

ST. CAMILLUS MISSION HOSPITAL KARUNGU



PMTCT PROJECT

Prevention of Mother To Child Transmission of HIV/AIDS

Period covered:

Annual report May 2008 – April 2009

BACKGROUND

With the HIV/AIDS pandemic deeply affecting our community, innocent children remain one of the most vulnerable populations. Currently 90% of HIV infections in children are due to mother-to-child transmission (MTCT). When no intervention is done during pregnancy, labour, and breastfeeding, transmission of the virus occurs in 25-45% of the cases (5% occurs intrauterine, 10-20% occurs during delivery, and 10-20% occurs through breastfeeding). However, research shows that MTCT can be reduced to only 2% in settings where women have access to a range of high-impact interventions like enrollment in antiretroviral treatment (ART).

Many factors influence the likelihood of Mother-to-Child Transmission (MTCT). One main factor is the disease status of the mother. The baby has a higher risk of becoming infected if the mother has advanced HIV disease (marked by a low CD4 count and/or a high viral load), if she acquires HIV during pregnancy or lactation, or if she has other vaginal infections. Labour is another important factor in MTCT. MTCT is more likely if the labour is premature, prolonged, or difficult, the duration of the membrane rupture is greater than four hours, or invasive monitoring and delivery procedures are used. Infant feeding is another mode of transmission of the virus. Prolonged breast feeding, mixed feeding, sore nipples/abscesses/mastitis, or oral thrush in breast fed infant also increase the likelihood of MTCT.



Fig. 1: one mother carrying her baby to the hospital

INTRODUCTION

The St. Camillus Mission Hospital Prevention of Mother to Child Transmission (PMTCT) program started in April 2003 with the aim of reducing HIV infection from mother to child in Karungu Division under the supervision and sponsorship by the Catholic Medical Mission Board with the title “BORN TO LIVE”. The PMTCT Project takes place in the Maternal and Child Health Clinic at St. Camillus Mission Hospital and at various mobile clinics in Karungu.

GOALS

The main goals of the PMTCT Project are:

1. To prevent the secondary transmission of HIV/AIDS from HIV positive pregnant mothers to their unborn and newborn children through PMTCT.
2. To prevent the primary transmission of HIV/AIDS to HIV negative mothers through voluntary counselling and testing (VCT).
3. To use antenatal care and follow up to improve the health and wellbeing of pregnant mothers, unborn children, infants, and toddlers.

STAFFING

The Maternal and Child Health (MCH) Clinic has three full time staff. Irene Omolo and Hellen Yonge are PMTCT nurses and qualified midwives. Mary Ojimbi is an Auxiliary Nurse and qualified VCT Counselor. All are qualified PMTCT Counselors and counsel, test, refer, and treat pregnant mothers. They all participate in mobile clinics, health education, and PCR sample collection.

The MCH Clinic also has three qualified Community Health Workers that visit mothers and children in their homes. They also provide VCT and encourage mothers to attend the Antenatal Care Clinic. Their names are Irene Nyagweth, Joseph Menya Ngode, and Elisha Omori Otieno.



Fig. 2: Irene Omolo visiting a pregnant mother

CAPACITY BUILDING

In order to continue expanding the quality and number of services provided in the Maternal and Child Health Clinic, the staff attended various trainings and workshops throughout the year. Mary Ojimbi, Irene Nyagweth, Joseph Menya Ngode, and Elisha Omori Otieno attended a *Homebased Care Training* in October 2008 in Eldoret sponsored by the MAE Project. Mary Ojimbi sponsored herself to attend *VCT Training* in February/March 2009 in Nairobi.

INTERVENTIONS

HIV counseling and testing using the Voluntary Counseling and Testing (VCT) method is done on each client's first Antenatal Care (ANC) visit. Counseling and testing on the first visit avoids missed screening opportunities and increases the likelihood of HIV positive mothers utilizing PMTCT. The main PMTCT interventions are as follows:

1. HIV Test results are given to the mothers whether positive or negative.
2. All positive mothers are referred to the ART Clinic and placed on Nevirapine and AZT.
3. HIV positive mothers are counseled on exclusive breastfeeding. Mothers are advised to exclusively breastfeed their babies up to six months.
4. PCR samples are collected from the babies at 6 weeks, 6 months, 12 months, and 18 months to determine the baby's HIV status. At 18 months, the baby is considered negative and free of the HIV virus.
5. All antenatal mothers, whether positive or negative, are advised to deliver at the hospital for safer deliveries.

ACTIVITIES:

Training: 14 Nurses have been trained on PMTCT and 4 nurses have been trained in Pediatric ARV to improve the quality of services to our clients.

Mobilization: Monthly Mobile Clinic sites include Otati, Ooro, Not, and Okiro. The Mobile Clinic services include weighing of children, vaccinations, ANC and VCT. Milk and biscuits are given to the mothers and children.

Health Education: Health talks are given by the nurse twice a month at the MCH Clinic. One talk is given on PCR day and on one Wednesday morning each month. Topics include proper infant feeding especially for HIV positive mothers, the importance of child immunizations, NHIF Registration, and maternal health.

Laboratory Services: All pregnant mothers, regardless of HIV status, receive free laboratory services on their first visit to the clinic through the MAE Project (Ministero Affari Esteri/Ministry of Foreign Affairs promoted by Salute e Sviluppo NGO based in Rome, in a partnership with Pro.Sa NGO, based in Milan, Italy). Lab tests include hemoglobin, blood typing, urine analysis and VDRL. All results are followed up by the nurse midwives and mothers are referred as necessary.

Antenatal Care: ANC Activities include weight taking, blood pressure monitoring, abdominal palpations, tetanus immunizations, heamatronics, malaria prophylaxis, and a free mosquito net on the mother's fourth antenatal care visit.



Fig. 3: A visit in Otati Dispensary

FREE SERVICES

1. All laboratory services, including ultrasound when necessary, are free for all antenatal mothers.
2. Sugar, biscuits, and soft drinks are given to PMTCT mothers and weaned children on PCR day.
3. Milk and biscuits are given to all children at the Mobile Clinics.
4. NHIF cards for pregnant mothers are paid by the hospital for 6 months before personal responsibility is assumed.



Fig. 4: Some mothers and children waiting for their visit

CHALLENGES

Despite the great progress made in preventing the transmission of HIV from the mother to her child during pregnancy and breastfeeding by the St. Camillus PMTCT Project, the project still faces many challenges preventing.

- The extreme poverty faced by many clients often makes healthcare and PMTCT services a low priority due to lack of money and resources.
- Likewise, the distance and subsequent costs of transportation from the homes to the health facilities (both St. Camillus Hospital and the Mobile Clinics) makes it difficult for the mothers to attend the clinics.
- Another consequence of poverty and lack of education is that some mothers continue to practice mixed feeding despite counseling.
- Finally, stigma towards HIV is still a major problem in the area, especially among the men. Because of this stigma, some clients refuse testing or prevention.
- Additionally, some HIV positive mothers have difficulty disclosing their test results to their partners. Lastly, some monthly PCR results are rejected due to unknown laboratory reasons.

ACHIEVEMENTS

The PMTCT Project has prevented the spread of the HIV virus from mother to child significantly through the previously described activities (See PCR Results in Table 1). Additionally, most mothers are now accepting to be tested during their antenatal care visits (See Table 2). More mothers who attend antenatal care clinic, including PMTCT mothers, are delivering in the hospital rather than at home. Finally, more post-natal mothers are accepting HIV counseling and testing.

Table 1. PCR Tests Performed for PMTCT MAY 2008 to APRIL 2009				
MONTHS	N. OF TESTS	NEGATIVE	POSITIVE	UNKNOWN
May 2008	28	27	1	0
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April 2009	0	n/a	n/a	n/a
Total	256	174	10	72
Percent negative: 67.9%				
Percent positive: 3.9%				
Percent unknown: 28.1%				

Table 2. HIV Testing and Counselling for ANC Clients					
Month	ANC Total Visits	ANC First Visits	First Visits Counseled and Tested	Re-visits Counseled and Tested	Total Women Testing HIV Positive
May 2008	61	26	24	11	6
June 2008	104	36	26	3	6
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Total	1175	444	386	66	79
Percentage of ANC First Visit Clients counseled and tested: $386/444 \times 100 = 86.9\%$					

Compiled by Irene Omolo and Kayla Bronder, 28 October 2009

ST. CAMILLUS MISSION HOSPITAL KARUNGU



PROGETTO PMTCT

*Prevention of Mother To Child Transmission of HIV/AIDS
Prevenzione della Trasmissione da Mamma a Bambino*

Periodo coperto:

maggio 2008 – aprile 2009

BACKGROUND

Con l'espansione pandemica di HIV/AIDS che colpisce la nostra comunità, i bambini innocenti rimangono una delle parti più vulnerabili della popolazione.

Attualmente il 90% delle infezioni da HIV nei bambini sono dovute alla trasmissione da madre a figlio (MTCT=Mother-To-Child-Transmission). Quando non viene effettuato nessun intervento durante la gravidanza, il parto, e l'allattamento, la trasmissione dell'HIV si presenta nel 25-45% dei casi (5% è intrauterina, il 10-20% avviene durante il parto e il 10/20% durante l'allattamento). In ogni caso, le ricerche mostrano che il MTCT può essere ridotto al 2% se le donne hanno la possibilità di accedere ad interventi di forte impatto come ad esempio il trattamento antiretrovirale (ART). Molti fattori influiscono la probabilità della trasmissione da madre a bambino. Uno dei fattori più importanti è lo stato di sieropositività della madre. Il bambino corre un più alto rischio di essere infettato se la madre è affetta da HIV avanzato (segnato da un basso livello di CD4 e/o un alto livello virale) se viene affetta da HIV durante la gravidanza o l'allattamento, o se ha altre infezioni vaginali.

Il parto è un altro fattore importante nel MTCT. La trasmissione è più probabile se il parto è prematuro, prolungato o difficile, se la durata della rottura della membrana è più di quattro ore o se vengono usate procedure invasive di monitoraggio. Il nutrimento del bambino è un altro modo di trasmissione del virus. Un prolungato allattamento, un nutrimento misto, o varie micro lesioni alla bocca aumentano la probabilità di trasmissione del virus.



Fig. 1: una mamma porta il suo bambino in ospedale

INTRODUZIONE

Il programma di prevenzione della trasmissione da madre a bambino (PMTCT) del St. Camillus Mission Hospital è cominciato nell'aprile del 2003 con lo scopo di ridurre l'infezione di HIV dalle madri ai bambini nella divisione di Karungu sotto la supervisione e la sponsorship del Catholic Medical Mission Board col titolo "BORN TO LIVE". Il progetto PMTCT si trova nel reparto maternità e pediatria dell'ospedale e ha varie cliniche mobili a Karungu.

OBIETTIVI

Gli obiettivi più importanti del progetto PMTCT sono:

1. Prevenire la trasmissione secondaria dell'HIV/AIDS dalle madri sieropositive in gravidanza ai loro bambini non ancora nati e neonati attraverso il PMTCT.
2. Prevenire la trasmissione primaria dell'HIV/AIDS alle madri di HIV negative attraverso test e consultazioni gratuite (VCT).
3. Usare cure pre-natali e continuare anche dopo il parto per migliorare la salute e il benessere delle madri in gravidanza, dei bambini non ancora nati, dei neonati, e durante la loro infanzia.

STAFF / PERSONALE

Il reparto maternità e bambini (MCH) ha tre collaboratori a tempo pieno. Irene Omolo e Helen Yonge sono infermiere PMTCT e ostetriche qualificate. Mary Ojimbi è un'infermiera ausiliare e qualificata nel VTC come consulente. Sono tutti consulenti del PMTCT qualificati e consigliano, testano, e trattano madri in stato interessante. Tutti loro partecipano alla clinica mobile, educano alla salute e raccolgono la campionatura del PCR. La MCH clinic ha anche tre operatori sanitari comunitari qualificati che visitano le madri e i bambini a domicilio. Loro provvedono anche a incoraggiare le madri a frequentare la clinica delle cure pre-natali. I loro nomi sono Irene Nyagweth, Joseph Menya Ngode e Elisha Omori Otieno.



Fig. 2: Irene Omolo visita una donna in gravidanza

CAPACITA' E COMPETENZE

Con lo scopo di continuare ad aumentare la qualità e il numero dei servizi previsti nel "Maternal and Child Health Clinic" il personale partecipa a vari incontri e workshop.

Durante il corso dell' anno Mary Ojimbi, Irene Nyagweth, Joseph Menya Ngode ed Elisha Omori Otieno hanno partecipato ad un Homebased Care Training nell'ottobre 2008 a Eldoret, sponsorizzato da MAE Project. Mary Ojimbi ha partecipato anche al VCT training a febbraio - marzo 2009 a Nairobi.

INTERVENTI

Il metodo di consultazione e test volontario (VCT) viene effettuato ad ogni cliente durante la sua prima visita della cura prenatale (ANC). Consultare e testare durante la prima visita evita di perdere opportunità di visita e aumenta la possibilità per le donne sieropositive di utilizzare il PMTCT. Gli interventi di PMTCT più importanti sono i seguenti:

1. I risultati del test dell'HIV sono dati alle madri sia nel caso in cui siano positivi , sia in quello in cui siano negativi
2. Tutte le madri positive sono segnalate alla ARC clinic e sottoposte a Nevirapina e AZT
3. Alle madri con HIV positivo viene consigliato esclusivamente l'allattamento. Alle madri viene consigliato il nutrimento con latte materno al bambino fino ai sei mesi
4. I campioni PCR sono presi ai bambini di 6 settimane, 6 mesi, 12 mesi e 18 mesi per determinare lo stato di HIV del bambino. A 18 mesi il bambino è considerato negativo e non affetto da virus di HIV
5. A tutte le madri in gravidanza, positive o negative, è consigliato di partorire in ospedale per avere un parto più sicuro

ATTIVITA':

Formazione: quattordici infermiere sono state formate al PMCTC e quattro infermiere sono state trasferite al pediatrico ARV per aumentare la qualità del servizio ai nostri clienti.

Mobilizzazione: la mobile clinic mensile include Otati, Orore, Not e Okiro. I servizi della clinica mobile includono la prova del peso dei bambini, le vaccinazioni, ANC e VCT. Latte e biscotti vengono distribuiti alle madri e ai bambini.

Educazione sanitaria: il discorso sulla sanità è tenuto due volte al mese alla clinica MCH. Un discorso è tenuto durante il giorno del PCR e un altro in un mercoledì di ogni mese.

I contenuti includono la nutrizione degli infanti, specialmente per le madri con HIV positivo, l'importanza dell'immunizzazione dei bambini, la registrazione al NHIF, e la sanità materna.

Servizi di laboratorio: tutte le madri, indipendentemente dal loro stato di HIV, ricevono servizio di laboratorio gratuito durante la loro prima visita alla clinica grazie al progetto MAE (Ministero degli Affari Esteri promosso da Salute e sviluppo NGO con base a Roma, in collaborazione con Pro.Sa NGO, con base a Milano, Italia). I test di laboratorio includono l'emoglobina, il gruppo sanguigno, l'analisi delle urine e il VDRL. Tutti i risultati sono controllati da infermiere ostetriche e le madri ricevono la consulenza necessaria.

Cure pre-natali: le attività di ANC includono la misurazione del peso, il monitoraggio della pressione del sangue, palpazione addominale, immunizzazione dal tetano, hematecnis, profilassi della malaria e una zanzariera gratuita per le madri in stato interessante dal quarto mese.



Fig. 3: una visita a Otati Dispensary

SERVIZI GRATUITI

1. Tutti i servizi di laboratorio, inclusa l'ultrasound, se necessario, sono gratuiti per tutte le madri in gravidanza.
2. Zucchero , biscotti e bevande vengono distribuiti alle madri PMTCT e ai bambini svezzati nel PCR day.
3. Latte e biscotti vengono distribuiti a tutti i bambini della mobile clinic.
4. L'assicurazione sanitaria è coperta per sei mesi dal SCMH, prima che le madri si assumono personalmente l'incarico di pagare la retta.



Fig. 4: alcune mamme aspettano la visita con i loro bambini

SFIDE

Nonostante il grande progresso ottenuto dal St. Camillus PMCTC Project nella prevenzione sulla trasmissione di HIV dalle madri ai bambini durante la gravidanza e l'allattamento , il progetto deve ancora sostenere numerose sfide nella prevenzione.

Spesso la povertà estrema di molti clienti fa dare precedenza ai soldi e alle risorse piuttosto che alla cura della salute e ai servizi di PMCTC.

Allo stesso modo, la distanza e i conseguenti costi di trasporto dalle case agli aiuti sanitari (sia il St. Camillus Hospital che la mobile clinic) rendono difficile la frequentazione delle madri alle cliniche.

Un'altra conseguenza della povertà e della scarsità di educazione è il fatto che le madri continuano a praticare il nutrimento misto nonostante i consigli dati siano contrari.

Infine, la pandemia dell'HIV è ancora uno dei maggiori problemi nell'area, specialmente tra gli uomini.

A causa di ciò, alcuni clienti si rifiutano di fare il test o di prevenire.

Inoltre alcune madri con HIV positivo hanno difficoltà a mostrare i risultati del loro test al partner.

Per finire, mensilmente, alcuni risultati del PCR vengono rifiutati a causa di non chiare ragioni di laboratorio.

SCOPI RAGGIUNTI

Il PMCTC Project ha prevenuto la diffusione del virus dell'HIV dalle madri ai bambini in modo significativo attraverso le attività precedentemente descritte (vedi i risultati del PCR nella tabella nr. 1)

Inoltre la maggior parte delle madri accetta di sottoporsi al test durante le loro visite per le cure prenatali (vedi tabella nr.2)

Molte madri che usufruiscono delle cure della clinica, incluse le madri PMTCT, preferiscono partorire in ospedale piuttosto che a casa.

Infine, più madri dopo il parto stanno accettando le consulenze e i test inerenti all'HIV.

**Tabella 1. Test del PCR eseguiti per il PMTCT
MAGGIO 2008 - APRILE 2009**

MESI	TEST	NEGATIVI	POSITIVI	SCONOSCIUTI
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Dicembre 2008	21	18	3	0
Gennaio 2009	25	23	2	0
Febbraio 2009	32	12	n/a	20
Marzo 2009	22	22	0	0
Aprile 2009	0	n/a	n/a	n/a
Totale	256	174	10	72

Percentuali negative: 67.9%
Percentuali positive: 3.9%
Percentuali sconosciute: 28.1%

Tabella 2. Test dell'HIV e consulenza per le clienti della ANC

Mese	ANC Visite Totali	ANC Prima Visita	Prime visite, Consulenza e Test	Seconda visita Consulenza e Test	Totale di test di donne con HIV positivo
Maggio 2008	61	26	24	11	6
Giugno 2008	104	36	26	3	6
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Fig. 1: one mother carrying her baby to the hospital

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- Another consequence of poverty and lack of education is that some mothers continue to practice mixed feeding despite counseling.
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February 2009	137	42	26	0	3
March 2009	114	46	43	3	5
April 2009	136	47	46	0	6
Total	1175	444	386	66	79
Percentage of ANC First Visit Clients counseled and tested: $386/444 \times 100 = 86.9\%$					

Compiled by Irene Omolo and Kayla Bronder, 28 October 2009