Review of the Pilot Phase of Prevention of Mother-to-Child Transmission of HIV (PMTCT)

Davao Medical Center
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Acknowledgments

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Core team:
Dr. Jose Gerard Belimac, National AIDS/STI Prevention and Control Program, Department of Health (DoH)
Dr. Renee Faldas, Center for Health Development, DoH, Region 11
Ms. Gudrun Nadoll, United Nations Children's Fund (UNICEF), Philippines
Mr. Philip Castro, UNICEF, Philippines
Dr. Madeline Salva, World Health Organization (WHO), Philippines

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List of Acronyms

3TC	Lamivudine
AIDS	Acquired Immune Deficiency Syndrome
ANC	Antenatal care
ART	Anti-retroviral therapy
ARV	Anti-retroviral (drugs)
DMC	Davao Medical Center
DoH	Department of Health
GFATM	Global Fund to fight AIDS, Tuberculosis and Malaria
HACT	HIV/AIDS Core Team
HIV	Human Immunodeficiency Virus
IDU	Injecting Drug User
IEC	Information, Education and Communication
MCH	Maternal and child health
NASPCP	National AIDS and STI Prevention and Control Programme
NGO	Non-governmental organization
OBGYN	Obstetrics/Gynaecology
OPD	Out-patient department
PICT	Provider-initiated counseling and testing
PLHIV	People living with HIV
PMTCT	Prevention of Mother-to-Child Transmission of HIV
SACCL	STD/AIDS Central Cooperative Laboratory
STI	Sexually Transmitted Infection
UNICEF	United Nations Children's Fund
VCT	Voluntary Counseling and Testing
WHO	World Health Organization
ZDV	Zidovudine (also known as AZT)

Executive Summary

In an effort to prevent new HIV infections in women and children, the Department of Health (DoH), in collaboration with the Davao Medical Center (DMC) and with support from UNICEF, initiated a pilot Prevention of Mother-to-Child Transmission of HIV (PMTCT) program in 2007. The target for the PMTCT pilot implementation was to reach all pregnant women attending antenatal clinic (ANC) in DMC with comprehensive PMTCT services. The comprehensive PMTCT services set out to include the following components:

1) Primary prevention of HIV-infection among women of reproductive age;
2) Prevention of unintended pregnancies among HIV-infected women;
3) Prevention of vertical transmission of HIV from mother to child; and
4) Provision of treatment, care and support for HIV-infected women and their children.

The review revealed that the PMTCT intervention was reaching the planned results. HIV education and counseling had been integrated in the ANC client flow, making good use of the women's time while they were waiting for other services. In the second half of the pilot phase, the program was very successful in increasing the uptake of HIV testing by pregnant women and their partners.
One of the identified weaknesses include that in spite of HIV-education provided, women still had misconceptions about HIV and AIDS. In addition, the majority of those initially tested did not come back to obtain their test results; for those who did, post-test counseling was often reduced to the provision of the test result, missing out on the opportunity to reinforce safe behaviours. Preparedness to provide comprehensive PMTCT services was hampered by limited PMTCT and VCT training; even if the HIV/AIDS Core team (HACT) was trained for comprehensive HIV management, the majority of PMTCT services were implemented by non-HACT staff. In addition, a lack of protocols had been noted, such as the lack of a protocol on the mode of delivery for HIV-infected women and logistics for post-partum care. DMC had access to a free supply of ARVs through GFATM; however, not all ARVs required for PMTCT were on stock at DMC.

In terms of strategy, the review findings revealed that DMC was accessible to the general public, women at higher risk and women infected with HIV, both in terms of opening hours, transport and costs involved. However, long waiting time and anecdotal reports about staff attitude towards indigent patients may discourage some beneficiaries to access services. Even if other STIs, such as hepatitis and syphilis, are more prevalent in pregnant women than HIV is, the PMTCT intervention only focused on HIV and missed the opportunity to strengthen overall STI prevention. At the time of the review, linkages and a referral network among DMC ANC OPD and other key stakeholders working on HIV in Davao – particularly those working with most-at-risk groups – have not yet been established. The review found that offering voluntary HIV-testing to all pregnant women independent of any risk factor is costly compared to the number of infections prevented. Means to sustain the intervention beyond UNICEF support were not determined yet, particularly in relation to the supply of HIV-tests. However, some PMTCT components are included in the approved GFATM Round 6 funding; in addition, DMC and DoH Regional Office indicated that HIV education and counseling could potentially be sustained out of their own means.

Recommendations include offering basic HIV education as part of routine antenatal care, however not as vertical HIV-program, but as part of a broader antenatal health education package. A simple verbal risk screening tool could help identify women at increased risk of STIs. If a woman is identified with a risk, syphilis, hepatitis B/C and HIV testing should be offered. In addition, focused interventions on reproductive health choices need to target women most at risk of HIV-infection, and men and women living with HIV. In order to establish and maintain an effective referral network, current discussion platforms such as local AIDS council meetings and case consultation meetings should regularly be used to inform partners on PMTCT interventions and discuss strategic collaboration.

Background and Rationale

By the end of 2006, there were 2,719 HIV antibody seropositive cases reported to the Philippine HIV and AIDS Registry. While the leading cause of HIV transmission was reported to be sexual contact (87%), a total of 37 HIV infections were caused by mother-to-child transmission (1.5%), the second largest reported mode of transmission in the registry. Based on the national data, peri-natal transmission was also the leading cause of HIV infection among infants and children below 14 years of age in the Philippines.

In an effort to prevent new HIV infections in women and children, the Department of Health (DoH), in collaboration with the Davao Medical Center (DMC), and with support from UNICEF, initiated a pilot PMTCT program in 2007. The target for the PMTCT pilot implementation was to reach all pregnant women attending antenatal care (ANC) in DMC with comprehensive PMTCT services. The comprehensive PMTCT services set out to include the following components:

1) Primary prevention of HIV-infection among women of reproductive age (i.e., by integrating HIV information and voluntary counseling and testing (VCT) as routine component of the antenatal care package);
2) Prevention of unintended pregnancies among HIV-infected women (i.e., by integrating family planning into maternal and child health services);
3) Prevention of vertical transmission of HIV from mother to child (i.e., by providing ARV prophylaxis, safe delivery techniques, and infant feeding counseling); and
4) Provision of treatment, care and support for HIV-infected women and their children (i.e., by providing treatment, care and support for HIV-infected mothers and their babies).

During the initial PMTCT pilot phase, a PMTCT protocol has been developed for DMC. The WHO generic PMTCT training package (2004) has been adapted to the Philippines context and in the first quarter of 2007, a PMTCT team from DMC has been trained. A PMTCT registry and a monthly report form have also been developed for the project. The launch of PMTCT interventions took place in 16 July 2007.

It was agreed among the stakeholders that UNICEF would provide financial support for supplies, training and communication materials, as well as technical assistance for the initial phase of program implementation. On the other hand, DMC would provide staff to conduct HIV education, counseling, testing, as well as specific interventions for HIV infected pregnant women and their infants. In addition, DMC would provide the required confidential space to undertake these interventions. All PMTCT interventions would be recorded by DMC staff and monthly reports would be filled-out and forwarded to DoH and UNICEF. PMTCT interventions were integrated into the proposal to the Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM) Round 6.

Purpose of the Review

The stakeholders agreed to evaluate the PMTCT pilot phase after 6 months of implementation to review progress towards planned results, the PMTCT strategy, and to identify challenges and

lessons learned. The findings of the review will be used to guide further discussions to scale up PMTCT in the Philippines.

1) Progress towards planned results

The review assessed the progress of the program towards the planned result, i.e. to provide PMTCT services to all pregnant women accessing DMC ANC, including the implementation of PMTCT activities and infrastructure.

2) PMTCT strategy

For interventions to have an impact on the HIV epidemic, services need to be accessible and acceptable to the target audience; therefore, the review intended to shed light on these issues. Furthermore, taking into account international recommendations, the appropriateness of the interventions were to be assessed. WHO/UNICEF/UNFPA/UNAIDS recommend that countries with low HIV-prevalence should focus PMTCT interventions on (a) primary prevention among women of reproductive age and their partners; and (b) prevention of unintended pregnancies among HIV-infected women.[1] Furthermore, in low-HIV-prevalence settings, HIV-prevention should be integrated in broader STI prevention interventions.[2] Recent findings by the Commission on AIDS in Asia reiterated that targeted efforts of HIV prevention and VCT among pregnant women who are most-at-risk for HIV infection (i.e. women in prostitution, with multiple partners or spouses with risky behaviours) were appropriate and proven approaches for low-prevalence settings.[3] The review intended to assess if these recommendations were being followed in the PMTCT pilot intervention at DMC.

Furthermore, in light of recent HIV statistics, this review intended to reveal if the initial "opt-out" approach among pregnant women at DMC was (cost-) effective in preventing new HIV infections in women and children. According to the 2007 Philippine UNGASS Country Report, HIV prevalence among antenatal women was 0.02%. This means, one woman out of every 5,000 antenatal women was expected to be HIV infected. Based on marital status and family planning methods of women living with HIV, the DoH Maternal and Child Health (MCH) Program estimated that 3% of Filipino HIV infected women of reproductive age were likely to get pregnant, or a total 77 women every year (Philippine UNGASS Country Report, 2007). Lastly, the review aimed to explore options to sustain the interventions after the initial UNICEF financial support ended at the end of 2007.

Methodology

The actual review was conducted from 8 to 10 April 2008. The steps included:

1) Initial communications and preparation

The HIV and AIDS Programme of UNICEF made the initial preparation for the review, including logistical support. The programme staff met with representatives from the DoH

[1] Asia-Pacific Operational Framework for Linking HIV/STI Services with Reproductive, Adolescent, Maternal, Newborn and Health Services. WHO/UNICEF/UNFPA/UNAIDS 2008.

[2] *Ibid.*

[3] Redefining AIDS in Asia: Crafting an Effective Response. Report of the Commission on AIDS in Asia. March 2008.

to set the schedule for the review. Succeeding discussions in relation to the scope of work and purpose of the review was mostly done through emails exchanged by the review team. DMC, through the Head of the PMTCT programme, was briefed regarding the scope and purpose of the review. All review team members were briefed on the PMTCT programme.

2) Development of review tools

UNICEF initially developed the review tools. The draft was circulated among the team members for their review and comment. Based on the suggestions of the team, the tools were revised and finalized.

3) Scheduling and logistics preparation

UNICEF was primarily responsible for the scheduling, including arrangements for site visits and interviews. A complete day to day account of the activities was maintained by UNICEF programme staff.

4) Consultations and site visits

The review involved several consultations and site visits. At the site, the areas of activity implementation, the staff and beneficiaries were consulted. Systems and record keeping were examined; infrastructure and organization of the programme were also looked at. Apart from interviews and consultation with staff, adjunct interview with key stakeholders like city health officers and NGO staff, and most-at-risk and HIV infected women were also conducted. Focus group discussions with beneficiaries were also conducted to assess levels of awareness and practices regarding HIV as well as knowledge of PMTCT services and programme staff.

5) Team debriefing

At the end of each day, the review team would meet for a debriefing and analysis session. The findings were consolidated and shared among the team members for analysis.

6) Draft report sharing and finalization

The draft report was shared among the team members and DMC for their review and validation. Queries and clarifications were sought during this process, and inputs from this sharing were incorporated in this report.

Data Collection

The review used a combination of quantitative and qualitative methodologies. Methodologies and processes used include:

1) **Primary and Secondary Data Analysis through review of the following documents:**
    a) PMTCT Registry
    b) Stock Registry (HIV tests kits, ARVs, etc.)
    c) A Protocol to Implement PMTCT in DMC
    d) 2007 PMTCT Report Card
    e) 2007 UNGASS Country Report

2) **In all, 20 Key Informant Interviews using checklists were conducted. The following were interviewed:**
    a) Hospital Director/Officer-in-Charge
    b) Head of OBGYN
    c) Head of HIV/AIDS Core Team (HACT)
    d) ANC staff involved in counseling
    e) Head of Laboratory
    f) Laboratory technician
    g) Staff of City Health Office
    h) Staff of NGOs working on HIV and AIDS
    i) Female sex workers
    j) Women living with HIV

3) **Focus Group Discussions**
    Three (3) focus group discussions were conducted with the following groups of people:
    a) Women recipient of PMTCT services in DMC ANC – two groups
    b) Male partners of pregnant women

4) **Survey Questionnaires**
    Survey questionnaires were distributed to pregnant women prior to HIV education to assess their baseline knowledge on HIV and AIDS. ANC staff was also asked to fill-out questionnaires assessing their knowledge related to PMTCT.

5) **Field Observations**
    Observations were done to assess the client flow in DMC ANC. This process focused on the delivery of PMTCT services, including HIV education/pre-test counseling, actual testing, and post-test counseling.

Review Team

The review team had five members composed of the following members:

1) Dr. Jose Gerard Belimac, Program Manager, National AIDS/STI Prevention and Control

Program (NASPCP), DoH
2) Dr. Renee Faldas, STI and HIV Coordinators, Center for Health Development, DoH-Region 11
3) Ms. Gudrun Nadoll, HIV and AIDS Specialist, UNICEF, Philippines
4) Mr. Philip Castro, HIV and AIDS Officer, UNICEF, Philippines
5) Dr. Madeline Salva, Programme Officer, HIV, AIDS and STI, WHO, Philippines

Review Findings

This section is divided into two parts – (1) Progress towards planned results, and (2) PMTCT strategy.

The progress of the program was assessed towards its planned result, i.e. to provide quality PMTCT services to all pregnant women accessing DMC ANC. In addition, the review looked at the implementation of PMTCT activities and its related infrastructure. It further examined the level of integration of PMTCT interventions in the ANC services at DMC, and the degree of preparedness of the health facility to provide comprehensive PMTCT services to HIV- infected pregnant and non-pregnant women.

Based on the epidemiological context of the Philippines, the overall PMTCT strategy was analyzed for its likelihood to have an impact on the epidemic, given the accessibility, acceptability, sustainability, (cost-) effectiveness and appropriateness of the interventions.

In each section, what works and what does not work are detailed. For the areas that work, opportunities for the program to be enhanced/replicated were examined. Recommendations for solutions and ways to move forward are discussed separately in the succeeding sections.

1. Progress towards Planned Results

1.1 Program Achievements

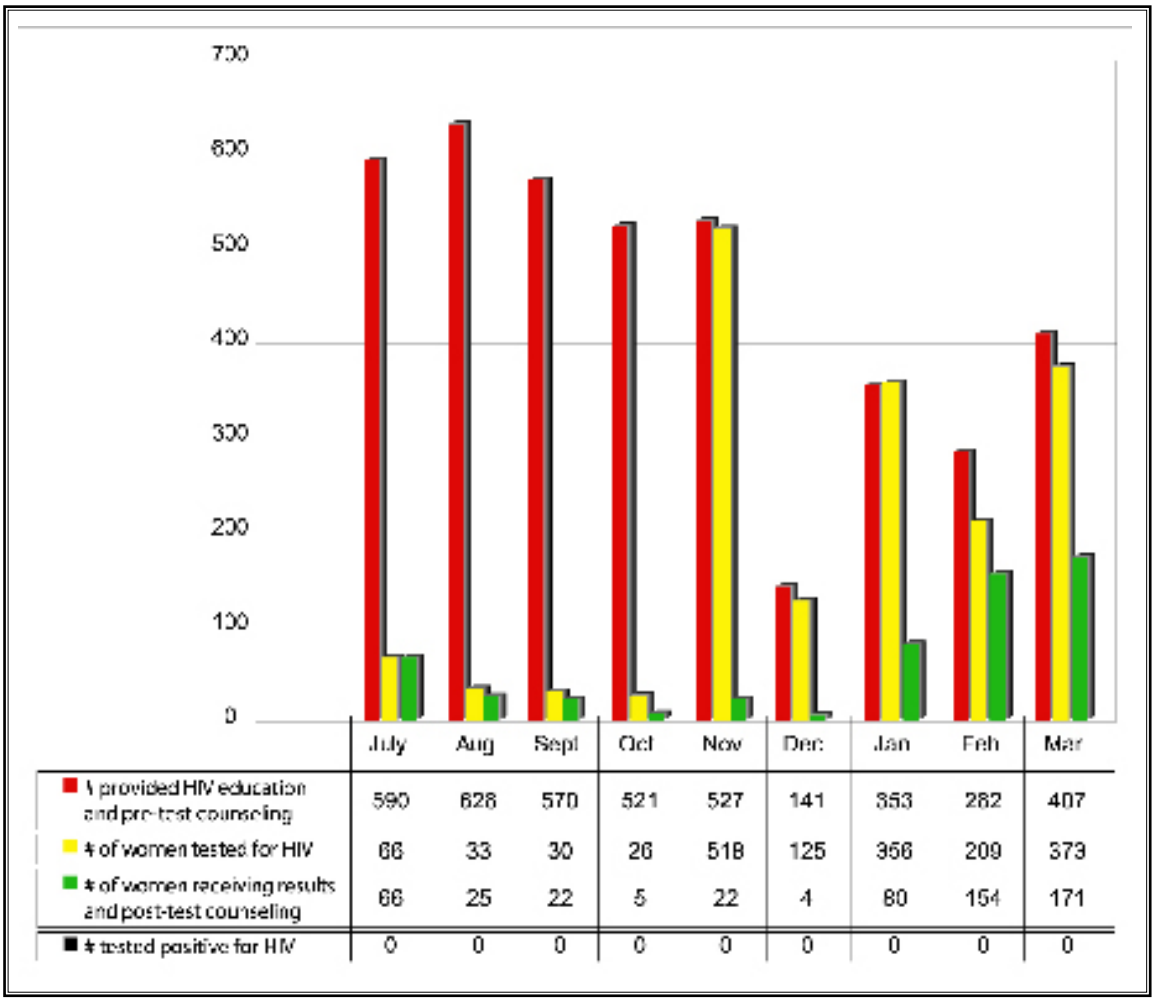
From its launching in 16 July 2007 to March 2008, the program provided HIV education and counseling to 4,019 women attending ANC. Of these, 1,736 voluntarily opted for HIV testing, giving an overall HIV testing uptake rate of 43% (please refer to Table 1).

As noted from the table below (Table 1), the HIV testing uptake increased halfway through the implementation, from an average monthly test rate of 7%, in the first four months, to 91% in the last five months. The increase was attributed to the improved process in HIV testing. Starting November 2007, actual blood extraction was being done on site right after HIV education and counseling, and once consent was secured.

However, out of the 1,736 women tested for HIV, only 546 (32%) received their test results, which is only 14% of those initially provided with HIV education and counseling. According to the DMC staff, most of the women accessing ANC services were indigents coming from as far as neighboring provinces, most of whom only come for initial pre-natal check up and do not return for follow-up visits. Consequently, they also fail to claim their HIV test results,

thus explaining the high drop out rate.
So far, none of the pregnant women tested were positive for HIV.

Table 1. Coverage of PMTCT services, DMC, July 2007 – March 2008

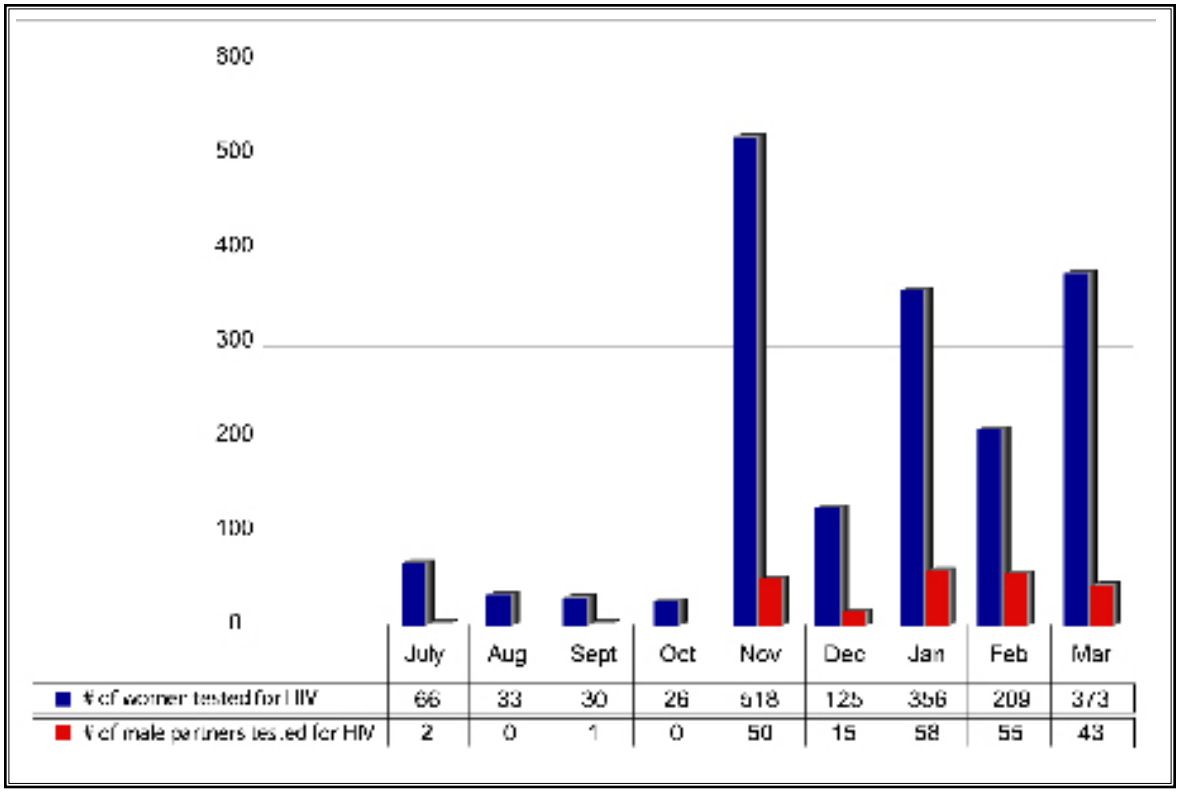


	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar
# provided HIV education and pre-test counseling	590	628	570	521	527	141	353	282	407
# of women tested for HIV	66	33	30	26	518	125	356	209	373
# of women receiving results and post-test counseling	66	25	22	5	22	4	80	154	171
# tested positive for HIV	0	0	0	0	0	0	0	0	0

Additionally, DMC also reached out to the partners of the pregnant women. From July 2007 to March 2008, 224 male partners of women attending ANC volunteered for HIV-testing (please refer to Table 2), or 13% of the total number of women who were tested. This figure needs to be seen against the fact that most of the pregnant women accessing ANC services at DMC were not accompanied by their partners.

Out of the 224 male partners tested, only 30 (13%) received their test results. To date, all tests came in negative for HIV.

Table 2. Number of Women and Men who accept HIV testing, PMTCT, DMC, July 07 – March 08



1.2 PMTCT Activities

a) HIV Education

As per protocol, HIV education was part of the routine services for pregnant women accessing ANC at the Out-Patient Department of DMC. It was a requisite for newly booked clients to undergo HIV education prior to pre-natal consultation. There were usually two education sessions in a day, one in the morning and one in the afternoon, with an average of 20 women per session. It was being conducted in a designated room in the waiting area. The session, which normally lasted for 20 minutes, was facilitated by the Head Nurse. Because of the high number of women attending ANC, waiting time for ANC services was several hours; PMTCT education and counseling was perceived to fill this waiting time, without adding any further delay.

The HIV education was not integrated into the broader health education package for pregnant women in DMC. In fact, apart from it, there was no other routine health education being offered to pregnant women in the ANC.

Overall, the HIV education session covered the following topics:

Etiology of HIV and AIDS;
HIV scenario in the Philippines;
Basic facts of HIV transmission; and
Basic facts of HIV prevention.

Basic information on HIV and AIDS was being correctly provided. However, the Philippine HIV statistics used were outdated. Secondly, information on HIV prevention focused only on prevention of sexual transmission, *i.e.*, through abstinence, being faithful, and condom use. There was little discussion related to prevention of mother-to-child transmission of HIV, nor on prevention of transmission through infected blood or blood products. The information related to HIV and breastfeeding was biased towards infant formula. It was also noted that the clients were not provided the opportunity to ask questions.

Focus group discussions among women who had attended the HIV education intervention revealed that while they have adequate knowledge on HIV transmission and prevention, some misconceptions prevailed.

b) Pre-test Counseling

Pre-test counseling was incorporated into the HIV education session, and conducted as a group activity, contrary to the site protocol. Risk assessment for HIV or other STI risk was not discussed, neither were signs and symptoms of STIs discussed. Aside from the basic information on HIV and AIDS (as mentioned above), there was little discussion on HIV testing or interpreting the test results.

The educator/counselor focused on the availability of HIV testing in relation to PMTCT services in DMC. Other than the fact that the service was offered free of charge, there was no further discussion on the benefits (and potential risk) of HIV testing. Furthermore, no further details were given about the available PMTCT services in DMC for HIV-infected pregnant (and non-pregnant) women.

Written consent was required prior to HIV testing, and respective standard consent forms required by the National Epidemiology Center (NEC) of DoH were provided to all women after HIV education and group counseling. Women and their partners were asked to fill-out the consent form while still sitting in the group. Though they were assured that their test results will be treated confidentially, they were explicitly disallowed to keep their real identity confidential by opting to use an alias or a codename. Because of the set-up, it was apparent to everyone present who in the group did not give consent to the test. In interviews, some hospital staff indicated that the HIV testing service offered by DMC was "mandatory in practice." DMC staff pointed out that the current approach was well received and no client had ever complained.

Based on the requisites set in the PMTCT protocol, pre-test counseling was lacking on the following areas:

- ☐ Establishment of good interpersonal relationship;
- ☐ Exploration of the clients concerns and issues related to PMTCT and testing;
- ☐ Assessing client's needs for further counseling; and
- ☐ Referral to professional counselor of HACT if need arises for risk assessment and reduction, and couple counseling.

Furthermore, as per the 2007 guideline for Provider-Initiated Counseling and Testing (PICT), DMC pre-test counseling service was short of the following components:

- ☐ Reasons why HIV testing and counseling is recommended;
- ☐ Clinical and prevention benefits of testing such as stigma, abandonment and violence;
- ☐ Services which are available in case of either HIV negative and positive test result;
- ☐ The fact that declining to undergo the test will not affect the client's access to services which do not depend on the test;
- ☐ In the event of a positive test result, encouragement of disclosure to other persons who may be at risk of exposure to HIV; and
- ☐ An opportunity to ask the health provider questions.

c) HIV Testing

Starting November 2007, blood extraction for HIV testing was being done on-site in the group setting right after HIV education and counseling, and after signing of the consent form. This was implemented to improve the HIV testing process by reducing the waiting time from education and counseling to actual testing, which was initially identified as the main factor for the initial low VCT uptake among pregnant women. HIV testing was being conducted separately from other routine laboratory blood tests.

There were one to two dedicated medical technologists drawing blood for HIV testing. The DMC indicated that the laboratory constantly ran out of supplies; consequently, medical technologists did not always wear gloves when drawing blood. It was also observed that hand washing was not normally practiced before and after every extraction. Test tubes containing blood samples were properly labeled; although sometimes they were left at the table uncovered causing hazard to the medical technicians and clients alike.

Consistent with the protocol, DMC laboratory was using a combination of two or more simple/rapid tests for diagnosis of HIV derived from the recommendation of WHO. Based on their testing algorithm, DMC was employing a series of three screening tests in determining HIV. For the initial screening, DMC was using HIV Determine. If reactive, the blood sample was tested with Serodia and with ELISA (enzyme-linked immuno-sorbent assay) as the final screening test for positive results. In line with the National Testing Algorithm, reactive (and indeterminate) test results in the screening were sent to the STD/AIDS Central Cooperative Laboratory (SACCL), the national reference laboratory for HIV and STI, based in San Lazaro Hospital in Manila, for the final confirmatory test, the Western Blot test.

The laboratory forwarded the HIV test results to the Head Nurse of the ANC OPD, who was then responsible for distributing them to OB residents who were supposed to hand out results and provide post-test counseling to clients.

d) Post-test Counseling

Release of results and provision of post-test counseling were usually done by the OB residents, as per protocol. However, staff pointed out that the Head Nurse sometimes performed this function. OB residents have not been specifically trained on VCT; some, but not all, were trained on PMTCT. The Head Nurse, on the other hand, had received both types of training.

The consultation room was only separated from the waiting clients with a curtain. However, given the very busy and, therefore, noisy atmosphere of the OPD, confidentiality was still maintained since the health providers were careful to lower their voices.

Normally, HIV test results for non-reactive tests were available a week after testing. However, typically, clients received their test results on their subsequent check up, usually a month after their initial visit.

Based on observation, residents normally just handed out results without exploring the clients' readiness and willingness to receive their test results as stipulated in the hospital guideline. Reinforcement of safe practices and risk assessment were not discussed, thus, missing out on the opportunity to promote behavioral change among clients.

Post-test counseling fell short of its required components (as per protocol), particularly on the following:

- ☐ Information to prevent (possible) future infection;
- ☐ Highlights of the risks of HIV infection during pregnancy or breastfeeding; and
- ☐ Window period and date to re-test (if a risk had been identified).

More so, based on discussion among beneficiaries, it was found that some clients have not received any form of counseling upon receipt of their test results.

e) Record Keeping

Record keeping of PMTCT data was almost exclusively done by the Head Nurse from pre-test counseling to release of test results and post-test counseling. Clients provided with HIV education and counseling were initially registered in a logbook. A separate book was used to record release of test results and post-test counseling. The Head Nurse transferred these data in a PMTCT registry by hand. These data were forwarded to the Head of HACT for consolidation and analysis. Because of the work load, the task of updating the registry was often delayed, compromising data quality. The registry was not well secured and easily accessible to anyone.

1.3 PMTCT Integration into ANC

Based on the above findings, PMTCT was integrated into ANC as it has a specific position in the ANC flow. However, hospital staff perceived PMTCT as separate and added service to the mainstream ANC, particularly the HIV education, counseling and testing.

1.4 Preparedness to Provide Comprehensive PMTCT Service

At the onset of program implementation, a team of doctors, nurses, midwives, social workers and laboratory personnel were trained on PMTCT using a PMTCT training package adapted to the Philippine context. The two-day PMTCT-training was facilitated by DoH and UNICEF. In addition, several staff members were also trained on VCT. However, not all of the current residents tasked to provide test results and post-test training have attended the PMTCT training, and no resident was trained specifically on VCT. Some of the hospital staff initially trained for the program were no longer connected with the institution or have been reassigned to a different department.

As part of the review, selected ANC staff members were asked to fill-in a questionnaire to measure their knowledge on PMTCT. While the staff generally had a good understanding of HIV transmission and prevention, knowledge gaps were found on specific PMTCT-related concerns, such as ARV prophylaxis, family planning, and infant feeding. Residents, and even Specialists, were asking for further trainings or a refresher course on PMTCT.

However, as one of the 11 AIDS Treatment Hubs in the country, DMC has a functional HIV and AIDS Core Team (HACT) trained to manage HIV and AIDS, including ARVs for PMTCT. The HACT functions as a valuable resource and backbone to PMTCT implementation.

DMC had direct access to free ARVs through the Global Fund–AIDS Project. Yet, according to the ARV stock report, DMC did not a have a ready supply of all ARVs required for PMTCT prophylaxis. Based on the site protocol, an HIV-infected pregnant woman should be provided with Zidovudine at 28 weeks of gestation or as soon as possible thereafter as prophylaxis for mother-to-child HIV transmission. However, the stock report revealed that Zidovudine was not available, except only in combination with 3TC. In addition, DMC had no current supply of pediatric ARVs required for PMTCT prophylaxis.

A protocol to implement PMTCT in DMC was developed in collaboration with DoH and UNICEF. The protocol included specific guidelines on implementation of PMTCT services from provision of HIV education and VCT to ARV prophylaxis, and treatment, care and support for infected mothers and their babies, including safe delivery and post-natal care.

The infrastructures necessary to provide comprehensive PMTCT services were available for HIV education, counseling and testing. However, there was no clear protocol yet for decision-making on the mode of delivery for HIV-infected pregnant women,

i.e. whether or not and when to do caesarean section or vaginal delivery. Similarly, there was no protocol yet on the logistical arrangements for HIV-infected patients post-delivery.

Of the four components of PMTCT, the program mainly focused on the primary prevention of HIV infection with the integration of HIV education and VCT to routine ANC package. Though DMC reported the provision of counseling on HIV and reproductive health to people living with HIV (PLHIV), there was no systematic approach yet, and no tools or protocols were available to support implementation. Also, DMC did not provide artificial family planning commodities.

2. PMTCT Strategy

2.1 Accessibility

The opening hours of DMC ANC were from 8:00 to 12:00 in the morning and 1:00 to 5:00 in the afternoon. Although admission of patients closed at 3:00 pm, consultations continued until the last patient was seen, which extended beyond the closing time. As a regional hospital and medical center, DMC catered to patients coming from nearby cities and municipalities.

PMTCT services, particularly HIV education, counseling and testing, were being provided to pregnant women attending ANC free of charge. These services were also extended to the partners of pregnant women at no cost except for a minimal fee (PhP10.00) for the patient record card.

Generally, ANC services were perceived to be readily accessible and affordable by clients including women of the general population, women living with HIV and women in sex work.

2.2 Acceptability

In general, the PMTCT program was recognized to be a good initiative by hospital officials and clients alike. It also gained appreciation and acceptance from other stakeholders, including the HIV positive community.

As to the general services offered at the OPD, some sectors felt that the services, in general, in DMC are wanting of an improvement. Perhaps due to the hospital's patient (over)load, services were perceived to be slow. There were also some complaints regarding the unfriendly and insensitive attitude of hospital staff towards patients, particularly the indigent patients. Therefore, some representatives of most-at-risk groups (PLHIV and women in sex work) indicated that they preferred other health facilities over DMC.

2.3 Appropriateness

The current PMTCT approach focused on HIV education and the offering of voluntary HIV testing at DMC ANC OPD. At the time of the review, neither government

counterparts nor NGO partners or PLHIV were aware or even involved in the PMTCT response. Other HIV programs in Davao were not interlinked with PMTCT; and DMC ANC OPD did not receive any referrals specifically for PMTCT services.

Even if other STIs, such as hepatitis and syphilis, are more prevalent in pregnant women than HIV is, the PMTCT intervention only focused on HIV and missed the opportunity to strengthen overall STI prevention.

PMTCT education, counseling and testing were perceived by the DMC staff as separate and added interventions to regular ANC services. Different stakeholders revealed that there might be scope to provide comprehensive health education to antenatal women, in which HIV could form a part of STI prevention, and that this could be addressed together with other key maternal and child health issues in a comprehensive intervention. A comprehensive health education approach could also unburden the residents who would then only follow-up if there were any other questions.

Stakeholders pointed out that a complete health promotion module would be needed, which could be taken from the pre-pregnancy manual which was currently being piloted in Davao. Clients could be guided through self-assessment for risk of STIs; residents could include risk assessment questions during routine medical history taking. A PMTCT video or a video covering several health aspects were considered to be very helpful tools; while the video would provide key messages, one person would still be assigned to health education in order to facilitate discussions and answer questions.

The efforts of reaching men were well perceived by staff and clients alike; key informants indicated that these efforts should be continued and expanded, potentially to areas beyond HIV in pregnancy.

One key intervention to prevent HIV-infection in children is to prevent unintended pregnancies in PLHIV. Interventions for PLHIV at the Treatment Hub to prevent unintended pregnancies are not systematic and no tools such as counseling flip charts or information materials exist.

2.4 Effectiveness and cost-effectiveness

The program implementers perceived PMTCT services to be effective in promoting HIV awareness and prevention among pregnant women attending ANC. Generally, they thought of it as an effective strategy in preventing HIV infection among children. Focus group discussions of the service recipients suggested, however, that even if the services were appreciated by the beneficiaries, the level of HIV awareness could still be improved, and some misperceptions prevailed even after the intervention.

In addition to raising awareness, the intervention intended to detect HIV-infection in pregnant women by offering voluntary HIV-testing to all pregnant women accessing DMC. This strategy was seen to reduce stigma and discrimination because HIV-testing was offered to everyone; in addition, this approach was seen as effective in order to

detect every pregnant woman with HIV-infection, which is a pre-condition to offering subsequent PMTCT interventions and preventing HIV-infection in infants.

While the program achieved a very high rate of HIV-testing, the program failed to reach a high rate of women who received their HIV-test results; for those who do receive their test results, post-test counseling was often reduced to the provision of the test results only, missing out on the opportunity to reinforce safe behaviours.

In the current epidemiological context of the country with 0.02% HIV prevalence in the general population, DMC would need to test about 5,000 women of the antenatal population in order to identify one who is HIV infected. At the same time, it would risk receiving 25 false positive test results (if the initially employed test is 99.5% accurate). It would require DMC to spend USD 5,000 for HIV testing (at approximately USD1 per test) to identify just one HIV positive pregnant woman. Given that even without any intervention, the risk of mother-to-child transmission of HIV is only 30-45%, testing all pregnant women for HIV in order to prevent HIV in children is a very costly strategy.

2.5 Sustainability

The pilot implementation of PMTCT program in DMC was partly subsidized by UNICEF. Apart from technical assistance, UNICEF provided financial support for supplies (i.e., HIV test kits, equipments, etc.), training and communication materials. As a counterpart, DMC provided the human resources to conduct HIV education, counseling, testing, as well as specific interventions for HIV-infected pregnant women and their infants.

For the running costs related to human resources, the Head of the PMTCT program at DMC estimated that one nurse at ANC OPD and one lab technician were dedicating about 20% of their time to PMTCT; furthermore, two residents gave 5% of their time; the hospital psychologist or her staff were sometimes involved, with a maximum of 5% of their overall work load dedicated to PMTCT.

The other main contributing factor to running costs were the HIV-tests, of which DMC consumed on average 192 tests per month at a cost of roughly 1USD per test since initiation of PMTCT intervention. In addition, commodities for universal precautions added to the overall running costs.

As per agreement, UNICEF committed funding support only for the start-up implementation of the program, after which Global Fund Round 6-AIDS Project would provide selected support to the program, such as national guideline development and further capacity building, while UNICEF and WHO would continue providing technical assistance. DMC and DoH Regional Office indicated that HIV education and counseling could potentially be sustained out of their own means.

Conclusions

1. Progress towards Planned Results

HIV education and counseling has been integrated in the ANC client flow, making good use of the women's time while they were waiting for other services. Because of the systems put in place, all new antenatal women had to pass this HIV awareness activity, before being able to proceed to other ANC services. In the second half of the pilot phase, the program has been very successful in increasing the uptake of HIV testing by pregnant women and their partners. Identified weaknesses include that the majority of those initially tested did not come back for test results; for those who did, post-test counseling was often reduced to the provision of the test result, with the staff missing out on the opportunity to reinforce safe behaviours.

Preparedness to provide comprehensive PMTCT services was hampered by limited PMTCT and VCT training; even if the HACT was trained for comprehensive HIV management, most PMTCT services were implemented by non-HACT staff. In addition, a lack of protocols had been noted, such as the lack of a protocol on the mode of delivery for HIV-infected women and logistics for post-partum care. DMC had access to a free supply of ARVs through GFATM; however, not all ARVs required for PMTCT are on stock at DMC.

2. PMTCT Strategy

Overall, the PMTCT program was perceived both by hospital staff and by clients as a good initiative to prevent HIV-infection in women. Review findings revealed that DMC was accessible to both general public, women at higher risk and women infected with HIV, both in terms of opening hours, transport and costs involved. However, long waiting time and anecdotal reports about staff attitude towards indigent patients may discourage some beneficiaries to access services. The effectiveness of raising awareness of HIV could be improved by improving the quality of the HIV education session; in addition, offering voluntary HIV-testing to all pregnant women independent of any risk factors is costly compared to the number of infections prevented. Even if other STIs, such as hepatitis and syphilis, are more prevalent in pregnant women than HIV is, the PMTCT intervention only focused on HIV and missed the opportunity to strengthen overall STI prevention. The staff perceived this may be a good opportunity. At the time of the review, PMTCT interventions were solely implemented at DMC ANC OPD. Other stakeholders did not know the details of the PMTCT intervention, did not refer or receive referrals, and did not incorporate PMTCT messages in their programs. Means to sustain the intervention beyond UNICEF support were not determined yet, particularly in relation to the supply of HIV-tests. However, some PMTCT components are included in the approved GFATM Round 6 funding; in addition, DMC and DoH Regional Office indicated that HIV education and counseling could potentially be sustained out of their own means.

Recommendations and Way Forward

The following recommendations are based on the analyses of the findings highlighted in the preceding section. These recommendations address program implementation and strategies:

- ☐ Basic HIV education should be part of routine antenatal care.
- ☐ Because of the low HIV-prevalence, HIV education should form part of a broader STI education. This HIV/STI education, again, should be included in a broader maternal and child health education package, which combines education on breastfeeding, maternal nutrition, HIV/STIs, vaccination, birth preparedness, family planning, and other key topics.
- ☐ Efforts targeting male partners of pregnant women should be continued, potentially in the form of a "Good Daddy" programme, instilling pride in parenthood.
- ☐ A simple risk screening tool could help identify pregnant women at increased risk of STIs. This risk assessment could be integrated in the routine medical history taking and could include the following factors:
    - o Having STIs or having a partner with genital tract symptoms (e.g., dysuria, discharge or sores);
    - o More than one sexual partner over three months;
    - o Having had sex with a new partner in the last three months; and
    - o Having shared injecting equipment, or having a partner who injects drugs.
- ☐ Based on above risk assessment, if women are identified with a risk, syphilis, hepatitis B/C and HIV testing should be offered.
- ☐ Voluntary HIV testing should not routinely be offered to all pregnant women, since this is not considered cost-effective in the given low-prevalence scenario.
- ☐ While DMC (or other Treatment Hubs) would continue to serve as referral center for comprehensive services for HIV-infected pregnant women, HIV education (integrated into comprehensive health promotion), counseling and testing to those identified with a risk should be expanded to other health facilities, with a priority to those catering to most-at-risk women.
- ☐ In addition to targeting pregnant women, PMTCT interventions should also specifically focus on men and women who are already living with HIV, informing them on sexual and reproductive health choices in the context of HIV, such as preventing infection, preventing unintended pregnancy, and having a healthy baby. Family planning counseling needs to be complemented with actual provision of commodities to HIV-infected men and women or discordant couples.
- ☐ Current HIV awareness activities at all levels should incorporate basic PMTCT messages.
- ☐ Current discussion platforms (local AIDS council meetings, case consultation meetings) should regularly be used to inform partners on PMTCT interventions and discuss effective networking and referrals.

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