

CASE 8

Mentor Mothers: Preventing Mother-To-Child Transmission of HIV/AIDS in Jinja

Safiyya Nazarali, BScN, CIC, MPH (MPH Class of 2014)
Esther Buregyeya, MBChB, MPhilHScOT, PhD
(Senior Lecturer, Makerere University School of Public Health)
Dyogo Nantamu, MBChB, MPH, PGD M&E
(District Health Officer, Jinja District Local Government)
Amardeep Thind, MD, PhD (Professor, Western University)

BACKGROUND

Jinja's District Health Officer (DHO), sat at his desk staring at a report. He had just been given the quarterly district rates from the biostatistician. He didn't like what he was seeing. Although his district had spent a lot of time and resources working to increase the services for prevention of mother-to-child transmission (PMTCT) of HIV/AIDS, there were still mothers who were refusing treatment and children born to HIV positive mothers who were missing follow-up tests in order to ensure that they were HIV free. The Uganda Ministry of Health (MOH) was moving towards the elimination of mother-to-child transmission (EMTCT) of HIV/AIDS, with a target of achieving a less than 5% transmission rate among children born to HIV positive mothers. However, the district's transmission rate for the fiscal year 2013/2014 was at 15.7%. The DHO knew he needed a new strategy in order to reach the MOH's goal. As he looked up from the report, the DHO wondered what more could the Jinja District Health Department do to reduce the district's HIV transmission rates from mother to babies and move from prevention to the elimination of mother-to-child transmission of HIV/AIDS. Could mentor mothers, who had worked for other organizations, be used to create a positive behaviour change in mothers in this district with respect to uptake and adherence to treatment, and as a way to monitor those whose children hadn't had the appropriate follow-up tests?

UGANDA

Uganda is located within the East African area of Sub-Saharan Africa. It is a low-income country with a population of approximately 37.5 million people (United Nations, 2013). Uganda has a high annual population growth rate of 3.3% (World Bank, 2014), with the majority of its population living in rural areas. Of the Ugandan population, about 50% are under the age of 15 (see Exhibit 1 for a comparison of Uganda to Sub-Saharan Africa) (Ministry of Health, 2011).

Uganda became independent from the British colonialists in 1962. Civil unrest that began in the 1970's negatively impacted the overall health and health system of Ugandans. Since then, the country has been working hard to reconstruct its health system. In 1995, as a way to improve efficiency, the government decentralized health services to the districts (MOH, 2011). The districts play a large role in the delivery and management of health services in their areas. Health services are divided into four levels: national referral hospitals, regional referral hospitals, district hospitals, and health centres IV, III, II and I, which are non-structured and utilize village

health teams (VHT). Health centre IVs are responsible for planning, organizing, budgeting, and managing health services at the health sub-district level, as well as the lower level facility in each sub-district. This includes overseeing all preventative, curative, and rehabilitative health activities within the sub-district. Level III facilities deliver basic services relating to preventative and curative care. They also supervise the level II facilities in their jurisdiction. Level II facilities are typically the first point of contact for individuals into the health care system. These facilities provide mainly outpatient care, delivery services, and community outreach. Lastly, the VHTs help mobilize communities, whether it is for immunizations or identifying the community's health needs (MOH, 2010).

JINJA

Jinja district is located in Eastern Central Uganda, approximately 80 kms from the country's capital, Kampala, and is bordered by the districts of Mayuge to the east, Kamuli to the north, and Buikwe to the southwest. On the south side, Jinja district is bordered by Lake Victoria, a popular tourist spot known as the Source of the Nile (Exhibit 2). It is an old industrial town with a cosmopolitan population that migrated in the 1960's in search of employment. The population of Jinja is 514,300 (Jinja District Health, 2013) approximately 80% of which live in rural areas (Jinja District Health, 2012). The top five causes of morbidity in the outpatient department in the district for the 2013/2014 fiscal year were malaria, the common cold, intestinal worms, skin diseases, and eye infections.

The Jinja district health system is organized into five health sub-districts: Butembe, Jinja Municipality East, Jinja Municipality West, Kagoma, and Kiira. There are many NGOs, not-for-profit, and private organizations that partner with the district. Within the sub-districts there are 54 government, 15 NGOs or private not-for-profit organization, and five private health facilities (see Exhibit 3). NGOs partner with the district to provide health system strengthening and training for the staff within the level III and IV facilities as well as the members of the District Health Team (DHT). Although there are many initiatives that the different NGOs deal with, many have a particular interest in HIV/AIDS. These partners include the AIDS Information Centre, Clinton Health Access Initiative (CHAI), Restless Development, Family Life Education Program, Assist, Act4Africa, The Red Cross, Sustain, and The AIDS Support Organization (TASO).

TASO supports Uganda across 16 centres and is funded by The US President's Emergency Plan for AIDS Relief (PEPFAR). They are the largest supporter of the Jinja district in terms of HIV prevention strategies. Although TASO has its own clinic providing counseling, treatment, and support, it also assists the district with training and strengthening of health systems within level III and IV health facilities (TASO, 2014).

The Jinja District Health Department manages the health facilities within the sub-districts and consists of 11 individuals forming the DHT. The DHT's focus ranges from HIV/AIDS, malaria, tuberculosis (TB), health education, biostatistics, health inspections, records management, finance, and monitoring/evaluation. The DHT is responsible for:

- Providing technical support for the health sub-districts including planning and performance reviews;
- Surveillance and data collection;
- Control of epidemics;
- Health advocacy;
- Mobilization and allocation of resources for the health sector;

- Monitoring and evaluation of performance of the district health system; and
- Preparing the budget for the development plan for the district health department.

The district faces a number of issues that constrain its efforts. Staffing is perhaps the most pressing issue; there are not enough personnel present on a daily basis, whether nurses or administrative staff. Even with so few workers, at times they turn up late, leave early, or sometimes do not come in at all. This poor attendance could be attributed to poor motivation because compensation is not always timely. Motivation to work within the district's health facilities can be low when employees know they can make money by having a second job, which keeps them from the health facility. In addition, many of the health facilities have poor infrastructure and lack upkeep; funds are needed in order to better maintain the buildings. As well, many of the health facilities have inadequate medical supplies and drugs, which affect the quality of patient care at the health centres (Jinja District Health, 2012).

HIV/AIDS

HIV/AIDS in Sub-Saharan Africa has been a pressing issue for many years. Although there have been many breakthroughs in terms of prevention, treatment, and care this issue continues to affect those in developing countries such as Uganda. Since 1992, there has been a significant decrease in HIV rates. In 2002, HIV prevalence decreased from 18% to 6.2% (MOH, 2012b); however, the rate has stabilized recently, fluctuating between 6% and 7% (MOH, 2012b). As of 2011, Uganda's prevalence rate of HIV/AIDS was 7.3% (MOH, 2011) and Jinja district's prevalence rate for the 2013/2014 fiscal year was 4.4% (Jinja District Health, 2013). The district's transmission rate from mother to child was 15.7% for the fiscal year 2013/2014. HIV in Uganda is driven by many factors. At the macro level, structural and contextual factors play a role. At the micro level, social determinants of health, namely poverty, gender inequality, access to healthcare, and stigma, are significant issues affecting national HIV rates. Many women do not disclose their HIV status to their husbands or friends for fear of abandonment or social isolation. The driving factors become a barrier to the success of interventions in place to help prevent transmission (MOH, 2012b). The different facilities all work to prevent the transmission of HIV/AIDS; level III and IV facilities test, counsel, and treat patients, whereas level II facilities test and refer patients to the larger facilities for treatment and counseling if needed.

HIV Prevention Strategies

In Jinja there are many strategies that are being employed in order to prevent the spread of HIV. Behavioural change communication through partners, safe male circumcision (SMC), condom distribution, HIV counseling and testing (HCT), provision of antiretroviral drugs (ART) to over 50% of eligible clients, structural interventions (policies/procedures), and prevention of mother-to-child transmission (Option B+) are some of those strategies.

Prevention to Mother-to-Child Transmission of HIV

Mother-to-child, or vertical transmission of HIV, occurs when an HIV positive mother transmits HIV to her child during pregnancy, labour, delivery, or breastfeeding. When there are no interventions in place, the transmission rate can range from 15-45% (WHO, 2010). Prevention of mother-to-child transmission (PMTCT) is part of a global initiative to eradicate new pediatric HIV infections. Although there has been progress in the PMTCT services offered in low and middle-income countries, much effort is still needed. WHO estimated that in 2008, 430,000 children were infected with HIV with 90% of cases occurring from mother-to-child transmission. It is estimated that only 35% of HIV-exposed infants had the appropriate testing done within the first two months of their lives (WHO, 2014). The use of the PMTCT strategy has the potential to improve the lives of both mother and baby, reducing the risk of transmission to 5% or less. The

use of this approach is in line with Millennium Development Goals 4, 5 and 6: reduce child mortality, improve maternal health, and combat HIV/AIDS, malaria, and other diseases (WHO, 2010).

WHO 4-Pronged Approach to PMTCTHIV

In order to prevent the spread of HIV from mother to child, the WHO encourages the use of a 4-pronged, comprehensive approach. The four prongs of the strategy are: 1) prevent HIV in women of reproductive age; 2) prevent unintended pregnancy in women with HIV; 3) prevent HIV transmission from mother to child; and 4) provide ongoing care and support to mothers, their children, and families. The third intervention is especially important because it encompasses HIV transmission risk reduction during antenatal care, labour/delivery, and postnatal care (WHO, 2010).

Jinja's Approach to The WHO 4-Pronged

- **Prong 1: Prevent HIV in women of reproductive age**
In this first stage the district works hard to encourage HIV testing in women. Women are sent for testing through the outpatient clinic or antenatal care (ANC). If they are HIV-negative, they are counseled using the ABC strategy in order to ensure they remain so. The ABC strategy includes abstinence until a woman is married. If she is already married, counselors encourage the second strategy of being faithful. If the client does not believe she can be faithful, the health care workers encourage condom use, ensuring they are used every time a woman is involved in sexual practices. Behaviour change communications and SMC are other avenues that are used to prevent HIV in all clients, not just women of reproductive age.
- **Prong 2: Prevent unintended pregnancy in women with HIV**
In the second prong of the PMTCT approach, Jinja district promotes dual protection, which involves the use of modern family planning methods and the use of condoms. However, the uptake on oral contraceptives or the injectable option has not been significant in Jinja (Exhibit 4). If women do not want children at all, long-term devices such as implants may be used as methods of avoiding pregnancy.
- **Prong 3: Prevent HIV transmission from mother to child**
Antenatal care (ANC) is recommended for all women who are pregnant. WHO recommends at least four antenatal visits for expecting mothers. Many health issues such as HIV/AIDS can be prevented, detected, and/or treated during these visits. These visits can be used for vaccinations, screening/treatment for infections (HIV/AIDS), and identification of warning signs during pregnancy. Counseling should also be given at any ANC visit (The Partnership for Maternal, Newborn, and Child Health, 2006). In Jinja, the percentage of women accessing the first ANC visit is 105% (due to Jinja being a referral district) and the percentage of women attending all four ANC visits is 37% (S. Baluka, Personal Communication, July 16, 2014).

When a woman is identified in antenatal care as being HIV positive, she is immediately enrolled into the PMTCT program and started on Option B+. Option B+ is a recommendation for PMTCT and was derived from Malawi as it was an approach that fit everyone, compared to the previous Option A and B (Exhibit 5), which depended on an individual's CD4 count and clinical stage. Uganda initiated this initiative on September 12, 2012 and it was rolled out in the Jinja district shortly after. Option B+ recommends life-long triple ARVs for mothers who are infected with HIV regardless of CD4 count or clinical stage. Lifelong treatment avoids continuous stopping and starting of treatment. This allows resistance to develop and

provides a continued benefit to prevent the transmission of HIV to couples that are serodiscordant (a couple in which one partner is HIV-positive and one is HIV-negative) as well as the protection against transmission of future pregnancies (WHO, 2012). For infants, Option B+ recommends daily Niverapine (NVP) syrup from birth to age six weeks, regardless of the method the child is being fed. Along with Option B+, the client is counseled, a nutritional assessment is done on both the mother and baby, and psycho/social support groups are available for mothers to join (UNICEF, 2012).

In order to prevent transmission from mother to child, the child is enrolled into the Early Infant Diagnosis (EID) program. At birth, the baby is started on NVP syrup for the first six weeks of life. After six weeks, the child has his/her 1st Polymerase Chain Reaction (PCR) test done while also being started on cotrimoxazole. At the six-month mark the child starts on complimentary feeds using other milk or foods to supplement breast milk, as the mother's breast milk alone is not enough for the baby to grow. By not starting complementary feeds, the baby can become malnourished allowing for HIV to affect the child. After 12 months, the baby stops breastfeeding and has a second PCR test done six weeks later (13.5 months). Cotrimoxazole is continued until the second PCR results come back negative. After 18 months the child can be tested a final time using a rapid test. Once this test is complete and the child is confirmed to be negative, he/she can be discharged from the EID program. Although the tests are done at various intervals over the first year and a half of the child's life, he/she should still be brought in for monthly routine check-ups to ensure proper growth and appropriate nourishment. If the child is found to be HIV positive at any of the three stages he/she is immediately discharged from the program and started on antiretroviral therapy. The mother and baby are then transferred to the regular ART clinics.

- Prong 4: Provide ongoing care and support to mothers, their children, and families
The fourth and final prong encourages those women who have already identified as being HIV positive to continue in care and on ARVs for life. Ideally, anyone who is positive should visit the health facility once a month. Here, HIV-positive individuals may be linked to mentor mothers, linkage facilitators, and psycho/social support groups that are led by the health care workers. A crucial piece to this prong is the follow-up of mothers who fail to bring their children to the facility for continued monitoring of their HIV status. The personnel who follow up with mothers can also provide counseling on the importance of the continued care for their children.

MENTOR MOTHERS

Mothers 2 Mothers (m2m) is an organization that uses mentor mothers to create a positive change in behaviour. They train and employ HIV positive mothers to work within level III and IV health centres, providing added help to the healthcare team. m2m works in nine districts and 45 health centres throughout Uganda. However, due to funding limitations, m2m is not currently active in the Jinja district. The trained m2m mothers provide health education, follow up with clients who have missed appointments, and offer group and individual psycho/social support. The mothers are recruited from within the community. They are required to have disclosed their status to their partners and have a desire to help other mothers. The m2m mentor mother model has been successful (Exhibit 6) because compared to the facilities within Jinja District, there are not as many individuals lost to follow-up.

CHALLENGES

The Jinja District Health Team is working hard to ensure that the four aforementioned strategies are being met; however, this does come with its challenges. In many cases women are not using dual family planning. The uptake of oral contraceptives or the injectable option along with

condom use has been low. Many of the health facilities are extremely busy and do not always have time to offer services and counsel patients regarding family planning. Health care workers may have biases towards family planning, which can interfere with the appropriate delivery of counseling services. Other challenges include non-adherence, either in the form of mothers not adhering to treatment regimens or in the form of failing to follow-up with their babies for the necessary tests. Exhibit 7 shows the percent of loss to follow up at 11 facilities in Jinja District. Another challenge the district faces is with respect to the psycho/social support groups; many facilities are not able to run these groups and are therefore missing out on important opportunities to counsel and support HIV positive mothers and their families.

CONCLUSION

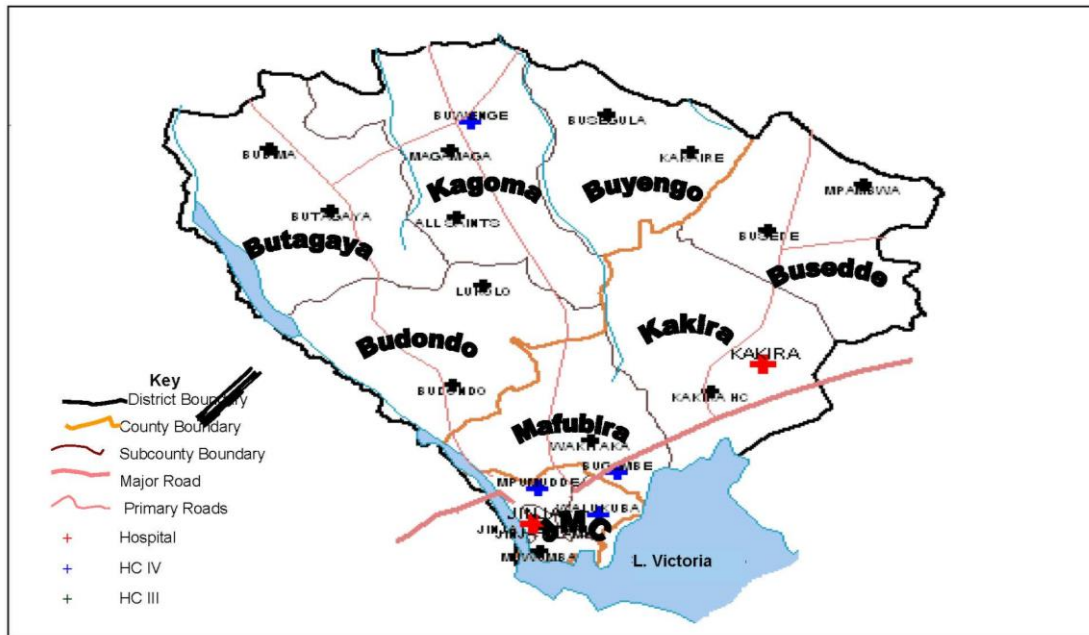
The District Health Officer knows that the issue of transmission from mother to baby needs to be tackled using a new strategy. Reducing Jinja's transmission rate from 15.7% to 5% is going to take a lot of hard work and commitment from the DHT as well as many stakeholders within the district. How can he go about implementing mentor mothers within the Jinja District to help change mothers' behaviours and reduce loss of follow-up in children?

EXHIBIT 1
Selected Indicators for Uganda and Comparative Countries

Selected Indicators (Former Name)	Selected Indicators (Name in Database)	Uganda	Sub-Saharan African Countries' Average	Low-Income Countries' Average	Year of Data	Source of Data (Uganda/Averages)
Total Population	Population, total	33,424,683*	17,598,890	22,750,325	2010	WDI 2011
Population Growth (Annual)	Population growth (annual %)	3.21	2.5	2.1	2010	WDI 2011
Rural Population	Rural population (% of total population)	86.7	62.57	71.72	2010	WDI 2011
Fertility Rate	Fertility rate, total (births per woman)	6.24	5	4.70*	2009	WDI 2011
Contraceptive Prevalence Rate	Contraceptive prevalence (% of women ages 15–49)	23.70**	20.97	33	2009	WDI 2011
Life Expectancy at Birth	Life expectancy at birth, total (years)	53.07	53.75	58.44	2009	WDI 2011
Under 5 Mortality Rate (per 1000 births)	Mortality rate, under-5 (per 1,000)	98.9	121.23	107.87	2010	WDI 2011
Maternal Mortality Rate (per 100,000 births)	Maternal mortality ratio (modeled estimate, per 100,000 live births)	430	640	590	2008	WDI 2011
Adult Literacy Rate	Literacy rate, adult total (% of people ages 15 and above)	73.21	N/A	N/A	2010	WDI 2011
Population with sustainable access to improved drinking water sources	Improved water source (% of population with access)	67	59.72	63.11	2008	WDI 2011
Population with access to improved sanitation facilities	Improved sanitation facilities (% of population with access)	48	31.36	35.47	2008	WDI 2011
Prevalence of underweight among children under 5	Malnutrition prevalence, weight for age (% of children under 5)	16.40**	24.57	28.33	2009	WDI 2011
Prevalence of HIV total (% of population aged 15–49)	Prevalence of HIV, total (% of population ages 15–49)	6.5	5.45	2.57	2009	WDI 2011

Source: Ministry of Health, Health Systems 20/20, and Makerere University School of Public Health, 2012.

EXHIBIT 2
Map of Jinja District Showing Health Facilities and Major Road Network



Source: Dyogo Nantamu (author), 2015.



Source: S. Nazarali (author), 2014.

EXHIBIT 3
List of Health Facilities in Jinja District

HSD	Sub-County/ Division	No	Facility	Level	Ownership
JME	Walukuba/Masese	1	Walukuba	HC IV	Gov
	Jinja Central	2	Jinja Central	HC III	Gov
	Walukuba/Masese	3	Jinja Main Prison	HC III	Gov
	Walukuba/Masese	4	Jinja Remand	HC III	Gov
	Walukuba/Masese	5	Kisima	HC II	Gov
	Walukuba/Masese	6	Masese Port	HC II	Gov
	Walukuba/Masese	7	Masese Danida	HC II	PNFP/NGO
	Walukuba/Masese	8	Masese 3	HC II	Gov
JMW	Mpumudde	9	Jinja Hosp	R.R.Hosp	Gov
	Mpumudde	10	Mpumudde	HC IV	Gov
	Mpumudde	11	Muwumba	HC III	Gov
	Mpumudde	12	Gaddafi	HC III	Gov
	Mpumudde	13	TASO-Jinja	Clinic	NGO
	Mpumudde	14	Family Hope Centre	Clinic	NGO
	Mpumudde	15	AIC-Jinja	Clinic	NGO
	Mpumudde	16	Jinja Police	HC III	Gov
	Mpumudde	17	Jinja Islamic	HC III	PNFP
	Mpumudde	18	crescent Medical Centre	HC III	Private/UMMB
	Mpumudde	19	Kimaka	HC II	Gov
	Mpumudde	20	Kimaka Senior Staff Coll	HC II	Gov
	Mpumudde	21	Al Shafa Modern Hosp	Hosp	Private
BUTEMBE	Bugembe TC	22	Bugembe	HC IV	Gov
	Bugembe TC	23	DAG	Clinic	Private
	Bugembe TC	24	AOET	HC III	NGO
	Mafubira	25	Wakitaka	HC III	Gov
	Mafubira	26	Aroma	HC III	PNFP
	Mafubira	27	St,Benedict	HC II	PNFP
	Mafubira	28	Mafubira	HC II	Gov
	Mafubira	29	Buwenda	HC II	Gov
	Mafubira	30	Lwanda	HC II	Gov
	Mafubira	31	Musima	HC II	Gov
	Mafubira	32	Almecca Medicare	Hosp	Private
	Kakira TC	33	Kakira Sugar LTD	Hospital	PNFP
	Kakira TC	34	Kakira	HC III	Gov
	Kakira TC	35	Wairaka	HC II	Gov
	Kakira TC	36	Kabembe	HC II	Gov
	Busedde	37	Busedde	HC III	Gov
	Busedde	38	Mpambwa	HC III	Gov
	Busedde	39	Nalinaibi	HC II	Gov
	Busedde	40	Nabitambala	HC II	Gov
	Busedde	41	Kisasi	HC II	Gov
	Busedde	42	Bwidhabwangu	HC II	FBO/PNFP

Mentor Mothers: Preventing Mother-To-Child Transmission of HIV/AIDS in Jinja

HSD	Sub-County/ Division	No	Facility	Level	Ownership
KIIRA	Budondo	43	Budondo	HC IV	Gov
	Budondo	44	Lukolo	HC III	Gov
	Budondo	45	Ivunamba	HC II	Gov
	Budondo	46	Nawangoma	HC II	Gov
	Budondo	47	Kyomya	HC II	Gov
	Budondo	48	Kibibi	HC II	Gov
	Budondo	49	Soft Power	Clinic	Private
	Butagaya	50	Butagaya	HC III	Gov
	Butagaya	51	Budima	HC III	Gov
	Butagaya	52	Wansimba	HC II	Gov
KAGOMA	Butagaya	53	Nawampandha	HC II	PNFP /FBO
	Butagaya	54	Bubugo	HC II	Gov
	Butagaya	55	Lumulili	HC II	Gov
	Butagaya	56	Namwendwa	HC II	
	Butagaya	57	Iwololo	HC II	PNFP/FBO
	Buwenge TC	58	Buwenge Medical Centre	Hospital	PNFP
	Buwenge TC	59	Buwenge	HC IV	Gov
	Buwenge TC	60	Bwase	HC II	Gov
	Buwenge TC	61	Bunawona	HC II	Gov
	Buwenge Rule	62	Magamaga	HC III	Gov
	Buwenge Rule	63	All-Saints	HC III	PNFP/FBO
	Buwenge Rule	64	Mutai	HC II	Gov
	Buwenge Rule	65	Kabaganda	HC II	Gov
	Buwenge Rule	66	Mpungwe	HC II	Gov
Buwenge Rule	67	Kitanaba	HC II	Gov	
Buwenge Rule	68	Buwoero	HC II	Gov	
Buwenge Rule	69	Mawoito	HC II	Gov	
Buwenge Rule	70	Muguluka	HC II	PNFP/FBO	
Buyengo	71	Kakaire	HC III	Gov	
Buyengo	72	Busegula	HC II	Gov	
Buyengo	73	Nsozibbiri	HC II	Gov	
Buyengo	74	Kamiigo	HC II	Gov	

Source: S. Baluka, Personal Communication, July 16, 2014.

EXHIBIT 4
Family Planning Methods (Jinja District 1-Jul-13 to 30-Jun-14)

Element	New Users	Revisits	Total
Oral FPM: Lo-Feminal users	110	96	206
Oral FPM: Microgynon users	1540	1499	3039
Oral FPM: Ovrette or Another POP users	150	95	245
Oral FPM: Other users	170	89	259
Female Condom FPM users	556	239	795
Male Condom FPM users	10142	64444	16586
IUD(copper) FPM users	1195	314	1509
Injectable FPM users	9293	14999	24292
Natural FPM users	186	88	274
Other Family Planning Method users	1599	564	2163

Source: Jinja District Health Report, 2014.

EXHIBIT 5

Table 1. Three options for PMTCT programmes

	Woman receives:		Infant receives:
	Treatment (for CD4 count ≤350 cells/mm ³)	Prophylaxis (for CD4 count >350 cells/mm ³)	
Option A^a	Triple ARVs starting as soon as diagnosed, <i>continued for life</i>	<i>Antepartum:</i> AZT starting as early as 14 weeks gestation <i>Intrapartum:</i> at onset of labour, single-dose NVP and first dose of AZT/3TC <i>Postpartum:</i> daily AZT/3TC through 7 days postpartum	Daily NVP from birth until 1 week after cessation of all breastfeeding; or, if not breastfeeding or if mother is on treatment, through age 4–6 weeks
Option B^a	<i>Same initial ARVs for both^b:</i>		Daily NVP or AZT from birth through age 4–6 weeks regardless of infant feeding method
	Triple ARVs starting as soon as diagnosed, <i>continued for life</i>	Triple ARVs starting as early as 14 weeks gestation and <i>continued intrapartum and through childbirth if not breastfeeding or until 1 week after cessation of all breastfeeding</i>	
Option B⁺	<i>Same for treatment and prophylaxis^b:</i>		Daily NVP or AZT from birth through age 4–6 weeks regardless of infant feeding method
	Regardless of CD4 count, triple ARVs starting as soon as diagnosed, ^c <i>continued for life</i>		

Source: WHO, 2012.

EXHIBIT 6
Early Infant Diagnosis Report (First 3 Quarters)

Test Type	Percentage Completed
1 st PCR	97%
2 nd PCR	52%
Rapid Test	65%

Source: Personal Communication, Sarah Auma, Monitoring & Evaluation Coordinator, Mothers2Mothers.

EXHIBIT 7
Quality Assessment Data

Health Facility	Level	Loss to Follow Up
Busedde	III	76%
Mpambwa	III	75%
Budondo	IV	73%
Kakira	III	55%
Butagaya	III	50%
Jinja Central	III	50%
Bugembe	IV	47%
Kakira Hospital		45%
Buwenge	IV	32%
Mpumudde	IV	31%
Kakaire	III	29%

Source: Jinja District Health Report, 2014.

REFERENCES

1. Jinja District Health. (2012). Jinja district workplan 2012/2013.
2. Jinja District Health. (2013). Jinja district workplan 2013/2014.
3. Jinja District Health Report, 2014.
4. Ministry of Health. (2010). Health sector strategic & investment plan (HSSIP) 2010/11 – 2014/15. Retrieved from http://www.unicef.org/uganda/HSSIP_Final.pdf
5. Ministry of Health. (2011). Uganda AIDS indicator survey. Retrieved from <http://dhsprogram.com/pubs/pdf/AIS10/AIS10.pdf>
6. Ministry of Health. (2012). National strategic plan for HIV/AIDS 2011/12-2014/15. Retrieved from <http://uganda.um.dk/en/~media/Uganda/Documents/English%20site/Danida/NATIONAL%20STRATEGIC%20PLAN%20FOR%20HIV%20%20AIDS%20201112%20%20201415.pdf>
7. Ministry of Health, Health Systems 20/20, and Makerere University School of Public Health. (2012b). Uganda health system assessment 2011. Kampala, Uganda and Bethesda, MD: Health Systems 20/20 project, Abt Associates Inc. Retrieved from <http://health.go.ug/docs/hsa.pdf>
8. Mothers 2 Mothers (m2m). (2014). Where we work: Uganda. Retrieved July 10 2014, from <http://www.m2m.org/where-we-work/uganda/>
9. The Partnership for Maternal, Newborn and Child Health. (2006). Opportunities for African newborn: Practical data, policy and programmatic support for newborn care in Africa. WHO on behalf of The Partnership for Maternal Newborn and Child Health, Geneva Switzerland. Retrieved from <http://www.who.int/pmnch/media/publications/africannewborns/en/>
10. The AIDS Support Organization (TASO). (2014). About TASO. Retrieved July 10, 2014 from www.tasouganda.org
11. UNICEF. (2012). Options B and B+: Key considerations for countries to implement and equity focused approach. Eliminating new HIV infections among children and keeping mothers living with HIV alive and well. Retrieved from http://www.unicef.org/aids/files/hiv_Key_considerations_options_B.pdf
12. United Nations. (2013). World population prospects: The 2012 revision, volume II, demographic profiles (ST/ESA/SER.A/345). Retrieved from http://esa.un.org/wpp/documentation/pdf/WPP2012_Volume-II-Demographic-Profiles.pdf
13. World Health Organization. (2010). PMTCT Strategic Vision 2010-2015. Preventing mother-to-child transmission of HIV to reach the UNGASS and Millennium Development Goals. Geneva, Switzerland: WHO Press. Retrieved from http://www.who.int/hiv/pub/mtct/strategic_vision/en/
14. World Health Organization. (2012). Programmatic update: Use of antiretroviral drugs for treating pregnant women and preventing HIV infections in infants. Geneva, Switzerland: WHO Press. Retrieved from http://www.who.int/hiv/PMTCT_update.pdf
15. World Health Organization. (2014). March 2014 supplement to the 2013 consolidated guidelines on the use of antiretroviral drugs for treating and preventing HIV infection. Recommendations for a public health approach. Geneva, Switzerland: WHO Press. Retrieved from http://www.who.int/hiv/pub/guidelines/arv2013/arvs2013supplement_march2014/en/
16. World Bank. (2014). Population growth (annual %). Retrieved July 14, 2014 from <http://data.worldbank.org/indicator/SP.POP.GROW>

INSTRUCTOR GUIDANCE

Mentor Mothers: Preventing Mother-To-Child Transmission of HIV/AIDS in Jinja

Safiyya Nazarali, BScN, CIC, MPH (MPH Class of 2014)
Esther Buregyeya, MBChB, MPhilHScOT, PhD
(Senior Lecturer, Makerere University School of Public Health)
Dyogo Nantamu, MBChB, MPH, PGD M&E
(District Health Officer, Jinja District Local Government)
Amardeep Thind, MD, PhD (Professor, Western University)

BACKGROUND

Jinja district is working hard to prevent mother-to-child transmission (PMTCT) of HIV/AIDS and is using the WHO'S 4-prong approach. Uganda, as a country, has a goal of elimination of mother-to-child transmission (EMTCT) of HIV/AIDS. Jinja district needs to have a rate of mother-to-child transmission below 5% by 2015; the rate in 2014 was 15.7%. The district is facing numerous challenges including infants being lost to follow up, causing Dr. Nantamu (the District Health Officer) to examine alternate approaches such as the Mentor Mothers (m2m) program, to increase participation in the PMTCT services.

OBJECTIVES

1. Understand the WHO 4-pronged approach to PMTCT, and its application in a developing country.
2. Understand behaviour change theories and develop a health promotion plan.
3. Create a logic model and select appropriate outcome indicators.

DISCUSSION QUESTIONS

1. How is Jinja district doing with respect to implementing the WHO 4-prong approach?
 - a. Is the information and data provided in the Case sufficient to decide?
 - b. If not, what other pieces of information do you need?
 - c. What are the challenges of collecting/obtaining such data in a context such as Jinja?
2. What behavior change theory would you use as a foundation for your health promotion plan (i.e. implementing m2m)?
3. Develop a logic model and an implementation plan for m2m.
 - a. What outcome measures will you use to evaluate the plan?
 - b. What are some challenges in collecting such data?

KEYWORDS

HIV/AIDS; PMTCT; behavior change; logic model; evaluation.