**REPORT**

# SEXUAL & REPRODUCTIVE HEALTH **COMMODITIES:** MEASURING PRICES, AVAILABILITY & AFFORDABILITY

## Four-country Comparison 2019: Kenya, Uganda, Tanzania & Zambia

HAI HEALTH ACTION INTERNATIONAL

HEALTH ACTION INTERNATIONAL

# REPORT
# SEXUAL & REPRODUCTIVE HEALTH **COMMODITIES:** MEASURING PRICES, AVAILABILITY & AFFORDABILITY

## Four-country Comparison 2019: Kenya, Uganda, Tanzania & Zambia

**Prepared by:**
Janneke van Oirschot, Reasearch Assistant
Gaby Ooms, Research Manager

May 2019

HAI HEALTH ACTION INTERNATIONAL

**Publisher**
Health Action International
Overtoom 60 (2) | 1054 HK Amsterdam
The Netherlands
+31 (0) 20 412 4523

**HAIWEB.ORG**

**Copyright**
This report is licensed under a Creative Commons Attribution-NonCommercial 4.0 International Licence.
View a copy of this licence at www.creativecommons.org/licenses/by-nc/4.0.

# CONTENTS

# 1. INTRODUCTION

Good sexual and reproductive health (SRH) is a state of complete physical, mental and social well-being in all matters relating to reproduction for both men and women, including adolescents. Maintaining good SRH means people need access to accurate information and safe, effective, affordable and acceptable contraception methods of their choice. They must be informed and empowered to protect themselves from sexually transmitted infections (STIs) and, when necessary, receive timely and affordable treatment. If and when they decide to have children, women must have access to services that ensure they have a fit pregnancy, safe delivery and healthy baby. Every individual has the right to make their own choices about their SRH and family planning.

National policies on medicine pricing and procurement strategies are needed to ensure medicines are affordable and available. While policies are necessary to improve health infrastructure, health education and financing are further required to ensure the rational use of medicines. Even in the face of weak infrastructure and gross inequality that underpins poverty prevalence, improvements in access can be achieved. However, without reliable information on medicine prices and availability, governments are working in an evidence vacuum. This restricts their ability to construct meaningful policy and properly evaluate the impact of any policy interventions. Reliable information is also a useful means of comparison between countries with similar health budgets for knowledge transfer and learning. Thus, in order to develop evidence-based policies, robust data is required. The Health Action International (HAI)–World Health Organization (WHO) methodology to assess the price, availability, and affordability components of medicines provides valuable data. To date, the methodology has not specifically targeted commodities for SRH. HAI has now adapted the methodology to focus on a specific set of sexual and reproductive health commodities (SRHC).[1,2] The objective of the survey is to generate reliable information on the price, availability and affordability of selected important commodities in the SRH supply chain, with the ultimate goal of improving access to affordable medicines for all. The methodology uses a cross-sectional design with quantitative methods and a semi-structured questionnaire adapted from the standardised HAI–WHO methodology, *Measuring Medicine Prices, Availability, Affordability and Price Components (2nd Edition)*. It allows data on the availability and out-of-pocket patient prices of SRHC in the public, private and mission/other sectors to be collected. It also assesses health provider perspectives on access to SRHC beyond the medicines supply chain. The method facilitates rapid and reliable data collection and enables price and availability indicators to be compared within and between individual countries.

The following report presents the results of the surveys carried out by HAI and in-country partners (Medicines Transparency Alliance [MeTA] Kenya, MeTA Uganda, MeTA Zambia, and UMATI Tanzania) during July and August 2018 in Kenya, Tanzania, Uganda and Zambia. It answers the following questions:

- What is the average availability of essential SRHC in health facilities in the countries of study?
- What price do people pay for SRH medicines?

[1] Please refer to the *Sexual and Reproductive Health Commodities: Measuring Prices, Availability and Affordability Methodology and Data Entry Manual (*1st Editions) for a full description of the methodology used for data collection.

[2] For a full list of the commodities surveyed, consult Appendix 1.

- Do the prices and availability medicines vary between urban and rural health facilities and across the public, private and mission sectors?
- How affordable are medicines for ordinary people?
- What do health providers believe are the main barriers to accessing medicines?
- What are the similarities and differences between the four countries?

The report will highlight obstacles to SRHC access and will bring attention to possible areas for intervention to improve the current situation at regional as well as national levels, and monitor changes in access over time in the countries of study.

# 2. DATA COLLECTION

This report presents data from the 2018 roll-out of the HAI research methodology, '*SRHC: Measuring Prices, Availability & Affordability' in Kenya, Uganda, Tanzania and Zambia*. The methodology used for the data collection follows HAI's SRHC data collection manual (2017). Please refer to this manual for details of the data collection methodology, or contact the HAI office. The methodology consists of a questionnaire and a qualitative survey component. Data collectors were trained in June 2018 (Tanzania), July 2018 (Kenya and Uganda), and August 2018 (Zambia). Data was collected at health facilities in the public, private and mission sectors, at urban and rural locations. The levels of health facilities visited were in Kenya: 'Health post' and above (country level 3-5), in Tanzania: 'Dispensary' and above (country level 1-3), in Uganda: 'Health Centre III' and above (country level 3-7), and in Zambia: 'Health post' and above (country level 1-4).

In each country, several provinces and districts were selected as data collection sites (Kenya: ten counties, Tanzania: six districts, Uganda: 18 districts within six regions, Zambia: 38 districts within nine provinces). In order to create a representative sample of the country, the districts within the provinces surveyed were selected randomly in Uganda and Zambia. Counties in Kenya and districts in Tanzania were selected purposely. In total, 169 facilities were surveyed in Kenya, 126 in Tanzania, 145 in Uganda and 237 in Zambia. **Table 1** provides an overview of the distribution of these facilities across sectors and locations.

**Table 1.** Distribution of facilities surveyed per country.

| | Urban | Rural | Total (N) |
|---|---|---|---|
| **Kenya** | | | |
| Public | 25 | 30 | **55** |
| Private | 36 | 20 | **56** |
| Mission | 30 | 28 | **58** |
| **Total** | **91** | **78** | **169** |
| **Tanzania** | | | |
| Public | 33 | 40 | **73** |
| Private | 29 | 9 | **38** |
| Mission | 10 | 5 | **15** |
| **Total** | **72** | **54** | **126** |
| **Uganda** | | | |
| Public | 25 | 30 | **55** |
| Private | 26 | 18 | **44** |
| Mission | 20 | 26 | **46** |
| **Total** | **71** | **74** | **145** |
| **Zambia** | | | |
| Public | 63 | 85 | **148** |
| Private | 45 | 11 | **56** |
| Mission | 6 | 27 | **33** |
| **Total** | **114** | **123** | **237** |

# 3. RESULTS

## 3.1. MEAN AVAILABILITY OF SRHC

The data collection tool assessed the availability of 55 SRH commodities at the moment of data collection in each of the 677 study facilities. The mean availability of these commodities was 36% in Kenyan health facilities, 29% in Tanzanian health facilities, 37% in Ugandan health facilities and 34% in Zambian health facilities. **Table 2** provides an overview of the mean availability of SHRC in the four countries in the public, private and mission sectors, and subdivided by location (urban or rural). Differences between the mean availability at urban and rural locations were small in each of the countries. Therefore, in all countries, availability of SHRC was not dependent on whether the facility was located in an urban or rural area. Interestingly, in Kenya and Zambia lowest availability was found in private facilities, while in Tanzania in mission facilities, and in Uganda in public facilities.

**Table 2.** Mean availability of SRHC (%) per country, sector and location.

| | Urban | Rural | Total (N) |
|---|---|---|---|
| **Kenya** | | | |
| Public | 50 | 41 | **45** |
| Private* | 28 | 25 | **27** |
| Mission | 36 | 35 | **35** |
| **Total** | **38** | **34** | **36** |
| **Tanzania** | | | |
| Public | 37 | 36 | **37** |
| Private | 25 | 27 | **26** |
| Mission | 24 | 23 | **24** |
| **Total** | **29** | **29** | **29** |
| **Uganda** | | | |
| Public | 35 | 34 | **34** |
| Private | 37 | 41 | **39** |
| Mission | 44 | 35 | **39** |
| **Total** | **39** | **37** | **37** |
| **Zambia** | | | |
| Public | 43 | 33 | **37** |
| Private | 27 | 24 | **27** |
| Mission | 44 | 38 | **39** |
| **Total** | **38** | **32** | **34** |

** Private sector availability was calculated using only availability of medicines, not availability of instruments.*

## 3.2 AVAILABILITY OF SELECTED SRHC

Next, we elaborate on the availability of selected individual commodities.[3] A detailed overview of the mean availability of the selected SRH commodities for each country is provided in **Table 3**. Again, availabilities are presented across public, private and mission sectors.

### 3.2.1 Contraceptives

In all countries, contraceptives were substantially less available in the mission sector compared to the public and private sector. In general, male condoms were the most available contraceptive commodity in each country (68-86% overall availability). In Kenya, ethinylestradiol + levonorgestrel tablets (30 mcg + 150 mcg), commonly known as the birth control pill, were available in 71% of public and private sector facilities. In Tanzania, public sector availability was similar at 68% while availability in the private sector was lower (45%) than in Kenya. In Uganda, private sector availability was the same as in Tanzania (45%) and public sector availability was just slightly higher at 55%. Availability of the pill was highest in Zambia in all sectors (81% in public; 75% in private; 45% in mission facilities). Medroxyprogesterone acetate, an injectable contraceptive, was moderately available with country averages between 46% and 67%. For all countries, medroxyprogesterone acetate was regularly available in the public sector, but less available in the private sector, except for Uganda where private sector availability transcended the public sector's availability. Levonorgestrel tablets (750 mcg), used as emergency contraceptive after birth control failure or unprotected intercourse, had highest availability in Kenya (at 45% of facilities), and were only available at 27% of Tanzanian, 25% of Zambian and 12% of Ugandan facilities.

Female condoms were mostly available in the public sector facilities of each country. However, the overall percentages display their poor general availability of 43% (Zambia), 29% (Tanzania), 23% (Uganda) and 13% (Kenya).

### 3.2.2 Pregnancy and Childbirth

The availability of supplements, such as calcium gluconate, ferrous salt, folic acid, zinc, and oral rehydration salts showed a large variability per type and country. Only in Zambia were all these supplements commonly available (70-84%, overall), with the exception of calcium gluconate, which had an overall availability of just 6%. Calcium gluconate was also poorly stocked in the other countries, with availabilities of 28% (Kenya), 17% (Uganda) and 2% (Tanzania). Oxytocin, used to induce labour and for the prevention and treatment of post-partum haemorrhage, was stocked relatively commonly (47-91%), with the exception of the private sector in Kenya (27%) and Zambia (20%). Gentamicin, used to treat pneumonia and neonatal and maternal sepsis, was moderately available in all countries (overall, 60-81%), except for in Tanzania (23%). Finally, availability of dexamethasone, used in the management of pre-term labour to improve foetal lung maturity, was considerably lower, ranging from 11% (overall, Tanzania) to 50% (overall, Uganda).

### 3.2.3 Sexually Transmitted Infections

Benzathine benzylpenicillin, used in the treatment of syphilis, was reasonably stocked in Kenya, Tanzania and Zambia, with availability in the private and public sectors ranging from 48% to 84%. Uganda had the lowest overall availability, with 44% of facilities stocking the medicine. The availability of metronidazole, used for treating vaginal infections, was high in all four countries (69% in Zambia, 75% in Kenya, 88% in Uganda and 94% in Tanzania).

[3] Please refer to the *Sexual and Reproductive Health Commodities: Measuring Prices, Availability & Affordability: data collection report* (2018) for each country for detailed price, availability and affordability data of each medicine.

**Table 3.** Mean availability (%) of selected SRHC by country and sector.

| Commodities | Kenya | | | | Tanzania | | | | Uganda | | | | Zambia | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Overall | Public | Private | Mission | Overall | Public | Private | Mission | Overall | Public | Private | Mission | Overall | Public | Private | Mission |
| Ethinylestradiol + levonorgestrel (tablet 30 mcg + 150 mcg) | **57** | 71 | 71 | 29 | **54** | 68 | 45 | 7 | **43** | 55 | 45 | 28 | **75** | 81 | 75 | 45 |
| Medroxy-progesterone acetate (Injection) | **50** | 84 | 32 | 34 | **67** | 92 | 42 | 7 | **46** | 51 | 64 | 22 | **67** | 86 | 29 | 42 |
| Levonorgestrel (750mcg tablet) | **45** | 53 | 70 | 14 | **27** | 42 | 8 | 0 | **12** | 9 | 23 | 7 | **25** | 16 | 58 | 12 |
| Male condoms | **77** | 98 | 91 | 43 | **69** | 86 | 58 | 13 | **68** | 76 | 86 | 39 | **86** | 89 | 89 | 64 |
| Female condoms | **13** | 31 | 0 | 9 | **29** | 38 | 16 | 13 | **23** | 27 | 20 | 22 | **43** | 55 | 25 | 18 |
| Calcium gluconate | **28** | 33 | 14 | 36 | **2** | 3 | 3 | 0 | **17** | 20 | 11 | 20 | **6** | 4 | 7 | 9 |
| Ferrous salt | **52** | 60 | 38 | 59 | **7** | 11 | 0 | 7 | **21** | 5 | 30 | 30 | **78** | 82 | 67 | 79 |
| Folic acid | **66** | 65 | 64 | 67 | **30** | 34 | 24 | 27 | **56** | 60 | 64 | 43 | **70** | 70 | 76 | 58 |
| Zinc (20 mg tablet) | **60** | 62 | 52 | 67 | **50** | 36 | 74 | 60 | **38** | 2 | 68 | 52 | **84** | 91 | 60 | 97 |
| Oral rehydration salts (sachets of 1L) | **4** | 7 | 2 | 3 | **80** | 82 | 76 | 80 | **32** | 4 | 50 | 50 | **81** | 80 | 76 | 91 |
| Oxytocin (injection) | **59** | 85 | 27 | 66 | **66** | 78 | 50 | 47 | **66** | 64 | 55 | 80 | **76** | 94 | 20 | 91 |
| Dexamethasone | **44** | 60 | 25 | 47 | **11** | 7 | 13 | 27 | **50** | 27 | 64 | 65 | **24** | 23 | 27 | 24 |
| Gentamicin (injection) | **60** | 75 | 46 | 59 | **23** | 22 | 26 | 20 | **81** | 76 | 84 | 83 | **60** | 57 | 56 | 79 |
| Benzathine benzylpenicillin | **64** | 73 | 48 | 71 | **77** | 78 | 76 | 73 | **44** | 35 | 55 | 46 | **81** | 84 | 64 | 94 |
| Metronizadole | **75** | 71 | 75 | 79 | **94** | 95 | 95 | 87 | **88** | 78 | 91 | 96 | **69** | 65 | 82 | 70 |
| Vasectomy Kit | **1** | 2 | N.A. | 0 | **1** | 0 | 3 | 0 | **8** | 7 | 11 | 4 | **6** | 8 | 4 | 0 |
| Tubal ligation kit | **1** | 2 | N.A. | 0 | **2** | 3 | 3 | 0 | **9** | 11 | 9 | 7 | **9** | 9 | 5 | 12 |
| Antiseptic | **24** | 27 | 20 | 24 | **65** | 74 | 53 | 53 | **61** | 56 | 70 | 59 | **63** | 66 | 49 | 73 |
| Speculum | **51** | 85 | N.A. | 67 | **70** | 84 | 45 | 67 | **87** | 89 | 82 | 89 | **56** | 64 | 15 | 88 |
| Ultrasound scan | **26** | 35 | N.A. | 41 | **17** | 3 | 32 | 47 | **43** | 29 | 48 | 57 | **18** | 14 | 13 | 45 |
| Foetal scope | **57** | 35 | N.A. | 79 | **84** | 97 | 58 | 87 | **95** | 96 | 93 | 96 | **67** | 80 | 16 | 91 |
| Safe delivery kit | **0** | 0 | 0 | 0 | **61** | 82 | 32 | 33 | **0** | 0 | 0 | 0 | **16** | 19 | 5 | 21 |

Contraceptives
Supplements
Labour & Childbirth Meds
STI Treatments
Medical Devices

### 3.2.4 Medical Devices

Availability of medical devices was very inconsistent across the countries. Vasectomy and tubal ligation kits were mostly unavailable in the four countries, with all overall availabilities below 10%. The availability of antiseptic was similar in Tanzania (65%), Uganda (61%) and Zambia (63%), but lower in Kenya (24%). Speculums were available at 85% of the public facilities of Kenya, 84% of Tanzania's, 89% of Uganda's and 64% of Zambia's public facilities. The private sector showed lower availabilities at 45% of Tanzanian, 82% of Ugandan and 15% of Zambian facilities.

Ultrasound scans had availability levels below 50% in all sectors of all countries, with exception of the mission sector of Uganda (57%). Foetal scopes were commonly available in the public sector of Tanzania (97%), Uganda (96%) and Zambia (80%), but not in Kenya (35%). Availability in the private and mission sectors showed a more mixed picture, with availabilities ranging from 16% (private, Zambia) to 96% (mission, Uganda). Safe delivery kits were not at all available in Kenya and Uganda, and only in 16% of Zambian facilities. Tanzania had a much more elaborate availability at 82% of public, 32% of private and 33% of mission facilities.

## 3.3 STOCK-OUT DAYS

In this research, data collectors only recorded stock-out information if stock information was registered via a stock card, or stock-taking database. In cases where stock information was not recorded, or anecdotal evidence was presented, the stock-out information was not used for the research. Stock-outs were only reported for commodities that had stock cards. Hence, commodities that were never available in a sector of a country were not included in calculations. Therefore, the total number of commodities included varied per sector and country.

Of the facilities recording stock-outs, there was a wide range in the overall numbers of facilities reporting to have experienced stock-outs in the past six months (from 2.7% in Tanzanian private facilities to 21.6% of Zambian mission facilities). For each country, stock-outs occurred most often in the public sector, except for Zambia where in the mission sector more facilities experienced stock-outs. If stock-outs occurred, they would last on average 6.8 days a month in Kenya, 13.3 days in Tanzania, 4.7 days in Uganda and 9.4 days in Zambia (for detailed stock-out information per sector, see **Table 4.**). Of all the different commodities included in the research, the number of commodities that experienced a stock-out in the six months before data collection varied greatly per sector in each of the countries. For all countries, the percentage of commodities for which stock-outs were reported was highest in the public sector, followed by the mission sector, and was lowest in the private sector. For example, in the public sector of Uganda, 73.5% of the commodities experienced stock-outs, in the mission sector 40.5% and in the private sector 37.5%. It should be noted that due to the low number of facilities with stock cards, it cannot be guaranteed that these data are representable for all facilities (including the ones not registering stock information).

**Table 4.** Mean availability of SRHC (%) per country, sector and location.

| | Facilities reporting stock-outs (%) | Average number of stock-out days/ month | Number of SRHC included | SRHC which had reported stock outs (%) |
|---|---|---|---|---|
| **Kenya** | | | | |
| Public | 7.4 | 6 | 38 | 60.5 |
| Private* | NA | NA | NA | NA |
| Mission | 2.7 | 9 | 36 | 30.6 |
| **Tanzania** | | | | |
| Public | 17.2 | 10 | 35 | 77.1 |
| Private | 2.7 | 8 | 31 | 9.7 |
| Mission | 11.9 | 15 | 23 | 34.8 |
| **Uganda** | | | | |
| Public | 16.8 | 6 | 34 | 73.5 |
| Private | 8.6 | 2 | 32 | 37.5 |
| Mission | 3.6 | 3 | 37 | 40.5 |
| **Zambia** | | | | |
| Public | 20.7 | 9 | 37 | 94.6 |
| Private | 14.1 | 9 | 34 | 58.8 |
| Mission | 21.6 | 10 | 34 | 70.6 |

** Excluded due to low number of facilities having stock cards.*

Extended stock-outs were uncommon. In the private and mission sectors of Uganda, if a stock-out occurred, none of the commodities were, on average, unavailable for more than 20 days a month. In the public sector of Kenya and Zambia, and the private sector of Tanzania, extended stock-outs also did not occur. In Uganda's public sector, just one commodity's stock-out exceeded 20 days a month on average and none were unavailable for the entire month. In Tanzania's public and mission sector and Kenya's mission sector, one commodity was on average unavailable the entire month. Most extended stock outs occurred in the private and mission sector of Zambia, where two commodities were on average unavailable the entire month. **Table 5** provides an overview of the extended stock-outs in numbers and percentages.

**Table 5.** Percentages of extended commodity stock-outs

| | Stock-outs of over 20 days/ month (%) | Stock-outs of 30 days/ month (%) |
|---|---|---|
| **Kenya** | | |
| Public | 0 | 0 |
| Private* | NA | NA |
| Mission | 2.8 | 2.8 |
| **Tanzania** | | |
| Public | 11.4 | 2.9 |
| Private | 0 | 0 |
| Mission | 4.3 | 4.3 |
| **Uganda** | | |
| Public | 2.9 | 0 |
| Private | 0 | 0 |
| Mission | 0 | 0 |
| **Zambia** | | |
| Public | 0 | 0 |
| Private | 8.8 | 5.9 |
| Mission | 5.9 | 5.9 |

** Excluded due to low number of facilities having stock cards.*

## 3.4 SRHC PRICES AND AFFORDABILITY

### 3.4.1 Overall Affordability of SRHC per Country

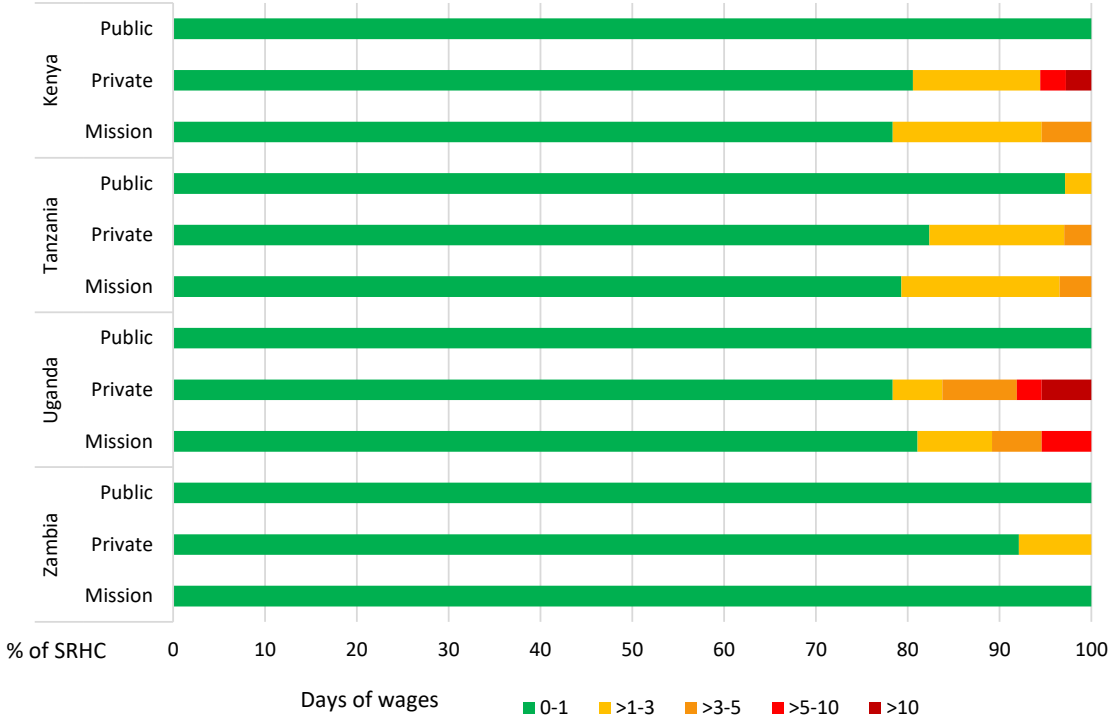
Prices in this research were collected for individual units of a commodity, in which a unit is the single most effective amount of a commodity that can be used. Examples are one tablet, a strip of 28 contraceptive tablets, 1 ml or one vial. The prices of commodities are in local currencies (i.e., Kenyan Shillings [KES], Tanzanian Shillings [TZS], Ugandan Shillings [UGX], and Zambian Kwacha [ZMW]). Affordability of SRHC was calculated per treatment regimen and based on the salary of the lowest-paid government worker (LPGW) in the country of study in 2018 (Kenya: 433.3 KES; Tanzania: 10227.3 TZS; Uganda: 6255 UGX; Zambia 145.45 ZMW).

An overall indication of SRHC affordability in each of the countries is provided in Figure 1. In the public sectors of Uganda and Zambia, all SRHC were provided completely free of charge resulting in optimal affordability (zero days of wages).

In Kenya's public sector, all SRHC were priced within 0.25 days of wages. The public sector of Tanzania was more expensive; just 88.6% of SRHC were priced within 0.25 days of wages, 8.6% of SRHC were priced between 0.25 and one day of wages and ampicillin was even priced at two days of wages (2.9%).

Regarding the mission sector, in Zambia all SRHC were provided free of charge. The mission sectors of Kenya and Tanzania had comparable affordability with a respective 78% and 79% of SRHC within one day of wages, 16% and 17% between 1-3 days of wages and 5% and 3% between 3-5 days of wages. Uganda's mission sector was slightly more expensive with 81% of SRHC within a day of wages, 8% between 1-3 days of wages, 5% between 3-5 days of wages and 5% between 5-10 days of wages. In each country, the private sector was the most expensive sector, except for Tanzania, in which the mission sector was slightly more expensive (see Appendix 2 for a complete overview of affordability).

**Figure 1.** Country comparison indication of affordability of SRHC per sector, using the salary of the lowest-paid government employee.



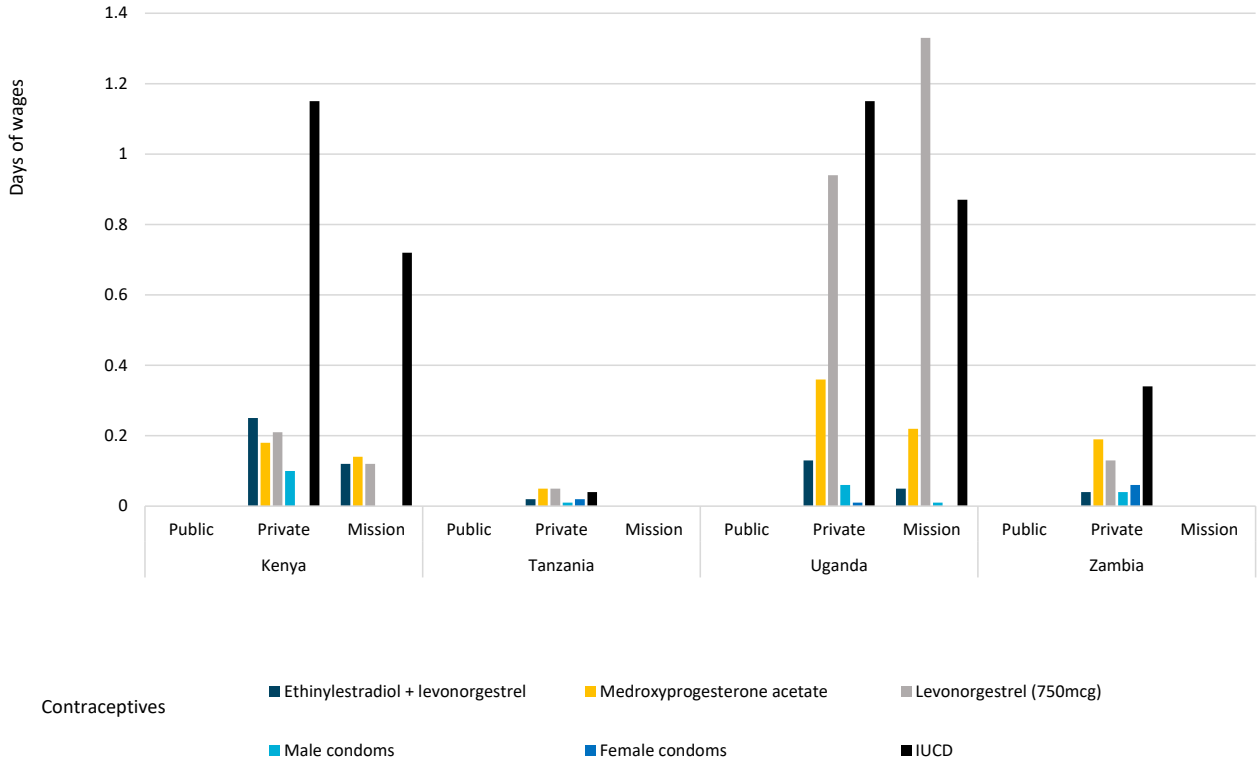

### 3.4.2 Contraceptives

**Figure 2.** provides an indication of the affordability of selected contraceptives. In the private sector of Kenya and the private and mission sectors of Uganda intrauterine contraceptive devices (IUCDs) were relatively more expensive than other contraceptives. It is important to note, however, that the IUCDs can work effectively for multiple years. Hence, affordability at 1-2 days of wages can still be considered acceptable. Also, levonorgestrel (750 mcg), used as emergency birth control, was relatively expensive in the private and mission sectors of Uganda (at a respective 0.94 and 1.33 days of wages for the LPGW).

### 3.4.3 Pregnancy and Childbirth

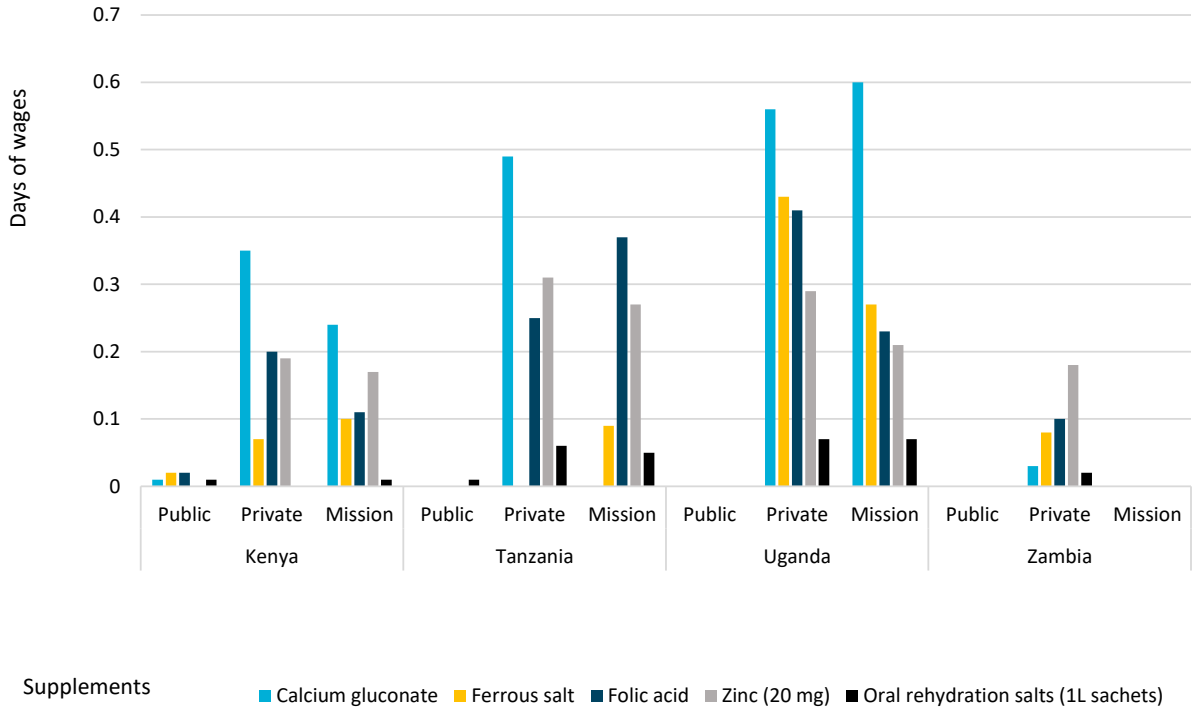
**Figure 3** provides an indication of the affordability of selected supplements for pregnant women or young children. All supplements were considered affordable, as they costed less than a day's wages in all countries. Except for calcium gluconate, all supplements were less than half a day's wages (of the LPGW). Calcium gluconate was the most expensive supplement in the private sectors of Kenya (0.35), Tanzania (0.49) and Uganda (0.56), and in the mission sectors of Kenya (0.24) and Uganda (0.60).

**Figure 2.** Indication of affordability of selected contraceptives per sector, using the salary of the lowest-paid government employee.




** Price information was not available for female condoms in Kenya's private sector and Levonorgestrel (750mcg) in Tanzania's mission sector.*

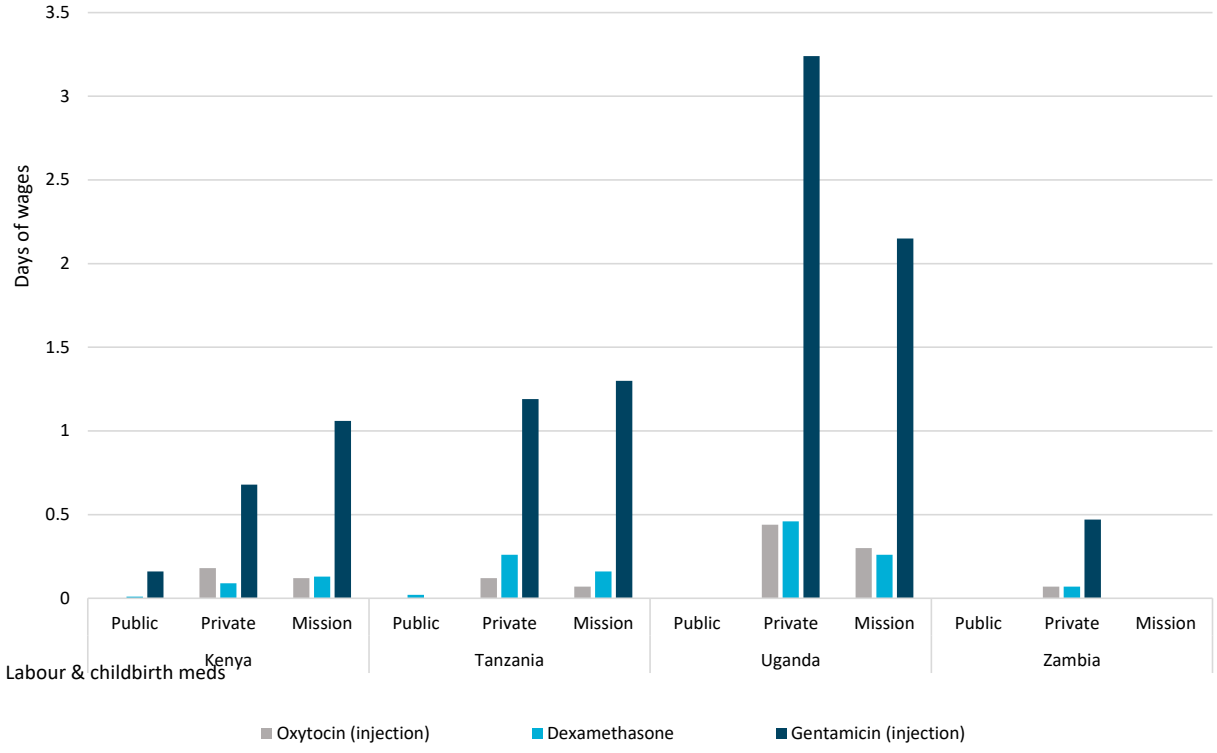
**Figure 3.** Indication of affordability of selected supplements per sector, using the salary of the lowest-paid government employee.




** Price information was not available for Calcium gluconate in Tanzania's mission sector and Ferrous salt in Tanzania's private sector.*

Regarding medications used in labour and childbirth (**Figure 4**), gentamicin, used to treat pneumonia and neonatal- and maternal sepsis, was evidently the most expensive commodity in all private and mission sectors (except for Zambia's mission sector, which is completely free of charge). This medicine proved to be unaffordable at over a day of wages (of the LPGW) in the mission sectors of Kenya, Tanzania and Uganda and the private sectors of Tanzania and Uganda. In Uganda's private and mission sectors, the medicine was especially unaffordable, at over two days of wages. Oxytocin and dexamethasone were less than half a day of wages.

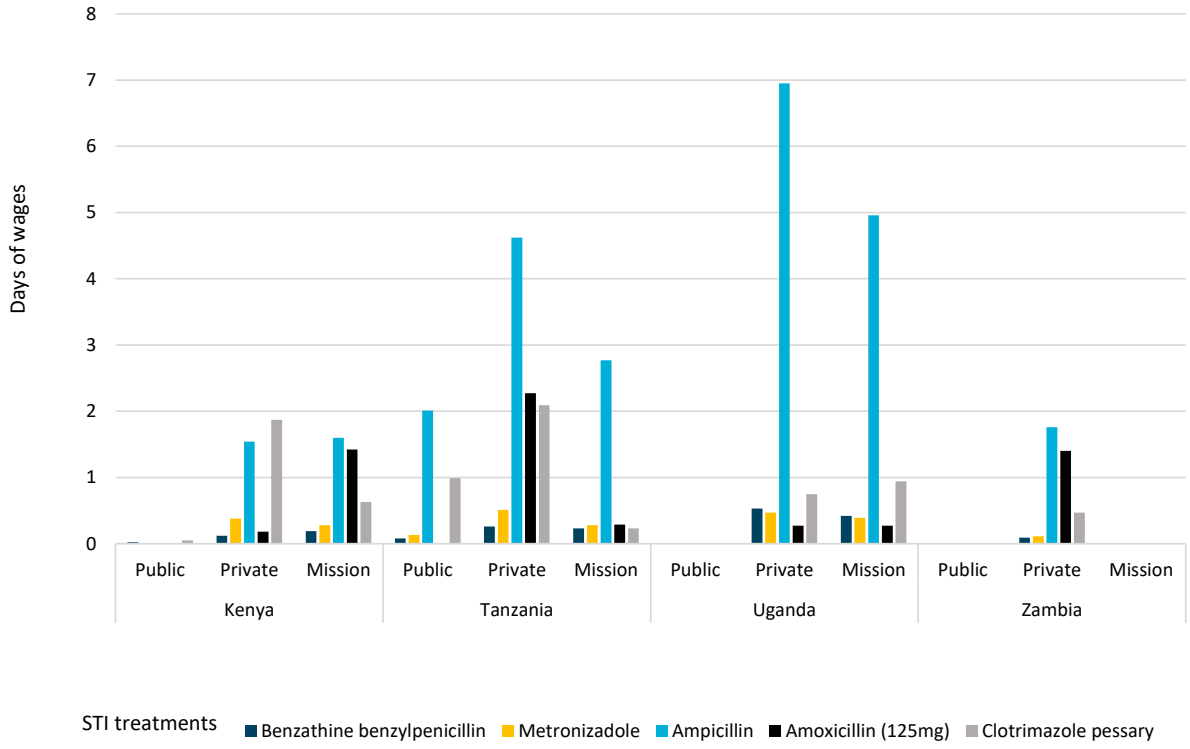
**Figure 4.** Indication of affordability of selected labour and childbirth medications per sector, using the salary of the lowest-paid government employee.




### 3.4.4 Sexually Transmitted Infections (STIs)

**Figure 5** provides an indication of the affordability of selected STI treatments. Some commodities proved to be unaffordable, priced at over a day of wages in certain sectors (ampicillin, clotrimazole pessary and amoxicillin). Ampicillin, an antibiotic used for treatment of some bacterial STIs and group B streptococcal infection in newborn children, was in general very expensive in Uganda's and Tanzania's private and mission sectors (2-7 days of wages). It was also relatively expensive in Kenya's private and mission sectors, Zambia's private sector and Tanzania's public sector (1-2 days of wages). Also, amoxicillin (antibiotic) was over a day's wage in the mission sector of Kenya, private sector in Tanzania and private sector in Zambia. Clotrimazole pessary (for vaginal thrush), cost about two days of wages in the private sectors of Kenya and Tanzania.

**Figure 5.** Indication of affordability of selected STI treatments per sector, using the salary of the lowest-paid government employee.




** Price information was not available for Ampicillin in Kenya's public sector.*

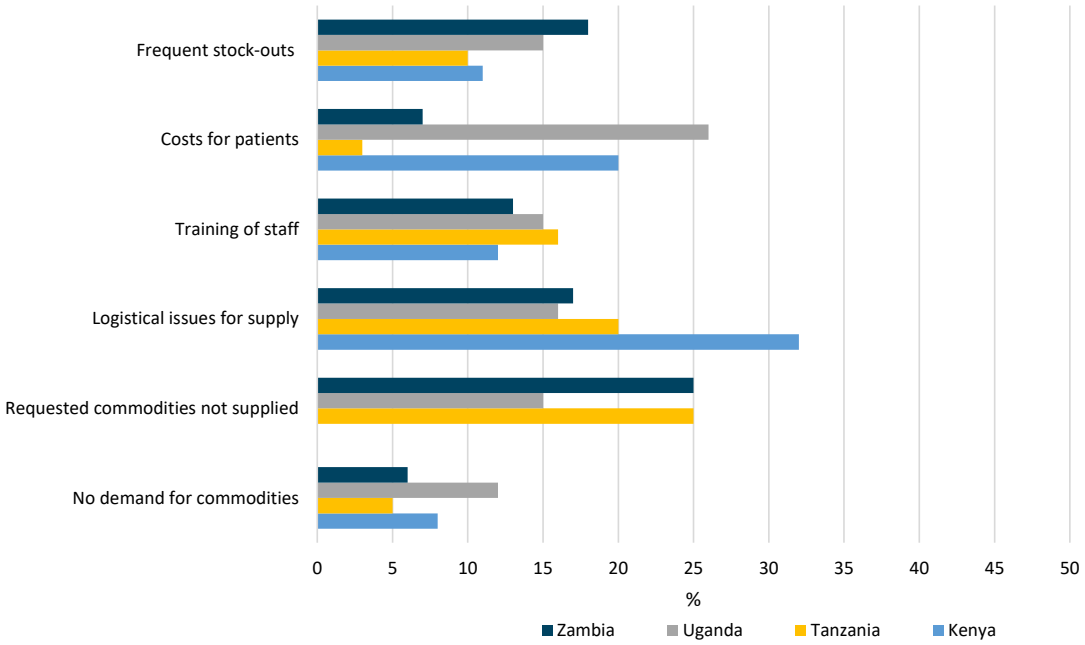
### 3.5 KEY CHALLENGES TO SRHC ACCESS AND RECOMMENDATIONS FOR IMPROVEMENT

The second portion of the research investigated access to SRH services, from the perspective of the health provider at the different facilities. The respondents were the same individuals as those providing information for the first part of the survey. The response rate for the qualitative survey was 89% in Kenya and 100% in Tanzania, Uganda, and Zambia.

Respondents were asked what they believed was the SRH service that experienced most challenges with regards to access (Family planning, maternal health, STI management, child health or other). In Kenya most participants thought maternal health and STI management faced most challenges (both 31%), while in Tanzania, Uganda and Zambia, family planning was thought to experience most challenges (61%, 47% and 36%, respectively).

Furthermore, respondents were asked about the most important challenges to SRHC access. The numbers provided next reflect the percentage of all responses within a country which focused on a specific challenge. The main challenges proved to be rather similar in the four countries. For instance, in both Tanzania and Zambia, the fact that requested commodities were not supplied was the primary challenge mentioned by respondents (both 25% of responses), while in Uganda it covered 15% of responses. In Uganda, the challenge most often mentioned by respondents was costs to patients (26% of responses), which was also recognised in Kenya as a significant challenge (20% of responses), but not so much in Zambia and Tanzania. Logistical issues for supply was another widely mentioned challenge (Kenya 32%; Tanzania 20%; Zambia 17%; Uganda 16% of responses). Other challenges regularly mentioned in all countries were: frequent stock-outs, training of staff and, to a lesser extent, a lack of demand for commodities. **Figure 6**, below, provides an overview of reported challenges by country.

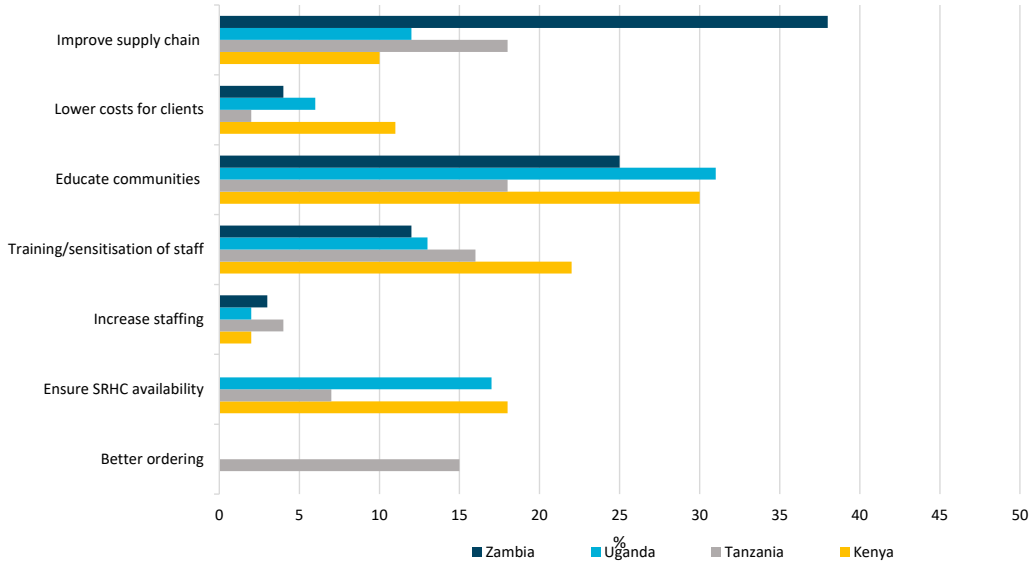
**Figure 6.** Key challenges to SRHC access by country, as reported by health professionals.




Respondents were also asked if they thought clients were reluctant to access SRHC. In Tanzania and Kenya, a respective 29% and 30% of healthcare providers thought clients were reluctant, while in Zambia and Uganda, percentages were higher at 40% and 58%, respectively. Supposed reasons for client reluctance in accessing SRHC were, again, similar across the countries. In Kenya, the main reasons were fear of stigmatisation (41%), belief in myths, superstitions and religion (21%), and patients' lack of knowledge (18%). In Tanzania, negative perceptions were mentioned most (27% of responses), followed by religious beliefs or myths (20%) and low support from males (18%). In Uganda, myths or religious beliefs were mentioned most (26% of responses), followed by fear of stigmatisation (20%) and cost to clients (15%). In Zambia, most thought cultural or religious beliefs impacted reluctance (31% of responses), followed by patients' lack of knowledge (24%) and stigmatisation from their family or community (15%). To overcome clients' reluctance to access SRH services, in all four countries, the main advice was to expand client education for everyone (84% of recommendations in Kenya; 69% in Tanzania; 68% in Uganda; 43% in Zambia).

Opinions on how to improve access to SRHC showed some consistency among respondents in the different countries. Improving the supply chain was mentioned most in Zambia (38% of responses), followed by 18% in Tanzania, 12% in Uganda and 10% in Zambia. Educating communities was the most common recommendation in the other countries (Kenya 30%; Tanzania 18%; Uganda 31%; Zambia 25% of respondents). After that, sensitisation of staff was most commonly recommended. And, in Uganda and Kenya, a substantial percentage mentioned that SRHC availability should be ensured (17% and 18% of responses, respectively). Lower costs for clients was sometimes mentioned by Kenyan respondents (11%), and to a lesser extent in Uganda (6%) Zambia (4%) and Tanzania (2%). Only Tanzania prioritised accurate ordering as a recommendation (15% of responses). A small percentage of respondents prioritised the increase of staffing (2-4% of responses). **Figure 7.** provides an overview of the most commonly prioritised recommendations.

**Figure 7.** Key recommendations to improve SRHC access by country.



# 4. DISCUSSION

These SRHC surveys were part of the second-year roll out of HAI's SRHC research for Kenya, Uganda and Zambia, and the first-year roll out for Tanzania, as part of the Health Systems Advocacy (HSA) Partnership. The studies will be repeated in 2019 and 2020 in each country of study to monitor changes in access over time. This report highlights some of the bottlenecks to access and potential areas for intervention to improve access to SRHC, both at national and regional levels.

In accordance with last years' results, the survey has shown that availability of SRHC is a problem in all sectors of all countries, given that the highest mean availability of SRHC was 45% in Kenya's public sector. The other sectors in Kenya, Tanzania, Uganda and Zambia had, on average, less than 40% of the commodities available. This is problematic because across the countries, an estimated 14.4% to 28.7% of women aged 15-49 years, respectively, had unmet family planning needs in 2018[4]. Moreover, antenatal and post-natal commodities, critical for ensuring a healthy and safe pregnancy, childbirth and life for the mother and the baby, are not regularly available in all four countries. This leads to serious, preventable morbidity and mortality. Poor availability of these commodities is likely to contribute to the high maternal mortality rates in these countries, which in 2015 ranged from 225 to 510 maternal deaths per 100,000 live births (Zambia: 225, Uganda: 343, Tanzania: 398, Kenya: 510)[5].

Stock-outs of SRHC were (on average) not very common in the public sector of Kenya, where 7.4% of facilities reported a stock-out. However, stock-outs were substantially higher in the other countries as 17.2% of Tanzanian, 16.8% of Ugandan and 20.7% of Zambian public sector facilities reported stock-outs. These numbers are a considerable increase pertaining to last year (Kenya 2%; Uganda 12%; Zambia 6% of public facilities). If an SRHC was stocked-out, the number of days it was unavailable in Kenya's and Uganda's public sector was on average six days a month. In Zambia and Tanzania's public sector it was higher, at nine and 13 days, respectively. Stock-outs exceeding 20 days a month were rare. It is important to note, however, that even though stock-outs may seem limited, since availability of SRHC is already low in the countries, stock-outs can still significantly impact access to SRHC. Moreover, stock cards were not available in a considerable number of facilities, which may have led to an underestimation of the actual stock-out situation.

The most expensive commodity exceeded ten days of wages (magnesium sulphate in the private sectors of Uganda and Kenya). Affordability of SRHC was optimal in the public sectors of Uganda and Zambia, and in Zambia's mission sector, as all commodities were free to patients. In Kenya's and Tanzania's public sector, the most expensive SRHC cost 0.16 days and two days of (LPGW) wages, respectively. Correspondingly, in the sectors providing commodities free of charge, low percentages of respondents articulated that costs to patients were a key challenge to accessing SRHC (at 0-4%), compared to the other, paid sectors (11-50% in Kenya, Uganda and Zambia). Interestingly, Tanzania formed an exception with a mere 2-5% of respondents in each sector thinking costs to patients were a barrier, while commodities were not free of charge.

It should be noted that many people earn much less than the LPGW and an SRHC, which may seem affordable, may be unaffordable to a large proportion of the population. For instance, in Kenya, the LPGW earns an equivalent daily wage of USD 4.28[6], while it is reported that 36.88% of the population lives below the international poverty line of USD 1.90.[7] A similar situation is found in the other countries: The LPGW earns the

[4] United Nations, Department of Economic and Social Affairs, Population Division. *Estimates and Projections of Family Planning Indicators 2018*.

[5] The World Bank. *Maternal mortality ratio (modeled estimate, per 100,000 live births)*. WHO, UNICEF, UNFPA, World Bank Group, and the United Nations Population Division. Trends in Maternal Mortality: 1990 to 2015. Geneva, World Health Organization, 2015. Accessed April 18, 2019, via https://data.worldbank.org/indicator/SH.STA.MMRT

[6] Based on currency conversion of KES to USD for the value of KES in USD on 18 July 2019, via https://www.oanda.com/currency/converter/

equivalent of USD 11.76 in Zambia[8] and USD 4.41 in Tanzania.[9] At the same time, the most recent estimates of people living below the international poverty line of USD 1.90 are high at 36.8% in Kenya (2015), 49.1% in Tanzania (2011)[7] and 57.5% in Zambia (2015).[7]

Besides the costs, major challenges experienced by the healthcare workers were issues with stock and supply, training of staff, and to a lesser extent, the demand for commodities. A low demand could be partially explained by the reluctance of clients to access SRHC, a problem in all countries, thought to be caused by cultural or religious beliefs, fear of stigmatisation, negative perceptions, patients' lack of knowledge and low support from males. It is not surprising that the main advice to overcome client's reluctance in all countries was to expand client education for everyone and to educate communities. In addition, in order to improve access to SRHC, training and sensitisation of staff, improving the supply chain and ensuring SRHC availability were widely recommended.

### 4.1 RECOMMENDATIONS

Some of the recommendations made based on the results of the 2017 surveys remain very relevant when looking at the comparative data and recommendations from the 2018 SRHC survey. This signifies the need for more interventions geared towards addressing some of the perennial challenges hindering availability and affordability of SRHC. The most important recommendations specified per country are presented below.

#### 4.1.1 Kenya

- Improve the supply chain at facility and county level. This should be coupled with a redistribution plan for when shortages arise or when there is an oversupply of a commodity in an area with low demand.
- Adopt a multi-sectoral approach in the provision of health services and commodities, especially in the rural and hard to reach areas, by integrating and bringing services closer to the population.
- Support for more national and county level Ministry of Health (MoH) interaction to promote cross-learning and sharing of strategies to improve access. This process has already started through the MeTA Forums and will be scaled up in collaboration with other partners.
- Demand creation and awareness raising through client and community education.
- Since adolescent women are the major group affected by access to SRH services and commodities, to consider improving the access to youth friendly health centres.
- More private sector engagement and support for local production of essential commodities. For instance, local production of chlorhexidine would boost its availability across facilities.
- County governments should include chlorhexidine as an essential medicine, therefore making budget available for its purchase.

#### 4.1.2 Uganda

- The MoH and partners should consistently make deliberate efforts to educate clients and sensitise communities about SRH services and commodities.
- The government of Uganda should actively seek out strategies to reduce the cost of high cost SRHC such as magnesium sulphate, for instance through offering subsidies.
- Strategies to improve the SRHC supply chain must be actively sought to ensure that commodities are delivered on time and in the quantities ordered.
- Healthcare providers need to receive additional training on SRHCs, especially in the private and mission sector facilities.

7 The World Bank. Poverty headcount ratio at $1.90 a day (2011 PPP) (% of population). World Bank, Development Research Group. Accessed April 18, 2019, via https://data.worldbank.org/indicator/SI.POV.DDAY

8 Based on currency conversion of ZMW to USD for the value of ZMW in USD on 18 April 2019, via https://www.oanda.com/currency/converter/

9 Based on currency conversion of TZS to USD for the value of TZS in USD on 18 Aprilw 2019, via https://www.oanda.com/currency/converter/

### 4.1.3 Zambia

- Improve the supply chain.
- Educate communities on the importance of SRHC and SRH services.
- Offer or improve follow-up services to patients.
- Improve client education and outreach.
- Increase the number of trained staff, and improve the knowledge of existing staff.
- For private sector facilities, introduce and explore new programmes to reduce client's costs.

### 4.1.4 Tanzania

Since this was the first year roll-out of the SRHC survey in Tanzania, no comparisons could be made to previous years. At first impression, inadequate availability of SRH commodities, frequent stock-outs, poor logistic management, and limited community knowledge also constitute major factors contributing to the problems experienced with accessing SRH commodities in this country. There is a high need to improve access to SRHC. In order to do this, the following steps are recommended:

- Ensure an adequate supply of SRH commodities by:
  - Improving the supply chain from the central level down.
  - Improving logistics management at the facility.
- Increase capacity building of healthcare providers through regular trainings on SRH.
- Sensitise communities about SRH services and commodities.
- Ensure all family planning commodities on the international Essential Medicines Lists (EMLs) are also included on the Tanzania EML.

## 4.2 CONCLUSION

The conclusions of this year's country comparison correspond with last year's report. In Kenya, Tanzania, Uganda and Zambia, the problems with accessing SRHC are dispersed over the central, facility and community level. At the supply side, the lack of availability, stock-outs, and (in some sectors) unaffordability of SRHC constitute severe threats to access. At the demand side, lack of knowledge, non-acceptance, fear and stigmatisation around SRH services pose a threat to access, together contributing to the 15-30% of women that still experience unmet family planning needs in these countries. Improvements in accessing SRHC are needed to achieve the Sustainable Development Goal of universal access to sexual and reproductive healthcare services.

The surveys showed that community education is suggested as a solution to improve the health-seeking behaviour of clients because it could tackle many of the reasons given as to why clients are reluctant to access SRH services. By educating the community, client's lack of knowledge, negative perceptions, and beliefs in myths and superstitions can be addressed. Client and community education may, in turn, lead to a reduction in stigmatisation of SRH service users by family members and the community. Targeting females as well as males in education programmes could further foster these positive effects. Related to this, staff sensitisation along with continued staff education are needed to ensure clients feel comfortable in accessing SRH services at facilities. To achieve this, staff should be sufficiently knowledgeable about SRH and available services so they can offer quality care and be professional in their approach, resolving (unintended) stigmatisation.

Improving client, community and staff education, however, is not enough. If commodities are not available, they simply cannot be accessed; therefore, another important area of focus is the pharmacy chain. A suboptimal pharmacy chain leads to issues with availability and commodity stock-outs. To improve the pharmacy chain, central medical storage points should have all commodities available, SRHC must be accurately ordered by facilities, delivery should be efficient, accurate and timely, and a closer examination of the most effective balance between a 'pull system' and a 'push system' of supply for different commodities could be of value.

# 5. APPENDICES

# Appendix 1: SRHC Surveyed

| Commodity | Strength |
|---|---|
| Ethinylestradiol + levonorgestrel | Tablet, 30 mcg + 150 mcg |
| Ethinylestradiol + norethisterone | Tablet, 35 mcg + 1.0 mg |
| Levonorgestrel | Tablet, 300 mcg |
| Levonorgestrel | Tablet, 750 mcg |
| Medroxyprogesterone acetate | 150mg in 1 ml |
| Norethisterone enanthate | 200mg/ml in 1 ml |
| Male Condoms | NA |
| Female Condoms | NA |
| Intrauterine contraceptive devices (IUCD) | NA |
| Implant: Levonorgestrel | NA |
| Implant: Etonogestrel | NA |
| Diaphragm | NA |
| Oxytocin injection | Vial, 10IU, 1ml |
| Misoprostol | Tablet, 200 mcg |
| Metronidazole | Tablet, 200 mg |
| Methyldopa | Tablet, 250 mg |
| Magnesium sulfate | Vial, 500mg in 2ml |
| Magnesium sulfate | Vial, 500mg in 10ml |
| Calcium gluconate | Ampoule, 100mg in 10ml |
| Clotrimazole pessary | Tablet, 500 mg |
| Clotrimazole cream | Tube, 1% in 15g |
| Gentamicin injection | Ampoule, 40mg/ml in 2ml |
| Ampicillin | Vial, 500mg powder for injection |
| Procaine benzylpenicillin (fort) | Vial, powder for injection (4MU) |
| Benzathine benzylpenicillin G | Vial, 2.4MU in 10ml |
| Amoxicillin | Tablet, 125mg, dispersible |
| Amoxicillin | Tablet, 250mg, dispersible |
| Dexamethasone | Vial, 4 mg/ ml |
| Ferrous Salt | Tablet, 200 mg |
| Folic Acid | Tablet, 5 mg |
| Ferrous Salt and Folic Acid | Tablet, 60 mg iron + 400mcg Folic Acid |
| Ferrous Salt and Folic Acid | Tablet, 150 mg iron + 500mcg Folic Acid |
| Zinc | Syrup, 10 mg in 5ml |
| Zinc | Tablet, 20 mg |
| Zinc ORS co-pack | Sachet, 10mg/ 1 L |
| ORS sachets | Sachet, 200 ml |
| ORS sachets | Sachet, 500 ml |
| ORS sachets | Sachet, 1 L |
| Safe delivery kit | NA |
| Vasectomy kits | NA |
| Tuboligation kits | NA |
| Antiseptic | NA |
| Chlorhexidine 4% | NA |
| Manual vacuum aspiration kits (MVA) | NA |
| Speculum | NA |
| Cervical dilators | NA |
| Incubator | NA |
| Monitor | NA |
| Ultra sound scan | NA |
| Ventilator | NA |
| Fetal scope | NA |
| Resuscitator | NA |
| Bag and mask size 0 | NA |
| Suction device | NA |
| Training mannequin for infant resuscitation | NA |

## Appendix 2: Affordability of SRHC by Sector

| Commodities | Kenya | | | Tanzania | | | Uganda | | | Zambia | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Public | Private | Mission | Public | Private | Mission | Public | Private | Mission | Public | Private | Mission |
| Ethinylestradiol + levonorgestrel | 0 | 0.25 | 0.12 | 0 | 0.02 | 0.00 | 0 | 0.13 | 0.05 | 0 | 0.04 | 0 |
| Ethinylestradiol + norethisterone | 0 | 0.20 | 0.00 | 0 | 0.05 | NA | NA | 0.32 | NA | 0 | 0.04 | 0 |
| Levonorgestrel 30 mcg | 0 | 0.30 | 0.04 | 0 | 0.02 | NA | 0 | 0.24 | 0.05 | 0 | 0.07 | 0 |
| Levonorgestrel 750 mcg | 0 | 0.21 | 0.12 | 0 | 0.05 | NA | 0 | 0.94 | 1.33 | 0 | 0.13 | 0 |
| Medroxy-progesterone acetate | 0 | 0.18 | 0.14 | 0 | 0.05 | 0.00 | 0 | 0.36 | 0.22 | 0 | 0.19 | 0 |
| Norethisterone enanthate | 0 | 0.05 | 0.12 | 0 | 0.00 | 0.18 | 0 | 0.16 | 0.21 | 0 | 0.08 | 0 |
| Male condoms | 0 | 0.10 | 0.00 | 0 | 0.01 | 0.00 | 0 | 0.06 | 0.01 | 0 | 0.04 | 0 |
| Female condoms | 0 | NA | 0.00 | 0 | 0.02 | 0.00 | 0 | 0.01 | 0.00 | 0 | 0.06 | 0 |
| Intrauterine contraceptive devices | 0 | 1.15 | 0.72 | 0 | 0.04 | 0.00 | 0 | 1.15 | 0.87 | 0 | 0.34 | 0 |
| Levonorgestrel implant | 0 | 0.67 | 0.39 | 0 | 0.00 | 0.00 | 0 | 0.94 | 0.43 | 0 | 0.43 | 0 |
| Etonogestrel implant | 0 | 0.00 | 0.50 | 0 | 0.06 | 0.00 | 0 | 1.19 | 0.22 | 0 | 0.69 | 0 |
| Diaphragm | NA | NA | NA | NA | NA | NA | 0 | NA | 0.80 | 0 | NA | NA |
| Oxytocin injection | 0 | 0.18 | 0.12 | 0 | 0.12 | 0.07 | 0 | 0.44 | 0.30 | 0 | 0.07 | 0 |
| Misoprostol | 0.01 | 0.16 | 0.11 | 0 | 0.10 | 0.12 | 0 | 0.55 | 0.72 | 0 | 0.32 | 0 |
| Metronidazole | 0.01 | 0.38 | 0.28 | 0.13 | 0.51 | 0.28 | 0 | 0.47 | 0.39 | 0 | 0.11 | 0 |
| Methyldopa | 0.04 | 1.51 | 1.92 | 0.70 | 2.58 | 1.90 | 0 | 3.76 | 2.76 | 0 | 0.89 | 0 |
| Magnesium sulfate 500mg/ 2ml | 0.09 | 7.62 | 3.48 | 0 | 0.00 | 3.52 | 0 | 31.65 | 9.15 | 0 | 2.41 | 0 |
| Magnesium sulfate 500mg/ 10ml | 0.08 | 10.60 | 4.26 | 0 | 0.00 | 2.93 | 0 | 13.91 | 7.81 | 0 | 0.03 | 0 |
| Calcium gluconate | 0.01 | 0.35 | 0.24 | 0 | 0.49 | NA | 0 | 0.56 | 0.60 | 0 | 0.03 | 0 |
| Clotrimazole pessary | 0.05 | 1.87 | 0.63 | 0.99 | 2.09 | 0.23 | 0 | 0.75 | 0.94 | 0 | 0.47 | 0 |
| Clotrimazole cream | 0.01 | 0.24 | 0.15 | 0.08 | 0.18 | 0.13 | 0 | 0.55 | 0.39 | 0 | 0.16 | 0 |
| Gentamicin injection | 0.16 | 0.68 | 1.06 | 0 | 1.19 | 1.30 | 0 | 3.24 | 2.15 | 0 | 0.47 | 0 |
| Ampicillin | NA | 1.54 | 1.60 | 2.01 | 4.62 | 2.77 | 0 | 6.95 | 4.96 | 0 | 1.76 | 0 |
| Procaine benzylpenicillin | 0 | 1.21 | 1.17 | 0.34 | 2.38 | 2.44 | 0 | 4.56 | 3.16 | 0 | 0.78 | 0 |
| Benzathine benzylpenicillin G | 0.02 | 0.12 | 0.19 | 0.08 | 0.26 | 0.23 | 0 | 0.53 | 0.42 | 0 | 0.09 | 0 |
| Amoxicillin 125 mg | 0 | 0.18 | 1.42 | 0 | 2.27 | 0.29 | 0 | 0.27 | 0.27 | 0 | 1.40 | 0 |
| Dexamethasone | 0.01 | 0.09 | 0.13 | 0.02 | 0.26 | 0.16 | 0 | 0.46 | 0.26 | 0 | 0.07 | 0 |
| Ferrous salt tablet | 0.02 | 0.07 | 0.10 | 0 | NA | 0.09 | 0 | 0.43 | 0.27 | 0 | 0.08 | 0 |
| Folic acid tablet | 0.02 | 0.20 | 0.11 | 0 | 0.25 | 0.37 | 0 | 0.41 | 0.23 | 0 | 0.10 | 0 |
| Ferrous salt: Folic acid 60/400 | 0.01 | 0.65 | 0.14 | 0 | NA | NA | 0 | 0.24 | 0.25 | 0 | 0.03 | 0 |
| Ferrous salt: Folic acid 150/500 | 0 | 0.56 | 0.25 | 0 | 0.88 | NA | 0 | 0.96 | 0.32 | NA | 0.01 | NA |
| Zinc 10mg/5ml syrup | 0 | 0.26 | 0.01 | NA | 0.29 | 0.29 | NA | 0.13 | 0.04 | 0 | 0.06 | NA |
| Zinc 20mg tablet | 0 | 0.19 | 0.17 | 0 | 0.31 | 0.27 | 0 | 0.29 | 0.21 | 0 | 0.18 | 0 |
| Zinc: ORS co-pack | 0 | 0.17 | 0.07 | 0.01 | 0.00 | 0.05 | 0 | 0.29 | 0.25 | 0 | 0.07 | 0 |

ADVANCING ACCESS
TO MEDICINES.
FOR EVERYONE.
EVERYWHERE.

HAI HEALTH ACTION INTERNATIONAL