

**REPORT OF THE UN REGIONAL  
TASKFORCE ON PREVENTION OF  
MOTHER-TO-CHILD TRANSMISSION  
OF HIV  
SOUTHEAST ASIA AND THE PACIFIC**

**Prepared by: UNICEF EAPRO  
Convenor, UN Regional Taskforce on PMCT**

**24-25 June 2002  
Beijing, People's Republic of China**

## Table of Contents

1. Introduction.....	2
2. Progress to-date by Countries.....	4
Cambodia.....	4
China.....	5
Papua New Guinea.....	6
India.....	7
Myanmar.....	9
Thailand.....	10
Annex 1: Agenda of the Meeting.....	21
Annex 2: List of Participants.....	25
Annex 3 : Presentations.....	28

# **REPORT OF THE UN REGIONAL TASKFORCE ON PREVENTION OF MOTHER-TO-CHILD TRANSMISSION**

## **1. Introduction**

The South East Asia and the Pacific UN Regional Taskforce on Prevention of Mother- to- Child Transmission (PMCT) convened its 3rd meeting in Beijing, People Republic of China from 23-24 June 2002. A total of 35 professionals participated in this two-day meeting. Participants discussed the country level PMCT experiences to-date and latest technical information and how these could be applied for their respective PMCT country programme. This report summarized the discussion according to the following (seven key programme components).

### **1.1 Summary and Background**

The UN Regional Taskforce on PMCT, South East Asia and the Pacific was officially established in May 2000. The first preliminary meeting to discuss on the establishment of this taskforce was originated in 5<sup>th</sup> International Congress on HIV/AIDS in Asia and the Pacific, convened in Kuala Lumpur, Malaysia in October 1999. During that meeting, national representatives from selected countries in SEAP region discussed and agreed that due to the increasing trends of HIV in this region, MTCT will become an area of concern in the near future. It was agreed that there was a clear need to establish a forum to discuss the relevant strategies, policies, programming issues and to share the latest technical information on MTCT, among countries in the efforts to prevent MTCT. The need to develop the TOR of the UN Regional Taskforce was discussed and the meeting participants agreed that UNAIDS-SEAPICT will draft the TOR to be endorsed by the members in the first meeting of the taskforce.

The first UN Regional Taskforce meeting on PMCT was convened in March 2000 in Cambodia. A total of 22 participants participated and the TOR of the taskforce was officially endorsed.

The second UN Regional Taskforce meeting was held in Bangkok in March 2001. Prior to the meeting, a request was made by India that they would like to participate in the SEAP UN regional taskforce meetings, as India is the one and only country with PMCT programme in South Asia region. The TOR of the taskforce was amended and India has become the official member of the taskforce in March 2001..

The third and recent meeting was convened in Beijing, China from 23-24 June 2002. Representatives from six countries, Programme Staff from UN regional agencies and resource persons from technical institutions actively participated and discussed on several technical and operational issues that are having impact on programme implementation.

## **1.2 Objectives and Expected Outcomes of the Meeting**

The objectives of the meeting were:

- To review progress of PMCT programme/projects implementation of selected countries in this region
- To share experiences and lessons learned of these projects
- To update and share the latest technical data on the following technical areas and its implications on programme implementations:
  - Use of ARVs
  - PMCT (+)
  - Cost of PMCT
- To share the upcoming global and regional PMCT events and
- To agree tentatively, the location and timing of the next taskforce meeting

## **1.3 Participants**

Participants included (1) PMCT national programme managers from Cambodia, China, India, Myanmar, Papua New Guinea and Thailand (2) technical experts from CDC (Atlanta), MSF (Belgium), PHPT, Thai Red Cross AIDS Research Centre and (3) professional staff from regional UN agencies (UNICEF - EAPRO, WHO – SEARO and WPRO, UNAIDS – SEAPICT and China). The full list of participants is given at the end of the report (Annex – 2).

## **1.4 Methods of Work**

Several methods were utilized in convening the meeting: presentations by country representatives on the progress of their respective country programme implementation, presentation on specific technical updates by technical experts followed by discussions and key issues that will have some implications on project implementation. Please refer to Annex 1 for the agenda of the meeting.

## **1.5 Opening Session**

The meeting was officially opened by Dr. Yang Qing, Deputy Director, PHC/MCH. On behalf of the Ministry of Health, he delivered a welcoming address to all participants. He stated that although not much has been done on PMCT in China, compared to other countries in this region, however this would be changed in the future. The government is now preparing to make PMCT a priority in one province, and the experience gained from this initiative will serve as a basis to develop a national policy and strategy. This was followed by the address of Ms. Siri Tellier, UNFPA representative and chairperson of UN Theme Group on HIV/AIDS in China. She emphasized the roles and partnership arrangements among UN agencies on PMCT, specifically with UNFPA, UNICEF, WHO and UNAIDS secretariat. Dr. Ray Yip, Chief, Health and Nutrition Section, UNICEF Beijing also elaborated on how HIV/AIDS and PMCT has become an organization priority for UNICEF and the support that UNICEF Beijing is providing to the Ministry of Health to initiate PMCT in Henan Province.

## **2. Progress to-date by Countries**

### **2.1 Cambodia**

Professor Koum Kanal, Director of National MCH Centre and Chairperson for PMCT technical working group in Cambodia presented the “Cambodia Experiences on PMCT and VCCT for Primary Prevention”. He presented first the social demographic data of Cambodia. Cambodia has a total population of 11.5 million and only 15.7% are living in urban areas. The maternal mortality ratio, MMR is very high (437/100,000 live births) and infant mortality rate, IMR is 94/1000 live births. U5 MR of 115/1000 live births is the highest in the region.

Cambodia also has the fastest growing HIV/AIDS epidemic in Asia and HIV/AIDS sero-prevalence rate among 15-49 year old is 2.8%. Prevalence among pregnant women attending ANC clinic is 2.6%. He also highlighted the following issues that are having an implication on the PMCT programme:

- Low access to family planning services, Contraceptive Prevalence Rate (CPR) is only 19%
- 44% AN care coverage (first visit)
- only 5% delivery at public provincial or district level facilities

According to the UNAIDS estimates, about 165,000 people are living with HIV/AIDS by the end of 1999. MOH has predicted by 2005, there will be around 1,000 new pediatrics AIDS cases every year. Without any interventions, 11,000 infants will be born with HIV per year.

The objectives of PMCT programme in Cambodia are:

- to enable women to avoid HIV through counselling to pregnant women in MCH setting
- To enable HIV sero-positive women to avoid unwanted pregnancies
- To protect HIV-infected women and children from stigmatization and discrimination, and
- To prevent vertical transmission in HIV infected pregnant women through prophylactic means.

To pursue the achievements of the above-mentioned programme objectives, Cambodia is implementing a pilot PMCT project and is providing the following services:

- Voluntary Counselling and testing services (VCT) to women and their sexual partners visiting antenatal care (ANC) services
- Infant feeding counseling to HIV positive women, before and after delivery
- Nevirapine to HIV positive women during labor and to their newborns
- Follow-up support to HIV positive mothers and their babies

In conjunction with the services provided at the MCH centres, primary prevention activities that includes the establishment of voluntary counseling and testing sites for young people and access to condoms are being ensured through condom social marketing activities.

### **Provision of VCT Services**

The following are major characteristics of VCT services in Cambodia:

- Maternal and Child Health (MCH) staff are properly trained and equipped with the skills to provide quality VCT services at ANC.
- All tests are on voluntary basis and mandatory testing is prohibited.
- Pre- and post- test counseling is a must for HIV testing, confidentiality is strictly followed.
- To maintain the HIV negative status, post test counseling is provided to both HIV positive and negative women.
- HIV testing is conducted according to WHO guidelines and recommendations: two different rapid tests in the same time and if there is a discordance result, a control with ELISA is carried out.

### **Achievements to-date**

From 16 November 2001 to 31 May 2002, for six month implementation period, a total of 3,516 women participated in the group counseling services (mother class). 533 women or 15.2% continued for pre-test counselling. Of this, 287 women (53.8%) consented for testing and half of these women brought their partners for couple counselling and testing. At the time of this meeting, no delivery has taken place and thus nevirapine administration was not materialized yet. The first delivery is expected to take place in 3 months time.

### **Lessons learned**

Provision of VCT services through ANC has certainly improved the HIV/AIDS awareness of the women and their husbands. It has served as a very good opportunity and avenue to disseminate reproductive health information to women and their partners. As husband has an enormous influence on the decision making of the wife, it is most important to involve men in PMCT and other reproductive health issues. A communication strategy needs to be developed to address this need.

## **2.2 China**

Dr. Fujie Zhang, Director, Department of Treatment and Care, National Centre for STD/AIDS Prevention and Control presented the "PMCT Programme in China". He elaborated the preparation and plans to materialize PMCT at two levels: the national level and the provincial.

At the national level, a strategic planning workshop was conducted from 25-26 April 2002 at Zhengzhou, Henan province. During this workshop, a team of national experts reviewed the global PMCT strategies, discussed the need to develop the practical PMCT protocol, and the roles and responsibilities of PMCT at the national, provincial, county and town levels.

To develop the national policy and guidelines, MCH and Local Health Bureau are cooperating with UNICEF and technical experts from NCAIDS-Beijing, Ditan Hospital, Peiking Union Medical College Hospital, Shenzhen CDC and local health care providers.

The need of developing and establishing a monitoring and supervision tool from the beginning of the PMCT programme was discussed and it was agreed that PMCT monitoring will be done every 3 months.

At the provincial level, a pilot project will be implemented in Shangcai county, Henan province. Based on the national guidelines, a locally appropriate PMCT guideline/protocol will be developed.

At the project hospital in the pilot sites, pregnant women will be offered free HIV testing services. Two rapid tests will be used and if positive, this will be followed by a confirmatory tests. All HIV positive women and their infants will be offered nevirapine.

Although the government is committed to initiate PMCT pilot project in Shangcai, Henan province, it was recognized that there are also some issues for careful consideration. Due to poor financial situation and other factors, MCH services are deteriorating in that county, most of the families could not afford for formula, VCT is not a usual practice and culture of the health care providers in China and keeping strict confidentiality also need to be reinforced.

### **Future Plans**

Dr. Fujie Zhang then reported to the participants the following future plans:

- Finalize PMCT national guidelines and specific guidelines for Shangcai county
- Train health care providers on how to use these guidelines
- Develop and establish PMCT monitoring system, and to
- Develop PMCT scale-up plan.

### **2.3 Papua New Guinea**

Dr. Ninkama Moiya, Director (a.i.) of National AIDS Programme presented the HIV/AIDS situation in PNG. PNG has a total population of 5.1 million. From 1987, when the first case of HIV was detected, to September 2001, over 4,000 cases were reported and the cases are rising at an exponential rate. The most common age group affected are 15-40 years, females are infected earlier than males and the infection rate between males and females is almost equal. 9-10% of the reported cases is due to MTCT.

### **Achievements to-date**

The national comprehensive multi-sectoral HIV/AIDS Control Programme in Papua New Guinea was guided by the Medium Term Plan (1998-2002). This is the last year of the current MTP. As MTCT was not visible in 1997, it was not addressed in the current MTP. However, with UNICEF support, PNG has participated in all the UN Regional Taskforce on PMCT meetings. During this period, MTCT also has become an increasing concern as more and more pregnant women are testing positive at the ANC. This alerted PNG to initiate the PMCT programme and with the support of UNICEF Regional Office and the Country Office, a PMCT plan of action is developed to incorporate into the new MTP (2003-2007).

The following components will be addressed through PMCT programme in the next MTP:

- PMCT education programme for child bearing age women
- Establish VCT centres in hospitals, clinics and health centres
- Improve obstetric care for HIV positive women
- Counselling on appropriate infant feeding options
- Establish follow-up care and referral mechanism for HIV positive mothers and their babies
- Conduct Training of trainers to Traditional Birth Attendants (TBAs)
- Include nevirapine in the essential drug list and supplied through country's health care system.
- Develop a capacity building strategy for health care workers and to establish a PMCT monitoring system (technical assistance requested).

## **2.4 India**

Dr. P. L. Joshi, Director, National AIDS Council and Dr. Anne H. Vincent from UNICEF India jointly presented the India PMCT programme, beginning with the following MCH Profile:

- Total Population : 1,027 million
- Sex Ratio (F:M): 933
- Annual Pregnancies: 27 million
- % ANC Coverage: 65.4/38
- % Institutional Deliveries: 33.6
- % Deliveries attended by Skilled Birth Attendants: 42.3

### **Rationale for PMCT**

Each year there are 27 million births in India. With 0.4% HIV prevalence rate among pregnant women attending ANC, it is estimated that there will be 108,000 infected pregnancies, giving birth to 32,000 infected newborns annually, if there is no intervention. As these infected children will die within 2-5 years, it is envisaged that 25,000-50,000 under 5 deaths will occur annually.

### **The Goals of PMCT programme are:**

- Reduced HIV prevalence among pregnant women age 15-49 to below 3% in the 6 high prevalence States and below 1% in other States by 2005.
- Reduced the transmission rate of MTCT of HIV to below 20% of live births by 2005, and below 10% by 2010.

### **The Objectives of PMCT programme are:**

- Increase the proportion of pregnant women accessing quality PMCT services to 60% by 2005
- Increase the proportion of partners of pregnant women that came to ANC, consented for pre-and post-test VCT to 50% by 2005
- Increase the % of clinically eligible HIV (+) mother who are provided with a completed course of ART to 30% by 2005



India PMCT programme is following the UN endorsed three-pronged strategy. Prong 1 addresses primary prevention in young people, Prong 2 - prevention of unintended pregnancies in HIV (+) women and Prong 3 - Prevention of transmission from an HIV infected women to her infant, with follow up care and support.

Regarding ARVs, the short course Thailand regimen was used in Phase 1 of PMCT programme. However, in Phase 2, the Thai regimen is now being replaced with the modified HIVNET 012, i.e. nevirapine.

Regardless of HIV status, all pregnant women enrolled for HIV testing are covered in post-test counselling with special attention given to primary prevention for HIV (-) women.

**The following table shows the result of India PMCT Feasibility Study:**

	AZT: March 2000-Aug 2001	NVP: Oct 2001 - March 2002
Total new ANC attendance	192,474	45,924
No. of pregnant women counseled	171,471 (89.1%)	38,984 (84.9%)
No. of pregnant women accepted HIV tests	103,681 (60.5%)	35,472 (91%)
No. of pregnant women detected HIV (+), ANC	1,724 (1.7%)	464 (1.6%)
No. of pregnant women detected HIV (+), labour	-	81 (4.5%)
No. delivered with AZT	726 (42.1%)	
No. of mother-baby pairs who received NVP	-	305 (70.6%)
No. of women who picked up their test result	-	19,594 (55.2%)
No. of (+) women who picked up their test result	-	392 (68.65%)
No. of husbands who accepted to be tested	-	915 (26.8%)
No. of PCR samples at 48 hrs. tested	427	
No. of samples tested (+) positive	34/427 (8.0%)	
No. of additional tested (+) at 2 months	9	4/48 (8.3%)
No. of women who opted for breastfeeding	135 (22%)	237 (54.9%)
No. of babies exclusively breastfed at 4 months	-	49 (20.7%)

**Issues Under Consideration**

Dr. Joshi presented the following challenges that the programme is facing:

- The acceptance rate of VCT is only 55%. Could this be due to the quality of counselling and for using rapid tests?
- Although 55% women opted for breastfeeding it was found that only 20% of them practice exclusive breastfeeding (EBF) at 4 months. Is this due to quality of counselling or insufficient follow up support to mothers who chose breastfeeding?
- More women without any ANC are being tested in labour (4.5%), than through the routine ANC services (1.6%). It shows that there is an urgent need to discuss on ethical aspects of counselling and testing during labour.
- As 20-60% of pregnant women are coming directly for labour. This is a clear indication that MCH services need to be improved and a communication strategy to be developed to create demand for ANC.

India team then further elaborated on the details of the training plan to scale up the PMCT coverage. From 11 centres of excellence and 74 Medical Colleges in 2002 (Phase 1), a total of 850 health facilities will be reached by PMCT programme by 2003 - 2004 (Phase 4). As of 20 June 2002, 84 centres are providing a minimum package of PMCT services that are mainstreamed into ANC.

## **Challenges**

Although PMCT programme in India is gathering momentum and is expanding according to the plan, it is still an enormous challenge to cover such a populous and vast country. Some of these challenges are -

- to ensure the availability of professional counsellors for round-the-clock VCT services;
- procurement and logistics issues in distributing rapid tests and nevirapine;
- monitoring, reporting and documentation of the programme;
- ensuring that the primary prevention and continuum of care are comprehensively addressed;
- the integration of PMCT into the reproductive and child health programme and
- funding gaps.

## **2.5 Myanmar**

Dr. Aye Aye Mon, Programme Officer, UNICEF Yagon presented the PMCT programme with a special focus on infant feeding options. PMCT was first initiated in Myanmar in February 2000 by conducting an assessment for the readiness of PMCT in two pilot project sites, Tachileik and Kawthaung. The actual implementation began in December 2000. The following are the components of Myanmar PMCT programme:

- Strengthening of Primary Prevention through lifeskills programme, in-and out-of-school youth, STD care and management, linkages with condom promotion
- Provision of VCCT
- Provision of ARV (nevirapine) for mother and baby pair
- Improving obstetric and postnatal care, and
- Counselling on infant feeding practices and improving birth spacing (through UNFPA)

As 80% of deliveries are taking place at home, Myanmar PMCT programme is tailored for a community-based approach. PMCT services are made available at the Rural Health Center (RHC) and the Sub-Health Centre (RHSC) levels. The midwives from these health centres are trained to provide counselling (pre, post and infant feeding), drawing the blood for testing at the township hospital, establishing a referral network including partnership arrangements addressing other HIV prevention and care services.

### **Infant feeding Options**

Breastfeeding is a tradition in Myanmar and prolong breastfeeding is the norm. Most women breastfed till the child is one to two years old. According to the statistics, 89% of women are still breastfeeding at 12 months, 67% at 20 months and breastfeeding up to 3 years is not uncommon. However, rate of exclusive breastfeeding is very low. Only 16% are exclusively breastfed at 0-3 months as 40-50 percent women introduced complementary feeding before the child is 4 months old.

A pilot study to assess the infant feeding practices was conducted at two different sites in mid 2002. In the preliminary findings, it was found that most mothers

introduce water, rice gruel, mashed rice with salt when the baby is at 4 months, feeding fruits and vegetables at 6 months and cows milk, eggs, meat and fish at 8-9 months.

Regarding the weaning practices, mothers usually stop breastfeeding the child abruptly at 18-24 months. The mothers in the study said that they have never heard of any mother who does not breastfeed their baby. The mothers believed that the expressed breast milk is not clean and could be contaminated. The study also revealed that wet nursing is not common.

### **Constraints**

No other VCT services are available except the ones established through PMCT programme and the community is still quite wary to use these VCT services. Thus, the acceptance of VCT among pregnant women is still low.

### **Future Plans**

Myanmar has planned to carry out the following activities in the next 12 months to beef up the implementation:

- Intensify advocacy, social mobilization and communication efforts
- Form national PMCT taskforce
- Strengthen partnership with partners to establish strong linkages between PMCT and birth spacing
- Advocate for exclusive breastfeeding for women of unknown status (about 98%) and for those women who are known to be not infected with HIV (97.5%)

## ***2.6 Thailand***

(1) Dr. Soisaant Sethavanich from the Bureau of Health Promotion, Department of Health, Ministry of Public Health presented the "Evaluation of PMCT Programme: The Opportunities and Constraints". The evaluation focused specifically on VCT in the context of PMCT in region 3 and region 6, conducted in October 2000.

She first briefly explained the gradual process of integrating VCT into the PMCT programme in Thailand. VCT was first introduced in STD clinics, anonymous clinics and hospitals in 1990. In 1994, it was integrated into ANC with an additional feature, counselling on formula feeding for HIV positive mothers. In 1998, counselling on zidovudine was added. In 2000, a complete integrated curriculum for VCT, antenatal care for HIV infected pregnant women, short course ZDV and formula feeding have become the essential components of Thailand National PMCT programme.

To improve HIV related counselling services, an evaluation to assess the implementation, effectiveness, acceptability and quality of HIV counselling services in antenatal care and maternal child health services was conducted in region 3 & 6 in October 2000.

The following table provided some demographic and HIV/AIDS situation of these two regions:

	<b>Region 3</b>	<b>Region 6</b>
Location & no. of provinces	7 provinces, central Thailand	7 provinces, NE - Thailand
Population	3.8 million	7.3 million
HIV prevalence in ANC	2.98%	1.4%
Births per year	50,000-60,000	90,000 - 100,000

### **Evaluation Methodology & Tools**

By using systematic random sampling, 19 hospitals comprising of 1 MCH, 3 Regional Hospitals, 3 General Hospitals and 12 District Hospitals were selected. The purposive sampling further selected, 82 counsellors, 51 pregnant women at pre-test counselling, 75 HIV negative pregnant women and 54 HIV positive women at post-test/on-going counselling. Interviewing, Observation and checking of records were undertaken.

### **The following table summarizes the evaluation results of the two regions (10/1999 to 4/2000)**

	<b>Region 3</b>	<b>Region 6</b>
Women who gave birth	55,505	73,365
With ANC	52,968 (95%)	71,984 (98%)
With HIV test result	51,171 (92%)	58,501 (81.3%)
HIV positive	1,075 (2%)	493 (0.8%)
Took AZT	476 (44%)	264 (54%)

Regarding service delivery, all hospitals (19/19) provided VCT at ANC. 12 out of 19 hospitals provided VCT during labour for those who never registered for ANC and 15 out of 18 hospitals provided intrapartum and postpartum ZDV for unattended ANC group.

To assess the skills of the counsellors, training component of these counsellors was also evaluated. 73% were trained on basic HIV counselling, 49% received HIV/MCH training and 45% were trained on PMCT. The counsellors also expressed that they need more training on PMCT area, followed by HIV/AIDS related clinical training.

Regarding the duration and workload of the counsellors, it ranged from 2 months to 8 years with a mean of 30 months. 1 to 8 hours each day with a range of 1 to 30 clients were seen per day by these counsellors. The majority of the counsellors, 82% of them wanted to continue with the counselling work, while a few, 5% found counselling too stressful and 2% of them wanted to move to other jobs.

The clients expressed that the content of the pre-test counselling is useful for them, and that there is adequate time for questioning and clarifying. The clients were also very satisfied with individual post test counselling sessions and said to be very informative.

The exit interviews to pregnant women, following pre-test counselling was also evaluated. Over 80% of women said that the information and the time given were adequate. 31% women wanted to ask additional questions while 12% of women were

not satisfied with their counsellors. Nearly all women said they will recommend VCT to other friends or relatives when they become pregnant.

On the exit interviews at post-test counselling, it was found that 70% of HIV (-) women and 80% HIV (+) women had the same counsellor for pre and post test sessions; over 80% of both HIV positive and negative women were satisfied with the time allotment and on information provided to them. However, 7% of HIV (-) women and 2% of HIV (+) women were not satisfied with their counsellor.

More HIV (-) women disclosed their status to their partners, compared to the HIV positive women (90% to 70%). Higher number of the Partners of HIV negative women consented for HIV testing.

As free infant formula was provided to HIV positive mothers for one year by the government, over 95% of HIV (+) women have opted for formula feeding. Among HIV negative pregnant women, over 50% of them were breastfeeding, about 30% were giving mixed feeding to their babies and only 10% of them were feeding formula.

Higher percent of HIV (+) women chose for tubal ligation (47% to 30%) for family planning, while more HIV (-) women opted for pills and injectables indicating that HIV positive women preferred for permanent and long term family planning methods.

Financial difficulty was cited as the highest problem (62%) that HIV (+) women encountered, followed by the health problems (24%). Relationship difficulties with husband or family accounted for less than 10%.

Dr. Sethavanich concluded that the success of PMCT programmes in Thailand is due to:

- Having a good health infrastructure
- High coverage of ANC, and
- High literacy rate of population.

Dr. Sompit Rugseree, Director, MCH Region 6, Khon Kaen followed with the presentation on "The follow-up mechanism to provide care and support to mothers and infants in the community".

In Thailand, MTCT has already infected 30,000 children, caused 7,500 AIDS cases and has increased the under 5 mortality. The incidence of mother-child HIV infection in Thailand is as follows:

- 900,000 women give birth annually,
- Of an estimated 250,000 HIV (+) reproductive aged women, some will become pregnant.
- 13,500 children will be born at risk for HIV annually and from that,
- 4,050 HIV-infected children are born annually.

### **3. Presentations by Technical Resource Persons**

#### **3.1 PMCT +, The Opportunities and Plans Underway**

The MTCT-Plus Initiative provides continued HIV treatment and care to mothers, partners and their children. It builds on established PMCT programmes and extends hope to these mothers and their families.

Dr. Gonzague Jourdain from Perinatal HIV Prevention Trial (PHPT), Thailand discussed the MTCT plus programme being experimented as a clinical trial by PHPT. He first presented in details, the timing of vertical transmission, the efficacy of PMCT with different drug regimens and infant feeding choices and the positive impact of PMCT programme, proven by the decreasing trend of pediatric AIDS in Thailand.

PMCT has provided an opportunity to prevent HIV in the family, to do couple counselling in preventing HIV transmission, to provide prophylaxis on Opportunistic Infections (OI), to provide ARV treatment to mother/father and child, and to gain experience in ARV treatment.

Due to the recent advancement in efficacy of OI prophylaxis and ARV, and the dramatic reduction of the cost of ARV drugs, PMCT + is now possible. However, to move forward from PMCT to PMCT +, it is essential to have access to VCT. Without knowing the HIV status, PMCT + services will not be accessible.

#### **The followings are the principles of PMCT + initiative:**

- The target population for PMCT plus are HIV pregnant women, their infants and their partners.
- About a quarter of HIV pregnant women have CD4 count of less than 250 and require prophylaxis of opportunistic infections and ARV treatment. The same principle applies for their partners.
- Half of the infected infants need ARV before one year of age.
- Asymptomatic women and/or their partners with CD4 count of more than 250 also need to be monitored continuously to provide intervention immediately when it becomes necessary.

Dr. Gonzague then discussed on PCP prophylaxis for immuno-compromised women, for infants of infected women and the threat of PCP during pregnancy and to infants. PMCT + or provision of anti-retrovirals programmes are on-going in some developing countries. One example is Brazil and by providing ARV therapy to all HIV/AIDS patients reduced AIDS related mortality by 40% - 75%, morbidity by 60% to 80% and reduced hospitalizations by 85%. By averting 358,000 people from being hospitalized, the country has saved US\$ 1.1 billion per year (Jorge Pinto, PACTG, Brazil).

Even in developed countries there are still room for improvement in this area regarding the time of initiation, combination of regimens, adherence, close and uninterrupted monitoring for efficacy and safety, treatment interruption and in the area of immune therapy. There is also a strong need for operational research.

### **From PMCT to PMCT+, PHPT Experience**

PHPT programme has covered 37 hospitals. 300 immunocompromised mothers after delivery and their infected children are receiving ARV therapy since September 1999. The services include prevention of O.I(s), administration of ARVs (d4T, ddI), monthly follow-up visits and CD4 counts at every six months. The following is the result of the programme:

- Number of women - 231
- Women on dual therapy - 229
- On follow-up - 133
- Withdrawn from treatment - 27 (12%)
- Died after enrollment - 14 (6%)
- Lost to follow-up - 51 (22%)
- Discontinued (CD4 > 500/mm<sup>3</sup>) - 7 (3%)

In conclusion, Dr. Gonzague emphasized that:

- ARV therapy is efficient and well tolerated in patients who are compliant to follow-up
- ARV therapy can be implemented through MCH system
- PMCT and PMCT + are a feasible and visible strategy to reduce the impact of AIDS
- Scope may be limited, but impact is not.
- Accept that programmes will start small, but not necessarily to stay small
- Pilot programmes are usually created in favourable environment and it is necessary to build a strong foundation to overcome obstacles.

### **3.2 Children Living with HIV/AIDS**

Dr. Mieke Ponnet from Medecins sans Frontieres, MSF (Belgium) based in Thailand presented the efforts of MSF in treating HIV infected children. MSF is providing home-based care to HIV positive adults and children, focusing on communicating them about HIV while addressing their social and medical problems.

Communicating children about HIV and AIDS is a very delicate issue and MSF is focusing on four specific areas in providing messages across to the children: (1) telling the diagnosis, (2) children and death, (3) children and medicines (HAART), and (4) children and sexuality. A Devimon fairy tale story book with full of attractive pictures was developed to help children understand about health, the importance of taking medicines regularly and on staying healthy by having nutritious food. Children aged 7-13 are targetted for this communication effort.

The Devimon fairy tale book was developed and is being tested to counsel children on one to one basis, reading them more than once, with questions at the end to assess their reactions and understanding. It is designed to be used in the hospitals, PLWHA groups and NGOs. It has been field tested already but more research is planned before using it on a large scale.

In addition to getting young children understand on being infected with HIV, a life skills training, communicating about sexual health, tailored to be suitable for the following groups of children are also in process:

- 7-10 years old
- age 10+ (but physically immature), and
- teenagers

The activities include (1) human development, (2) relationship, (3) personal skills, (4) sexual behaviour and health, and (5) society and culture.

MSF has also discussed with the appropriate education authorities providing interactive training to the teachers that will encourage them to support to children infected with HIV in their schools.

Dr. Ponnet then went into details the HAART (Highly Active Antiretroviral Therapy) for children. The HAART could be defined as taking 3 or more drugs in specific combination to obtain long term suppression of the virus. By being on HAART, an HIV (+) person will have less opportunistic infections, have a longer life and better growth and development than a HIV positive person not on HAART.

The cost of HAART for children with triple drug therapy (3TC + D4T - NVP) for a child of 10 kg is estimated as follows in Thailand:

• 3TC 150mg 1/2 tab BID	300 baht/month
• D4T 15mg 1 caps BID	150 baht/month
• NVP 200mg 1/2 tab BID	450 baht/month
<b>Total for 1 month</b>	<b>900 baht (US\$21)</b>

If the drug combination of AZT + 3TC + EFV is used, it will cost baht 1970 per month or US\$45.

In conclusion, Dr. Ponnet reemphasized that although there is not much experience and there is a room to build up the confidence on this arena, still Children living with HIV can be treated and MSF is working hard on it.

### **3.3 US CDC Global AIDS Programme**

Ms. Mary Culnane, US Centres for Disease Control and Prevention (US CDC), Thailand MOPH briefed on HIV/AIDS Initiatives and PMCT programmes supported by CDC in this region.

#### **Global AIDS Programme (GAP)**

In this region, Cambodia, China, Thailand and Viet Nam are covered by GAP. The GAP Objectives are to:

- Reduce HIV transmission through sexual, mother-to-child, and blood transfusion (primary prevention)
- Improve care and treatment of persons living with HIV/AIDS and related infections (Care, Support and Treatment)



- Strengthen national capacity to collect and use surveillance data and managing national HIV/AIDS programmes (Surveillance and Infrastructure Development).

In the context of the above-mentioned three categories, the programme design is dictated by the specific needs identified by the country and contributions of other partners.

Under Primary Prevention, the following components are supported by CDC:

- VCT
- PMCT
- Blood safety
- STD management and prevention
- HIV prevention among youth
- National mobilization campaigns
- Public-private partnerships
- Preventing HIV transmission in IDUs
- Behavioural change communication

Under *Care, Support and Treatment component*, prevention and care for TB and other OIs, palliative care for AIDS cases and appropriate use of ARVs were addressed. *Surveillance and Infrastructure Development* component covers the areas of HIV/STD/TB surveillance, laboratory support for HIV/STD/TB/OI, monitoring and evaluating prevention programme, establishing information systems and training activities.

At country level, CDC/GAP is working with MOH, National AIDS Programme, and in the United States with USAID, HRSA and NGOs. Among UN agencies, UNAIDS secretariat, WHO, UNICEF, UNDP, UNFPA and World Bank are the partners to CDC together with bilateral international donors, local and regional organizations.

### **Achievements to-date**

CDC staffs are in place at 17 of the 24 GAP countries, and the process is underway to assign staff to the remaining countries. As of June 2002, 18 technical strategies were developed and 22 country programme assessments were conducted. In addition, 17 GAP countries have developed the respective country programme plans and the remaining 7 countries are in the process of developing their plans.

### **GAP PMCT**

At global level, CDC has formed a partnership with UNICEF, UNAIDS and WHO on PMCT in addition to the Ministry of Health, FHI, Population Council, Elizabeth Glaser Pediatrics AIDS Foundation, World Bank, NGOs, CBOs and also with pharmaceutical companies.

GAP PMCT technical strategies include, VCT at ANC, provision of short-course ARV prophylaxis (ZDV, NVP, ZDV/3TC) to women with ANC, and providing post-exposure prophylaxis to women without ANC. To minimize breastfeeding

transmission risk, replacement feeding from birth was recommended to women who are tested HIV positive (if it is safe, feasible, acceptable and affordable). Women who have opted for breastfeeding are counselled for early exclusive breastfeeding with early weaning.

In collaboration with MOH, CDC supported the PMCT interventions to:

- Be Integrated within MCH programmes
- Strengthen antenatal care
- Promote the health of the mother
- Enhance HIV primary prevention efforts in the community
- Prepare for going to scale, and
- Monitor and evaluate against the defined set of indicators.

Ms. Culnane then elaborated on GAP - PMCT programme activities in Thailand that are being implemented in collaboration with Thai Ministry of Public Health, UNICEF and the Thailand MOPH-US CDC Collaboration (TUC). TUC is supporting operational research activities in Region 7.

In one of the CDC supported PMCT programmes, women who have enrolled in ANC requested more for HIV testing (94%) than those who had no ANC (74%). The same pattern follows for ZDV administration.

	ANC	No ANC
No. of women	589,863	20,683
HIV test	94%	74%
ZDV administration	77%	25%

From 1998 to 2001, GAP programme in Thailand has gradually expanded its scope of activities. To the 1998, pilot AZT implementation programme in Region 7, HIV outcome monitoring system and the national monitoring system were added in 2000. In 2001, PMCT training and care for HIV infected mothers and family were again added.

### **Expanding HIV Care and Treatment for Families (ECAT)**

The objectives of the ECAT is to develop and evaluate a provincial PMCT programme through establishing:

- A system for monitoring the health status of asymptomatic and symptomatic HIV+ women, their HIV+ partners, and their HIV+ children
- A network of health care providers to provide care and to refer programme participants as appropriate.

Although there are still many challenges ahead with ECAT, the expected outcome is worthwhile. ECAT will make possible to:

- Develop a comprehensive care and treatment referral/network system in the pilot provinces
- Deliver comprehensive care and treatment interventions successfully to target populations
- Strengthen provincial capacity, and

- Identify lessons learned from pilot implementation.

Ms. Mary Culnane concluded that the success of Thailand PMCT programme is due to strong political commitment, integrating PMCT into MCH, strong training and planning process, commitment to and honest with monitoring and evaluation, and linkages between prevention and care.

### **3.4 Cost Effectiveness of the PMCT Programme**

Dr. Bernard Fabre-Teste, HIV/AIDS Regional Advisor from WHO Western Pacific Regional Office (WPRO) discussed on “The three-pronged strategy: Elements of economical evaluation”. He first elaborated in details what are the activities encompassed in each Prong. Then he presented the socio-economic consequences of HIV/AIDS epidemic.

In Africa where HIV/AIDS accounts for about 20% of all deaths and disability-adjusted life years, life expectancy in the worst affected countries is reduced by more than 10 years (Creese A et al. Lancet 2002). No such analysis has done for Asia yet.

To calculate the cost effectiveness (CE) of each programme the following has to be considered:

- The cost of all programmes developed in each strategy
- The benefits in term of number of cases and deaths avoided

The best strategy in terms of CE is the strategy that could prevent the larger number of cases or deaths with the minimum of resources. CE also take into consideration the number of DALYs gained or by DALY’s cost.

To analyze CE of HIV is quite different from other programmes such as immunization or water and sanitation. It is much more complex as many components and elements are involved.

The following challenges could be defined to evaluate CE:

- Evaluation of comprehensive costs
- Evaluation of the number of prevented cases and deaths (surveillance and estimation)
- Evaluation of the comprehensive benefits
- Evaluation of real part of benefits that attribute to a strategy in the context of multiple interventions and disease evolution.

Most of the CE studies on HIV/AIDS specifically looked at one specific component of the programme at a time. For example, CE of condom promotion and distribution programme in Kenya conducted in 1999 shows that the cost of one HIV infection prevented is US\$276 and Cost by daily gained is US\$ 12.4. A universal coverage with a single dose of Nevirapine in Uganda in 1999 calculated that cost by HIV infection prevented is US\$143 while cost by DALY gained is US\$5.

As PMCT programme encompassed a comprehensive range of all HIV/AIDS prevention and care components, to have a fair idea of CE on PMCT, we need to calculate the cost of each element in all three prongs to get the sum of the cost of a

PMCT programme. There has never been any study done on this. However, the principle is that if we could manage to get the CE of each component in prong 1, when a country add prong 2, interventions for prong 1 continue with the same cost. When a country add prong 3, interventions for prongs 1 & 2 continue, with their costs.

Therefore, a strategic approach for HIV/AIDS prevention and care is:

- For a low prevalence country, prong 1 (primary prevention) is essential and must be a priority
- Prongs 2 & 3 could be introduced progressively after the development of pilot projects and the sustainability of large scale implementation is assured.
- Access to prong 3 should be guaranteed for humanitarian reasons for HIV-infected women and families.

For a high prevalence country,

- prong 1 is essential and priority
- Prongs 2 & 3 should be developed for large scale implementation in whole country, however with a special focus to women in high risk situations.
- VCT is not only essential for PMCT but need to be the key entry point for all 3 prongs.

Dr. Ying Ru Lo from WHO South East Regional Office followed with her presentations on “Efficacy, Cost and New Data from Clinical Trials”. Her presentation focused on (1) review data from pivotal PMCT trials, (2) Thai Red Cross ARV donation programme and (3) new data from PMCT clinical trials. Please refer the annex 3 for details of her presentation.

In summary:

- ARV regimens for PMCT depend on policy and resources of individual countries
- It is necessary to treat mother and infant pair
- Treat infant more aggressively (e.g. long ZDV) if ARV started to mother is in late pregnancy
- Maximum viral suppression equals maximum reduction in transmission
- Ideal goal is undetectable viral load
- Treat pregnant women the same as everyone else with exceptions on certain medicines (d4T/ddl, efavirenz)

#### 4. Conclusion

The UN Regional Taskforce meetings adjourned on the late afternoon of 25 June 2002. The next taskforce meeting is planned tentatively to be in India in first quarter of 2003. A field trip to PMCT programme sites will also be organized. Dr. P.L Joshi will confirm after obtaining the approval from the Government of India.



## **Annex 1: Agenda of the Meeting**

**UN Regional Taskforce Meeting on  
Prevention of Mother to Child Transmission  
Beijing, 24-25 June, 2002**

**The Agenda**

**Monday, 24 June 2002**

- 08:30-09:00 Registration of participants
- 09:00-09:30 Opening Session:  
Welcome address - Dr. Yang Qing, Deputy Director, PHC/MCH  
Opening address – Ms. Siri Tellier, Chairperson, UN Theme Group on HIV/AIDS  
Address - Dr. Ray Yip, Chief, Health and Nutrition, UNICEF Beijing
- 09:30-10:00 Objectives of the meeting, review of agenda, Thazin Oo  
Introduction of participants and resource persons
- 10:00-10:30 Coffee break
- 10:30- Country Presentations
- 10:30–10:50 China, with special focus on PMCT plans for Henan province and partnership arrangements between different sectors, Dr. Zhang Fujie, Director, National Centre for AIDS/STD Prevention and Control (NCAIDS)
- 10:50-11:10 Discussion
- 11:10-11:30 Cambodia, with special focus on Voluntary Counseling and Testing as primary prevention tool for pregnant women  
Prof. Koum Kanal/Etienne Poirot
- 11:30-11:50 Discussion
- 11:50-12:10 India, with special focus on Scaling up PMCT program and cost implications  
-Dr. P.L.Joshi/Dr. Anne Vincent
- 12:10-12:30 Discussion
- 12:30-13:30 Lunch
- 13:30-13:50 Myanmar, with special focus on Infant Feeding Options in a resource limited context. Dr. Aye Aye Mon
- 13:50:14:10 Discussion
- 14:10-14:30 Papua New Guinea, with special focus on how to integrate PMCT into the national HIV/AIDS medium term plan and donor support, Dr. N. Moiya
- 14:30-14:50 Discussion
- 14:50-15:10 Thailand, with special focus on the follow-up mechanism to provide care and support to mothers and infants in the community, Dr. Sompit Rakseree
- 15:10-15:30 Discussion
- 15:30-16:00 Coffee Break

16:00-16:30 ARV regimens for PMCT. Efficacy, cost and new data from clinical trials.  
Dr. Chris Duncombe, HIV-Net, Thai Red Cross AIDS Research Centre

16:30-17:00 Discussion

17:00 End of Day 1

---



## **Tuesday, 25 June 2002**

- 09:00-09:30 MTCT+, The opportunities and plans underway, Dr. Gonzague Jourdain, Perinatal HIV Prevention Trial, Chiang Mai
- 09:30-10:00 Discussion
- 10:00-10:30 CDC supported PMCT programs in the region, the existing and future plans, Ms. Mary Culnane, CDC
- 10:30-11:00 Coffee Break
- 11:00-11:30 Discussion
- 11:30-11:50 Children living with HIV/AIDS can be treated! Dr. Mieke Ponnet, Medecins sans Frontieres-Belgium, Thailand
- 11:50-12:10 Discussion
- 12:10-13:10 Lunch
- 13:10-13:30 Evaluation of PMCT programs, the Opportunities and Constraints. Dr. Soisaang Sethavanich, Thailand
- 13:30-13:50 Discussion
- 13:50-14:15 Prevention of HIV in infants and young children, “The three-pronged strategy”, Elements of socio-economical evaluation, Cost effectiveness of Prong 3. Dr. Ying Ru Lo, Dr. Bernard Fabre-Teste, WHO – SEARO/WPRO
- 14:15-14:25 Discussion
- 14:25-14:45 PMCT related issues in the region. PMCT experience exchange program. Thazin Oo
- 14:45-15:00 Discussion
- 15:00-15:15 Synthesis of the meeting. Agreement on next PMCT taskforce meeting. Thazin Oo
- 15:15-15:30 Closing session
- 15:30 Coffee & Tea

## **Annex 2: List of Participants**

**UN Regional Taskforce Meeting on Prevention of Mother-to-Child Transmission  
24-25 June 2002, Beijing**

<b>Country Team</b>	<b>Name of participants</b>	<b>Agency/Organizations</b>	
<b>1. Cambodia</b>	1. Prof. Koum Kanal	Deputy Director, NMCH	
	2. Dr. Etienne Poirot	HIV/AIDS Project Officer, UNICEF	
<b>2. China, Beijing</b>	3. Dr. Ray Yip	Senior Project Officer, H/N, UNICEF Beijing	
	4. Dr. Liu Bing	Project Officer, UNICEF Beijing	
	5. Dr. Zhang Fujie	Director, NCAIDS	
	6. Dr. Sun Xinhua	Division Chief, Disease Control Dept., MOH	
	7. Dr. Fan Qinghua	Beijing Family Planning Institute	
	8. Dr. Wang Ailing	Beijing Family Planning Institute	
	9. Dr. Shen Jie	Director, NCAIDS	
	10. Dr. Fan Qingbo	Beijing United Hospital	
	11. Dr. Wang Ling	Ditan Hospital	
	12. Dr. Wen Yi	Consultant, NCAIDS	
	13. Dr. Wang Bin	MCH Dept., MOH	
	14. Dr. Song Li,	MCH Dept., MOH	
	15. Dr Junko Otani	Medical Officer, WHO	
	Henan, China	16. Dr. Wang Zhe	Deputy Director, Henan CDC
		17. Dr. Chen Wei	MCH Dept.
Shenzhen, China	18. Dr. Feng Tiedian	Beijing University Hospital	
Yunnan, China	19. Dr. Wang Yunsheng	Deputy Director, Yunnan Provincial HIV/AIDS Office	
	20. Dr. Wang Jun	Deputy Director, MCH Hospital	
Sichuan, China	21. Dr. Luo Yuanxiu	Director, Bazhong City MCH Hospital	
<b>3. Myanmar</b>	22. Dr. Aye Aye Mon	Project Officer, PMCT, UNICEF	
<b>4. Papua New Guinea</b>	23. Dr. Ninkama Moiya	Acting Director, National AIDS Council Secretariat	
<b>5. Thailand</b>	24. Dr. Sompit Rakseree	Director, Maternal and Child Health Region (6) Khon Kaen	
	25. Mr. Scott Bamber	Project Officer, HIV/PMCT, UNICEF	
<b>6. India</b>	26. Dr. Anne Vincent	Safe motherhood/PMCT Project Officer, UNICEF, India	
	27. Dr. P.L. Joshi	Joint Director, National AIDS Control Organization, New Delhi	
<b>Regional Teams</b>			
UNICEF/EAPRO	28. Ms. Thazin Oo	Regional Project Officer, HIV/AIDS/PMCT	
WHO, WPRO	29. Dr. Bernard Fabre-Teste	STI and HIV/AIDS Regional Advisor	
WHO, SEARO	30. Dr. Ying-Ru Lo	Medical Officer, HIV/AIDS	
UNAIDS/SEAPICT	31. Mr. Paul Toh	Programme Advisor, GIPA	
	32. Ms. Fan Yuhua	UNAIDS Beijing	
<b>Technical Institutions</b>	33. Ms. Mary Culnane	Chief, Perinatal, Pediatrics & Family Section, CDC	
	34. Dr. Gonzague Jourdain	Technical Expert, Perinatal HIV Prevention Trial, Thailand	
	35. Dr. Chirstopher Duncombe	Technical Specialist, HIV-Net	
	36. Dr. Soisaag Sehtavanich	Director, MCH, Region 10 Chiang Mai	
	37. Dr. Mieke Ponnet	Medical Officer, MSF Belgium	
<b>Rapporteur</b>	38. Ms. Amourence Lee	Consultant, H/N Section, UNICEF Beijing	
<b>Secretary</b>	39. Ms. Yu Xiufeng	Secretary, H/N Section, UNICEF Beijing	



## Annex 3: Presentations

1. [PMCT Prevention in Myanmar – Dr. Aye Aye Mon](#)
2. [Antiretroviral Regimens for PMCT – Dr. Chris Duncombe](#)
3. [" The three-pronged strategy “ Elements of economical evaluation - Dr. Bernard Fabre-Test, Regional Advisor HIV/AIDS, WHO WPRO](#)
4. [PMCT Program in China - Fujie Zhang MD, Director, Dept. Treatment and Care, National Center for STD/AIDS Prevention and Control](#)
5. [MTCT+, the Opportunities and Plans Underway - Gonzague Jourdain, MD, Harvard School of Public Health, Perinatal HIV Prevention Trial, Thailand](#)
6. [Prevention of Mother-To-Child Transmission of HIV in India - Dr. P. L. Joshi – NACO & Dr. Anne H. Vincent - UNICEF India](#)
7. [CAMBODIA Experiences PMTCT and VCCT for Primary Prevention - Prof KOUM KANAL, Director of NMCHC & Chairperson of PMTCT Technical working Group](#)
8. [US CDC Global AIDS Program - Mary Culnane, MS, CRNP, Thailand MOPH – US Centers for Disease Control and Prevention](#)
9. [Children living with HIV/AIDS can be treated! - Medecins sans Frontieres-Belgium, Thailand](#)
10. [PAPUA NEW GUINEA - Moiya](#)
11. [" The three-pronged strategy “ PMTCT WHO Concept - Elements of economical evaluation - Cost effectiveness of Thailand PMTCT Public Health Programme](#)
12. [Evaluation of PMCT Programs: The Opportunities & Constraints, The Bureau of Health Promotion, Department of Health, Ministry of Public Health, Thailand](#)
13. [Mother to Child HIV Prevention Program in Thailand: The Follow-up Mechanism to Provide care and Support to mothers and Infants in the Community , Thailand - Sompit Rugseree MD.](#)
14. [PMCT Meeting Objectives – Thazin Oo](#)
15. [Prevention of HIV in infants and young children: “\*\*The three-pronged strategy\*\*” - Elements of socio-economical evaluation - Cost effectiveness of Prong 3 – Dr. Ying Ru-Lo](#)