



**Monitoring access to UN Commission on Lifesaving Commodities
(Reproductive, Maternal, New-born and Child Health - RMNCH)
In Uganda, Survey Report - September 2015**

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Monitoring access to UN Commission on Lifesaving Commodities (Reproductive, Maternal, New-born and Child Health - RMNCH) In Uganda

Survey Report
September 2015



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List of Acronyms

| | |
|---------|---|
| WHO | World Health Organisation |
| HAI | Health Action International |
| MOH | Ministry of Health |
| UNCoLSC | United Nations Commission on Lifesaving Commodities |
| RMNCH | Reproductive Maternal New born and Child Health |
| ORS | Oral rehydration salts |
| UGX | Uganda Shillings |
| HEPS | Coalition for Health Promotion and Social Development |
| ABH | Advocacy for Better Health |
| USD | US Dollar |

Executive Summary

The UN Secretary-General's Global Strategy for Women's and Children Health highlights the inequitable access to life-saving medicines and health supplies suffered by women and children around the world and calls on the global community to work together to save 16 million lives by 2015. The Strategy identifies the need for increased access to and the appropriate use of essential medicines, medical devices and other commodities that could save these lives. This study assesses the status of access to the lifesaving commodities in Uganda.

Objectives

- a) Determine the availability and prices of a basket of EMHS for UNCoLSC within the public, private and mission sectors
- b) Determine stock out days for basket of EMHS for UNCoLSC
- c) Inform the public, policymakers, donors and other stakeholders on the status of UNCoLSC.

Methods

The study used a cross-sectional design with quantitative methods utilising semi-structured questionnaire adapted from the standardized WHO/HAI Medicine Prices Monitoring Tool. There were 104 facilities visited for the survey including 37 public facilities (18 urban and 19 rural), 32 private facilities (23 urban and 9 rural) and 35 mission facilities ((18 urban and 17 rural).

Results

Overall the public sector had the highest availability at 57%, followed by mission sector at 40% and private sector at 30%. In private sector availability in urban facilities was 19% higher compared to rural facilities and in mission sector rural facilities had 23% higher availability than urban facilities. This disparity in availability in both mission and private may be explained by income differentials. Ability to pay for services is higher in urban facilities of private sector. However, in rural areas mission facilities have higher demand due to subsidized services where consumers cannot afford private sector. There has been improvement in public sector availability of maternal health commodities but a reduction in mission sector. Availability of Oxytocin for postpartum haemorrhage was high in mission and public sector.

- Dispersible tablets which are the WHO and MOH recommended appropriate treatment for childhood Pneumonia were poorly available across all sectors. However, for treatment of diarrhoea, availability of medicines was high.
- Urgent attention is required from all stakeholders in all sectors to improve availability and choice of reproductive health commodities to reduce unwanted pregnancies.
- Overall, the ranges of consumer prices for medicines and commodities were very highly. The maximum prices of many commodities were 10-15 times higher than the minimum prices.
- A large number of facilities had never stocked many of the lifesaving commodities surveyed.

Recommendations

- MOH should scale up efforts with all sectors to improve access to Magnesium sulphate to improve maternal health.
- In order to improve child survival, efforts are required to improve availability of Chlorhexidine, Dexamethasone and new born resuscitation equipment across all sectors.
- For realisation of Child Survival Strategy, MoH ought to consider urgent education of all providers on appropriate treatment for childhood Pneumonia.
- MOH should institute measures to control consumer prices of lifesaving commodities in order to stop consumer exploitation. As a pathfinder country for the UNCoLSC, MOH ought to look into stocking of the lifesaving commodities.

1. Background

The United Nations (UN) Secretary-General's *Global Strategy for Women's and Children's Health* highlights the problem of inequitable access to life-saving medicines and health supplies suffered by women and children around the world. The strategy calls on the global community to work together to save 16 million lives by 2015. The Strategy identifies the need for increased access to and the appropriate use of essential medicines, medical devices and other commodities that could save these lives.

The UN Commission on Life-Saving Commodities for Women estimates that an ambitious scaling up of 13 commodities over five years would cumulatively save over 6 million lives including 230,000 maternal deaths averted through increased access to family planning. Achieving these goals would save an extra 1.8 million child deaths a year, reducing the estimated 7.1 million deaths in 2010 to 5.3 million. Likewise, the estimated 287,000 maternal deaths in 2010 would be reduced to 213,000 by increased access to maternal health and family planning commodities.

The major challenge in Uganda is the high fertility rate with a Total Fertility Rate of 6.6 (UDHS 2011). This is driving the other burdens namely pre-term delivery, Post-partum haemorrhage, sepsis, pre-eclampsia and eclampsia. A key challenge is in Supply Chain Management especially "last mile deliveries".

Essential commodity supplies are required to ensure that healthy reproductive care is made possible. Childbearing individuals have a right to choose, obtain and use contraceptives to avoid unintended pregnancies and to protect their health and that of their children and also require medicines and health supplies to prevent and treat sexually transmitted infections (STIs), and to ensure healthy pregnancy and delivery. This concept is known as Reproductive Health Commodity Security (RHCS) and requires government to ensure and maintain access to and availability of reproductive health commodities which include commodities sexual reproductive health.

2. Objectives

- a) Determine the availability and prices of a basket of EMHS for UNCoLSC within the public, private and mission sectors
- b) Determine stock out days for basket of EMHS for UNCoLSC
- c) Inform the public, policymakers, donors and other stakeholders on the status of UNCoLSC.

3. Study Design

The study used a cross-sectional design with quantitative methods utilising semi-structured questionnaire adapted from the standardized WHO/HAI Medicine Prices Monitoring Tool. Thirteen key medicines and health supplies selected by the United Nations Commission on Lifesaving Commodities (UNCoLSC) for Reproductive Maternal New born and Child Health (RMNCH) were selected for availability, price and stock out survey. The highest and lowest-priced medicines were considered for data collection from facilities accredited by Ministry of Health (MOH).

3.1. Study areas, population, sample size, selection criteria

The study was conducted in 4 regions of the country East, West, Central and North. The official list of health facilities accredited by MoH was used for selection of facilities. Private sector pharmacies and drug shops were selected from National Drug Authority and Pharmaceutical Society of Uganda accredited lists. Health facilities were randomly sampled from the lists. Sample of 120 facilities were selected. A minimum of 90 facilities including thirty from each sector (public, mission, private) are required for the study as per recommendations by the WHO/HAI standardised methodology.

3.2. Selecting outlets

Selecting public sector facilities:

Public health facilities were used to anchor the sample, with other types (by ownership) of facilities chosen by their proximity to these facilities from a list of all public health facilities in each survey area that are within a 3 hours drive of the main government health facility in that district. Uganda has several levels of facilities, from hospitals down to health centres or dispensaries. Lower level facilities are often more widely dispersed than upper level ones. Generally, both upper and lower level facilities were included if they were expected to offer reproductive health care. NGO/mission health facilities .The same process above was followed for the mission sector.

Selecting private facilities:

Using the standard WHO/HAI methodology, private health care facilities were selected by their proximity to the public health facilities selected.

3.3. Personnel

The study involved the following personnel: Survey Manager with pharmaceutical experience, 8 HEPS seasoned associate researchers based in the four regions (4 pharmacists and 4 social scientists) working in pairs. There were also two Data entry clerks.

3.4. Data collection procedures, instruments and quality control

Data collection:

Data collectors worked in teams of two coordinated by the Survey Manager. For each medicine included on the data collection form, availability as well as the price (if applicable) was noted. The information was recorded by interviewing the attendant in the outlet; the data collectors asked to see the items as well. Also using stock cards of the various commodities at the different stores, data collectors noted stock outs in the last six months and for various stocked out medicines the number of days of stock out were recorded.

Quality control:

The Survey Manager was responsible for dealing with queries and communicating with the data collectors to ensure that any issues that arose during data collection were managed. A quality assurance team travelled to selected areas to ensure data quality.

Data management and analysis:

At the end of data collection, the data collectors sent filled forms to the HEPS secretariat where data was processed and analysed using standardised workbook for final report.

Table 1: Medicine and Supplies List

| Reproductive Health Commodity | Use |
|--|--|
| 1- Female Condom | Contraception |
| 2- Contraceptive Implants (e.g. Implanon, Jadelle) | Contraception |
| 3- Emergency Contraceptive Pill | Emergency Contraceptive |
| Maternal Health | |
| 4- Oxytocin | Prevention and management of Post Partum Haemorrhage |
| 5- Misoprostol | Prevention and management of Post Partum Haemorrhage |
| 6- Magnesium Sulphate | Management of pre-eclampsia and Eclampsia |
| Child Health | |
| 7- Amoxicillin | Pneumonia |
| 8- Oral Rehydration Salts + Zinc. | Diarrhoea |
| Newborn Health | |
| 10- Injectable Antibiotics (Gentamicin, Procaine Benzyl penicillin, Ceftriaxone) | Infections |
| 11- Antenatal Corticosteroids (Dexamethasone) | Preterm birth enlargement of lungs |
| 13- Resuscitation Devices (Bag & mask, suction devices, manikin) | Resuscitation of newborns |

4. Results

4.1. Facilities surveyed

There were 104 facilities visited for the survey including 37 public facilities (18 urban and 19 rural), 32 private facilities (23 urban and 9 rural) and 35 mission facilities ((18 urban and 17 rural).

4.2. Overall medicine availability

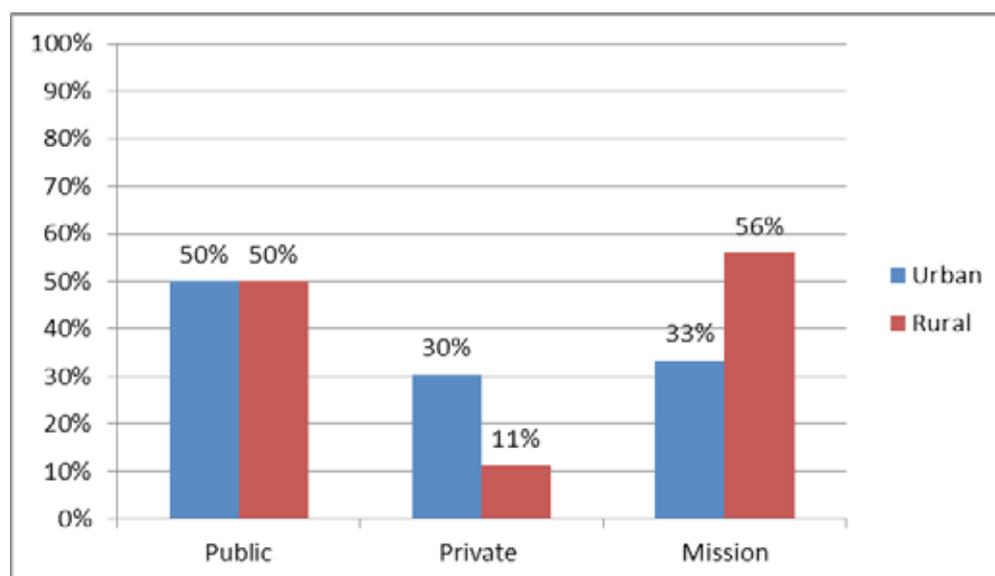
This indicates the median availability of all surveyed medicines and supplies irrespective of dosage form or packaging. Overall the public sector had the highest availability at 57%, followed by mission sector at 40% and private sector at 30%.

Table 2: Overall medicine availability

| Sector | Median Availability |
|----------------|---------------------|
| Public (n=37) | 57% |
| Private (n=32) | 30% |
| Mission (n=35) | 40% |

4.3. Availability of medicines and commodities: Urban versus Rural

A comparison on availability across urban and rural facilities was made as below:

Figure 1: Availability of medicines and commodities: Urban versus Rural

There was no difference in availability in the public sector between urban and rural. However, there was a large difference in private sector where availability in urban facilities was 19% higher compared to rural facilities and in mission sector rural facilities had 23% higher availability than urban facilities. This disparity in availability in both mission and private may be explained by income differentials. Ability to pay for services is higher in urban facilities of private sector. However, in rural areas mission facilities have higher demand due to subsidized services where consumers cannot afford private sector.

4.4. Availability of different categories of medicines

4.4.1. Availability of Reproductive Health Commodities

Reproductive Health commodities are required to prevent pregnancy. Availability is shown below:

Table 3: Availability of Reproductive Health Commodities

| No | Medicine | Public | Private | Mission |
|----|---------------------------------------|--------|---------|---------|
| | Female condoms | 22% | 6% | 11% |
| | Levonorgestrel 0.75mg/rod x 2 Implant | 38% | 9% | 20% |
| | Etonogestrel 68 mg /rod x 1 implant | 76% | 19% | 26% |
| | Levonorgestrel 1.5 mg Tablet | 5% | 6% | 0% |
| | Levonorgestrel 0.75 mg Tablet | 19% | 44% | 3% |
| | Misoprostol 200 µg Tablet | 59% | 44% | 46% |

Overall the long term contraceptive Etonogestrel implant (Implanon) was the most available reproductive health supply at 76% in public facilities. Next to Implanon, only Misoprostol was available in over 50% of facilities. The most available commodities in private sector were emergency contraceptive Levonorgestrel and Misoprostol tablets (at 44%).

Female condoms were poorly available across all sectors, most available in public sector at 22%. Emergency contraceptives were poorly available in both public and mission sectors.

Urgent attention is required from all stakeholders in all sectors to improve availability and choice of reproductive health commodities to reduce unwanted pregnancies.

4.4.2. Availability of Maternal Health Commodities

Oxytocin for postpartum haemorrhage and Magnesium sulphate for pre Eclampsia and Eclampsia are the medicines of interest for maternal health. Their availability is shown below:

Table 4: Availability of Maternal Health Commodities

| No | Medicine | Public | Private | Mission |
|----|--|--------|---------|---------|
| | Oxytocin Injection 10IU, 1ml | 84% | 41% | 89% |
| | Magnesium sulfate Injection 500mg/ml, 2ml, 5ml, 10ml vials | 62% | 25% | 66% |

Availability of Oxytocin was high in mission and public sector (89% and 84%). There was a high increase in public sector from 61%; mission sector was 90% and private 48% (HEPS Uganda, 2012). In the same 2012 study, availability of Magnesium sulphate was at 47% in public sector and has risen to 62% but has reduced from 100% in mission facilities to 66% and has not had much improvement in private sector from 21% to 25%.

There has been improvement in public sector availability of maternal health commodities but a reduction in mission sector. Efforts are required from all sectors to improve access to Magnesium sulphate

4.4.3. Availability of commodities for New born Health: Commodities for new born health include anti-infectives, pre-term birth and new born cord protection. Below are findings:

| No | Medicine | Public | Private |
|----|--|--------|---------|
| | Gentamycin Injection 40mg/ml in 1ml or 2ml ampoules (or 20mg/ml in 1ml or 10mg/ml in 2ml ampoules) | 84% | 56% |
| | Procaine penicillin Injection 1g in a vial | 22% | 38% |
| | Ceftriaxone Injection 250mg, 500mg or 1g in a vial | 73% | 78% |
| | Dexamethasone Injection 4mg/ml in 1ml vial | 62% | 53% |
| | Chlorhexidine 4% gel or solution | 62% | 25% |

Table 5: Availability of commodities for New born Health

There is a relatively high availability of anti-infective medicines except for procaine penicillin injection an old antibiotic which may be getting out of favour of prescribers. Dexamethasone injection for lung expansion in pre-term births was highest in mission facilities at 77% whereas Chlorhexidine gel for new born cord protection was highest in public sector at 62%.

Efforts are required to improve availability of Chlorhexidine and Dexamethasone availability across all sectors for new born health.

4.4.4. Availability of New born resuscitation equipment

Availability of supplies and equipment for resuscitation of new born babies is shown in table below:

Table 6: Availability of New born resuscitation equipment

| No | Medicine | Public | Private | Mission |
|----|---|--------|---------|---------|
| | Training manikin with ability to visualize inflation chest rise | 19% | 6% | 14% |
| | Neonatal mask with bag and valve size 1 for term babies | 68% | 9% | 43% |
| | Neonatal mask with bag and valve size 0 for pre-term babies | 59% | 6% | 31% |
| | Electric or manual suction pump less than 100mm Hg, 1 bottle. | 46% | 13% | 37% |
| | Suction catheter , CH08, 150 cm, single use, conical tip, Fr# 8, 10 or 12 | 35% | 9% | 34% |
| | Suction bulb | 57% | 13% | 46% |

Availability of new born resuscitation equipment was low across all facilities surveyed. The most available item was neonatal mask with bag and valve size 1 at 68% public facilities and 43% mission facilities.

Stakeholders from all sectors should improve availability of new born resuscitation equipment to improve child survival.

4.4.5. Availability of commodities for Child Health

Medicines for child health include medicines for treatment of Pneumonia (Amoxicillin) and diarrhoea (Oral rehydration salts-ORS and Zinc). These are shown below:

Table 7: Availability of commodities for Child Health

| No | Medicine | Public | Private | Mission |
|----|---|--------|---------|---------|
| | Amoxicillin 125mg or 250 mg dispersible tablets | 54% | 34% | 34% |
| | Oral rehydration salts | 43% | 97% | 91% |
| | Zinc sulfate 10 mg or 20mg dispersible tablets | 19% | 75% | 51% |
| | Zinc sulfate syrup (10mg/5ml) | 0% | 19% | 0% |
| | Zinc/ ORS co-pack | 73% | 34% | 29% |

Dispersible tablets which are the WHO and MOH recommended appropriate treatment for childhood Pneumonia were poorly available across all sectors. For treatment of diarrhoea, availability of medicines was high; the public sector preferred stocking of Zinc/ORS co-pack whereas private sector preferred separate packs probably due to profit incentive.

For realisation of Child Survival Strategy, MoH ought to consider urgent education of all providers on appropriate treatment for childhood Pneumonia.

Change in availability of commodities 2015 vs. 2012

| No | Medicine | 2015 | | | 2012 | | |
|----|---------------------------------------|--------|---------|---------|--------|---------|---------|
| | | Public | Private | Mission | Public | Private | Mission |
| | Female condoms | 22% | 5% | 8% | 13% | 9% | 0 |
| | Levonorgestrel 0.75mg/rod x 2 Implant | 38% | 12% | 19% | 29% | 18% | 10% |
| | Etonogestrel 68 mg /rod x 1 implant | 76% | 22% | 25% | 71% | 12% | 30% |
| | Emergency Contraceptive Pill | 24% | 61% | 3% | 61% | 27% | 10% |
| | Misoprostol 200 µg Tablet | 59% | 49% | 44% | 71% | 42% | 50% |
| | Oxytocin injection 10IU, 1ml | 84% | 44% | 86% | 61% | 48% | 90% |
| | Magnesium sulfate injection | 62% | 20% | 64% | 47% | 21% | 100% |

In public sector there was a reduction in availability of EC but an improvement of maternal health commodities which reduced in mission sector.

4.5.RMNCH Medicine Stocking

A large number of facilities had not stocked many of the lifesaving commodities in a period of over six months (44% public facilities, 49% private facilities, 59% mission facilities). Table below shows the percentage of facilities that had not stocked RMNCH medicines in over six months and average stock out days for those that stocked.

Table 8: Stock status of RMNCH medicines

| Medicine | Private Sector | | | Mission Sector | | |
|--|-------------------|--------------------|--------------------|-------------------|--------------------|--------------------|
| | Median Unit Price | Minimum Unit Price | Maximum Unit Price | Median Unit Price | Minimum Unit Price | Maximum Unit Price |
| Female condoms | | 0.00 | 0.00 | | 2000.00 | 2000.00 |
| Levonorgestrel 0.75mg/rod x 2 Implant | | 10000.00 | 100000 | | 25000.00 | 25000.00 |
| Etonogestrel 68 mg /rod x 1 implant | | 3000.00 | 75000.00 | | 15000.00 | 30000.00 |
| Levonorgestrel 1.5 mg Tablet | | 10000.00 | 15000.00 | | 0.00 | 0.00 |
| Levonorgestrel 0.75 mg Tablet | 5000.00 | 3850.00 | 12000.00 | | 0.00 | 0.00 |
| Misoprostol 200 µg Tablet | 5000.00 | 1000.00 | 10000.00 | 3000.00 | 773.50 | 20000.00 |
| Oxytocin Injection 10IU, 1ml | 2000.00 | 600.00 | 5000.00 | 2000.00 | 350.00 | 5000.00 |
| Magnesium sulfate Injection 500mg/ml, 2ml, 5ml, 10ml vials | 6750.00 | 3000.00 | 20000.00 | 5000.00 | 1000.00 | 8000.00 |
| Gentamycin Injection 40mg/ml in 1ml or 2ml ampoules (or 20mg/ml in 1ml or 10mg/ml in 2ml ampoules) | 1000.00 | 300.00 | 5000.00 | 1250.00 | 200.00 | 15000.00 |
| Procaine penicillin Injection 1g in a vial | 1350.00 | 500.00 | 4000.00 | 1650.00 | 100.00 | 2500.00 |
| Ceftriaxone Injection 250mg, 500mg or 1g in a vial | 4000.00 | 1200.00 | 20000.00 | 4000.00 | 1500.00 | 13000.00 |
| Dexamethasone Injection 4mg/ml in 1ml vial | 2300.00 | 500.00 | 10000.00 | 2000.00 | 500.00 | 10000.00 |
| Chlorhexidine 4% gel or solution | 25.00 | 7.50 | 3000.00 | 2250.00 | 20.00 | 54000.00 |
| Amoxicillin 125mg or 250 mg dispersible tablets | 100.00 | 50.00 | 200.00 | 100.00 | 60.00 | 5000.00 |
| Oral rehydration salts | 500.00 | 200.00 | 1000.00 | 500.00 | 150.00 | 1500.00 |
| Zinc sulfate 10 mg or 20mg dispersible tablets | 200.00 | 100.00 | 3000.00 | 150.00 | 65.00 | 1000.00 |
| Zinc sulfate syrup (10mg/5ml) | 2000.00 | 200.00 | 3500.00 | | 0.00 | 0.00 |
| Zinc/ ORS co-pack | 2750.00 | 300.00 | 3500.00 | 2000.00 | 1000.00 | 3000.00 |
| Training manikin with ability to visualize inflation chest rise | | 0.00 | 0.00 | | 0.00 | 0.00 |
| Neonatal mask with bag and valve size 1 for term babies | | 0.00 | 0.00 | | 0.00 | 0.00 |
| Neonatal mask with bag and valve size 0 for pre-term babies | | 0.00 | 0.00 | | 0.00 | 0.00 |
| Electric or manual suction pump less than 100mm Hg, 1 bottle. | | 0.00 | 0.00 | | 0.00 | 0.00 |

| | | | | | | |
|---|--|------|------|--|------|------|
| Suction catheter , CH08, 150 cm, single use, conical tip, Fr# 8, 10 or 12 | | 0.00 | 0.00 | | 0.00 | 0.00 |
| Suction bulb | | 0.00 | 0.00 | | 0.00 | 0.00 |

As a pathfinder country for the UNCoLSC, MOH ought to look into stocking of the lifesaving commodities.

4.6. Prices of RMNCH Commodities in Private and Mission sectors

The median, minimum and maximum prices of medicines and commodities were recorded as below:

| Medicine | Private Sector | | | Mission Sector | | |
|--|-------------------|--------------------|--------------------|-------------------|--------------------|--------------------|
| | Median Unit Price | Minimum Unit Price | Maximum Unit Price | Median Unit Price | Minimum Unit Price | Maximum Unit Price |
| Female condoms | | 0.00 | 0.00 | | 2000.00 | 2000.00 |
| Levonorgestrel 0.75mg/rod x 2 Implant | | 10000.00 | 100000 | | 25000.00 | 25000.00 |
| Etonogestrel 68 mg /rod x 1 implant | 10000.00 | 3000.00 | 75000.00 | | 15000.00 | 30000.00 |
| Levonorgestrel 1.5 mg Tablet | | 10000.00 | 15000.00 | | 0.00 | 0.00 |
| Levonorgestrel 0.75 mg Tablet | 5000.00 | 3850.00 | 12000.00 | | 0.00 | 0.00 |
| Misoprostol 200 µg Tablet | 5000.00 | 1000.00 | 10000.00 | 3000.00 | 773.50 | 20000.00 |
| Oxytocin Injection 10IU, 1ml | 2000.00 | 600.00 | 5000.00 | 2000.00 | 350.00 | 5000.00 |
| Magnesium sulfate Injection 500mg/ml, 2ml, 5ml, 10ml vials | 6750.00 | 3000.00 | 20000.00 | 5000.00 | 1000.00 | 8000.00 |
| Gentamycin Injection 40mg/ml in 1ml or 2ml ampoules (or 20mg/ml in 1ml or 10mg/ml in 2ml ampoules) | 1000.00 | 300.00 | 5000.00 | 1250.00 | 200.00 | 15000.00 |
| Procaine penicillin Injection 1g in a vial | 1350.00 | 500.00 | 4000.00 | 1650.00 | 100.00 | 2500.00 |
| Ceftriaxone Injection 250mg, 500mg or 1g in a vial | 4000.00 | 1200.00 | 20000.00 | 4000.00 | 1500.00 | 13000.00 |
| Dexamethasone Injection 4mg/ml in 1ml vial | 2300.00 | 500.00 | 10000.00 | 2000.00 | 500.00 | 10000.00 |
| Chlorhexidine 4% gel or solution | 25.00 | 7.50 | 3000.00 | 2250.00 | 20.00 | 54000.00 |
| Amoxicillin 125mg or 250 mg dispersible tablets | 100.00 | 50.00 | 200.00 | 100.00 | 60.00 | 5000.00 |
| Oral rehydration salts | 500.00 | 200.00 | 1000.00 | 500.00 | 150.00 | 1500.00 |

| | | | | | | |
|---|---------|--------|---------|---------|---------|---------|
| Zinc sulfate 10 mg or 20mg dispersible tablets | 200.00 | 100.00 | 3000.00 | 150.00 | 65.00 | 1000.00 |
| Zinc sulfate syrup (10mg/5ml) | 2000.00 | 200.00 | 3500.00 | | 0.00 | 0.00 |
| Zinc/ ORS co-pack | 2750.00 | 300.00 | 3500.00 | 2000.00 | 1000.00 | 3000.00 |
| Training manikin with ability to visualize inflation chest rise | | 0.00 | 0.00 | | 0.00 | 0.00 |
| Neonatal mask with bag and valve size 1 for term babies | | 0.00 | 0.00 | | 0.00 | 0.00 |
| Neonatal mask with bag and valve size 0 for pre-term babies | | 0.00 | 0.00 | | 0.00 | 0.00 |
| Electric or manual suction pump less than 100mm Hg, 1 bottle. | | 0.00 | 0.00 | | 0.00 | 0.00 |
| Suction catheter , CH08, 150 cm, single use, conical tip, Fr# 8, 10 or 12 | | 0.00 | 0.00 | | 0.00 | 0.00 |
| Suction bulb | | 0.00 | 0.00 | | 0.00 | 0.00 |

Overall, the ranges (difference between maximum and minimum) consumer prices for medicines and commodities were very highly. The maximum prices of many commodities were 10-15 times higher than the minimum prices.

Although MOH has instituted recommended consumer prices for some medicines like ORS and Zinc at UGX 1500, the median price for ORS/Zinc co-pack was UGX 2750 and maximum price was UGX 3500.

4.7. Affordability of treatment

Affordability is described as the number of days it requires to pay for standard treatment. For acute conditions, it considers the full course of treatment and for chronic conditions, a monthly refill (dose) of treatment. Affordability was determined based the daily income of the lowest-paid unskilled government employee. The daily wage of the lowest paid government worker (attendants) is about UGX 6255 (USD 1.78) as per Uganda Ministry of Public Service salary structure . Treatments that require more than a day's wages to purchase are considered unaffordable.

MOH should institute measures to control consumer prices of lifesaving commodities in order to stop consumer exploitation.

4.7. Affordability of treatment

Affordability is described as the number of days it requires to pay for standard treatment. For acute conditions, it considers the full course of treatment and for chronic conditions, a monthly refill (dose) of treatment. Affordability was determined based the daily income of the lowest-paid unskilled government employee. The daily wage of the lowest paid government worker (attendants) is about UGX 6255 (USD 1.78) as per Uganda Ministry of Public Service salary structure . Treatments that require more than a day's wages to purchase are considered unaffordable.

The Table below shows affordability of selected treatments in private and mission facilities:

| Medicine | Treatment units | Price | |
|--|-----------------|----------------|----------------|
| | | Private sector | Mission sector |
| Etonogestrel 68 mg /rod x 1 implant | 1 | 1.6 | - |
| Levonorgestrel 0.75 mg Tablet | 2 | 1.6 | - |
| Misoprostol 200 µg Tablet | Assume 3 | 2.4 | 1.5 |
| Oxytocin Injection 10IU, 1ml | 5 | 1.5 | 1.5 |
| Magnesium sulfate Injection 500mg/ml, 2ml, 5ml, 10ml vials | | 1.1 | 0.8 |
| Ceftriaxone Injection 1g vial | 5 | 3 | 3 |
| Zinc/ ORS co-pack | 1 | 0.4 | 0.3 |

A number of treatments were required more than a day's wages therefore were unaffordable

4.8. Median Price Ratios (MPR)

This is a comparison between prices of different sectors.

| | Overall Private/Public | Overall Mission/Public | Pub-Urb/PubRural | PrivUrb/PrivRural | Mis-Urb/MisRural | Priv-Urb/Mis-Urb | PrivRural/MisRural | Priv-Urb/PubUrb | PrivRural/PubRural |
|-----------------------------|------------------------|------------------------|------------------|-------------------|------------------|------------------|--------------------|-----------------|--------------------|
| No. of times more expensive | | | | 1.13 | 1.17 | 1.00 | 1.00 | | |
| # of Pairs Compared | 0 | 0 | 0 | 4 | 10 | 9 | 5 | 0 | 0 |

Medicines are free in public sector but prices of medicines in the private sector are 13% more expensive in urban areas compared to rural. In mission sector prices are 17% higher in urban compared to rural facilities. However, private-rural consumers pay the same with their mission-rural facilities and the same for private-urban and mission-urban clients.

5. Conclusions and Recommendations

5.1. Conclusions

1. Overall the public sector had the highest availability at 57%, followed by mission sector at 40% and private sector at 30%.
2. There was no difference in availability in the public sector between urban and rural. However, there was a large difference in private sector where availability in urban facilities was higher compared to rural facilities and in the mission sector rural facilities had higher availability than urban facilities.
3. This disparity in availability in both mission and private may be explained by income differentials. Ability to pay for services is higher in urban facilities of private sector. However, in rural areas mission facilities have higher demand due to subsidized services where consumers cannot afford private sector.
4. There has been improvement in public sector availability of maternal health commodities but a reduction in mission sector. Availability of Oxytocin for postpartum haemorrhage was high in mission and public sector.
5. Dispersible tablets which are the WHO and MOH recommended appropriate treatment for childhood Pneumonia were poorly available across all sectors. However, for treatment of diarrhoea, availability of medicines was high.
6. Urgent attention is required from all stakeholders in all sectors to improve availability and choice of reproductive health commodities to reduce unwanted pregnancies.
7. Overall, the ranges of consumer prices for medicines and commodities were very high. The maximum prices of many commodities were 10-15 times higher than the minimum prices.
8. A large number of facilities had never stocked many of the lifesaving commodities surveyed.

5.2. Recommendations

1. MOH should scale up efforts with all sectors to improve access to Magnesium sulphate to improve maternal health.
2. In order to improve child survival, efforts are required to improve availability of Chlorhexidine, Dexamethasone and newborn resuscitation equipment across all sectors.
3. For realisation of Child Survival Strategy, MoH ought to consider urgent education of all providers on appropriate treatment for childhood Pneumonia.
4. MOH should institute measures to control consumer prices of lifesaving commodities in order to stop consumer exploitation.
5. As a pathfinder country for the UNCoLSC, MOH ought to look into stocking of the lifesaving commodities.