited 2023 feb 16]. Available from: https://www.who.int/news-room/fact-sheets/detail/family-planning-contraception.

World Health Organization. Framework for ensuring human rights in the provision of contraceptive information and services. (2014). Geneva: World Health Organization.

World Health Organization. Maternal Health. [cited 2023 Feb 16]. Available from: https://www.who.int/health-topics/maternal-health#tab=tab_1.

World Health Organization. Sexually Transmitted Infections (STIs). 2022 [cited 2023 Feb 16]. Available from: https://www.who.int/news-room/fact-sheets/detail/sexually-transmitted-infections-(stis).

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

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

ANNEX 1

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

36	Tenofovir + lamivudine (TDF + 3TC)	Antiretroviral, management of HIV/AIDS
37	Atazanavir/ritonavir (ATV/r)	Antiretroviral, management of HIV/AIDS
38	Lopinavir/ritonavir (LPV/r)	Antiretroviral, management of HIV/AIDS
39	Raltegravir (RAL)	Antiretroviral, management of HIV/AIDS
40	Dolutegravir (DTG)	Antiretroviral, management of HIV/AIDS
41	Paediatric dolutegravir (DTG)	Antiretroviral, management of HIV/AIDS
42	Efavirenz (EFV)	Antiretroviral, management of HIV/AIDS
43	Nevirapine	Antiretroviral, management of HIV/AIDS
PERSONAL HYGIENE & KITS		
44	Sanitary pads	Management of menstruation
45	Vasectomy services	Male sterilisation
46	Tubal ligation services	Female sterilisation
47	Pregnancy test kit	-
48	HIV self-test kit	-
49	HPV DNA test kit	-

ANNEX 2

Table 1. Price, treatment costs and affordability per sector, with treatment regimens.

	Average Unit Price (KES)		Treatment Units	Treatment Days	Mean Treatment Cost (KES)		Affordability (days of wages)	
	Public	Private			Public	Private	Public	Private
Ethinylestradiol + levonorgestrel (30mcg + 150mcg)	0.00	-	1	1	0.00	-	0 days	-
Ethinylestradiol + norethisterone (35mcg + 1.0 mcg)	-	-	1	1	-	-	-	-
Levonorgestrel (30 mcg)	0.00	200.00	1	1	0.00	200.00	0 days	1.52 days
Levonorgestrel (1.5 mg)	-	-	1	1	-	-	-	-
Medroxyprogesterone acetate (150 mg/ml)	-	-	1	1	-	-	-	-
Implants: levonorgestrel	-	-	1	1	-	-	-	-
Implants: etonogestrel	-	-	1	1	-	-	-	-
Copper-containing IUD	0.00	5.00	1	1	0.00	5.00	0 days	0.04 days
Levonorgestrel-releasing IUD	0.00	-	1	1	0.00	-	0 days	-
Male condoms	0.00	100.00	1	1	0.00	100.00	0 days	0.76 days
Female condoms	0.00	-	5	1	0.00	-	0 days	-
Oxytocin (10 IU in 1ml)	-	-	1	1	-	-	-	-
Misoprostol (200mcg)	-	-	2	1	-	-	-	-
Carbetocin (100mcg/ml)	-	-	3	1	-	-	-	-
Tranexamic acid (100mg/ml in 5ml)	-	-	1	1	-	-	-	-
Ergometrine (200mcg in 1ml)	0.00	-	9	1	0.00	-	0 days	-
Mifepristone - misoprostol (200mg + 200mcg)	-	-	1	1	-	-	-	-
Magnesium sulphate (0.5mg/ml)	-	-	1	30	-	-	-	-
Calcium gluconate (100mg/ml in 10ml)	-	-	1	30	-	-	-	-
Ferrous salt (equiv 60mg iron)	-	-	1	30	-	-	-	-
Folic acid tablet (5mg)	-	-	1	30	-	-	-	-
Ferrous salt and folic acid (60mg + 400mcg)	0.00	5.00	1	30	0.00	150.00	0 days	1.14 days
Dexamethasone (4mg/ml)	-	-	3	1	-	-	-	-
Methyldopa (250mg)	0.00	-	6	30	0.00	-	0 days	-
Metronidazole (250mg)	0.00	10.00	2	7	0.00	140.00	0 days	1.06 days
Clotrimazole (500mg)	20.00	-	1	1	20.00	-	0.15 days	-

Benzathine benzylpenicillin (2.4 million IU)	-	50.00	2	1	-	100.00	-	0.76 days
Amoxicillin (250mg)	0.00	10.00	3	7	0.00	210.00	0 days	1.60 days
Acyclovir (200mg)	5.00	-	3	10	150.00	-	1.14 days	-
Azithromycin (500mg)	0.00	75.00	1	3	0.00	225.00	0 days	1.71 days
Ceftriaxone (1g in vial)	25.00	200.00	1	1	25.00	200.00	0.19days	1.52 days
Doxycycline (100mg)	0.50	6.00	2	7	7.00	84.00	0.05 days	0.64 days
Cefixime (400mg)	-	40.00	1	1	-	40.00	-	0.30 days
Pre-Exposure Prophylaxis: emtricitabine (FTC) + tenofovir (TDF) (200mg +300mg)	0.00	-	1	30	0.00	-	0 days	-
Dolutegravir + lamivudine + tenofovir (DTG + 3TC + TDF) (50mg + 300mg + 300mg)	0.00	-	1	30	0.00	-	0 days	-
Tenofovir + lamivudine (TDF + 3TC) (300mg + 300mg)	-	-	1	30	-	-	-	-
Atazanavir/ritonavir (ATV/r) (300mg + 100mg)	0.00	-	1	30	0.00	-	0 days	-
Lopinavir/ritonavir (LPV/r) (200mg + 50mg)	-	-	4	30	-	-	-	-
Raltegravir (RAL) (400mg)	-	-	1	30	-	-	-	-
Dolutegravir (DTG) (50mg)	0.00	-	1	30	0.00	-	0 days	-
pediatric dolutegravir (DTG) (10mg)	-	-	1	30	-	-	-	-
Efavirenz (EFV) (600mg)	0.00	-	2	30	0.00	-	0 days	-
Nevirapine (50mg/5ml)	-	-	1	30	-	-	-	-
Sanitary pads	0.00	-	3	7	0.00	-	0 days	-
Pregnancy test kit	0.00	100.00	1	1	0.00	100.00	0 days	0.76 days
HIV self-test kit	0.00	200.00	1	1	0.00	200.00	0 days	1.52
HPV DNA test kit	-	-	1	1	-	-	-	-
HIV self-test kit	0.00	200.00	1	1	0.00	200.00	0 days	1.52
HPV DNA test kit	-	-	1	1	-	-	-	-

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