Kingdom of Cambodia
Nation  Religion  King

Ministry of Health

Annual Report 2011

National Center for HIV/AIDS, Dermatology and STD
March 2012
Acknowledgement

It gives us a great opportunity to review the last year achievements of NCHADS’ program. The achievements are the outputs of our teams of dedicated staffs working in partnership with all partners and donors in the communities at provincial and national levels to implement and improve the quality of HIV/AIDS & STI Prevention and Care activities for the benefits of people of the Kingdom of Cambodia. I would like to thank all partners, donors and policy makers who have been dedicated their commitment towards the success of HIV/AIDS Prevention, Care and Treatment Programme in the country.

When we reviewed what has been achieved, we are motivated to continue striving, to set the overall goals, objectives, and target for the next coming year to meet with the various changing needs of people and to deal effectively with changing of the epidemic pattern of different target groups based on the latest research findings in their communities.

We hope that you will understand our last year achievements deeper as you read further of this report.

Date...30th March, 2019

Dr. Ly Phaln Sun
Deputy Director of NCHADS
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A. GENERAL REPORT:

1. BACKGROUND:

1.1 Introduction:
This report describes the achievement of program implementation on HIV/AIDS and STI prevention, care, support and treatment during the year 2011. The report is intended to aggregate data and information collected from all OI/ART, VCCT, Family Health Clinics, HBC, and PMTCT sites from the whole country to be represented as the National Comprehensive Report for the health sector response to HIV/AIDS and STI in Cambodia. The following sections reported the main three program areas implemented for this year that are including: A) General Report related to Programme management and implementation; B) Results from health service deliveries; C) Financial Report for describe the financial disbursements against the yearly budget plan; D) Procurement of OI/ARV Drugs, E) Challenges etc.

1.2 HIV/AIDS Epidemic:

Cambodia appears to have shown what is emerging as a classic Asian pattern for HIV. After HIV was first found in the country in 1991, there was a sharp rise in infection rates, fuelled largely by a booming sex industry, between 1995 and 1998, when prevalence nearly doubled from 1.2% to 2% in 2008. Then the prevalence was further decreased from 0.9% in 2006 to 0.8% in 2011. Along with the decline in HIV prevalence among the general population, it is noted that most-at-risk populations (MARPS) such as entertainment workers, drug users and men who have sex with men (MSM) are remain the target group that required special attention in the provision of prevention, care and treatment services. According to the results of NCHADS-BSS in 2010, the trend of consistent condom use rates with clients reported by entertainment workers with clients are remained high at 89.2% from 2003 to 2010; however, the consistent condom use rate with sweethearts remained low at 50% during the same period.

2 NCHADS MANAGEMENT SYSTEM

2.1 Planning and Monitoring Cycle in NCHADS:

The Comprehensive Annual Operational Work Plan 2011: The Planning Workshop for 24 provinces was conducted as the part of the Annual Coordination Workshop held in October 2010 in order to review progress made during first 3 quarters, to provide the updates of technical concepts and strategies or Guidelines in the programme implementation, and to make the final review of the work plan for 2011. At this meeting, Annual national and provincial targets were set. The result was the final draft of Annual Operational Comprehensive Plan for NCHADS Programme in 2011, which incorporated with many of the inputs and expected outputs of partners working in coordination with PASP at provincial and national levels. This AOCP was also firmly grounded on the Ministry of Health Annual Operational Plan 2011, prepared for the HSSP. Finally, the NCHADS Annual Comprehensive Work Plan and budget plan including incentives for staff for 2011 has been approved. It has the total budget of $19,957,083 that is consisting of 10 different funding sources to implement HIV/AIDS and STI program at national and provincial levels.

2.2 Signing of LoAs: during the year 2011, NCHADS signed the Letter of Agreement with the following implementing partner:
1. Men’s Health Social Service NGOs for the Prevention of HIV/AIDS and impact of Using Drugs among IDUs and DUs from August 2009 to July 2012. Men’s Health Social Service has received funding from KHANA, PACT, FHI and PSI for HIV/AIDS, STI, IDU, DUs Prevention and condom social marketing among the Most at Risk Population (MARPs) such as Men who have Sex with Men (MSM), Entertainment Workers (EWs), Drug Users and Injection Drug Users (IDUs) in 09 provinces and municipality which consist of Phnom Penh, Battambang, Banteay Meanchey, Kampong Thom, Pursat, Kampong Chhnang, Kampong Speu, Pailin, and Prey Veng province from August 2009 to July 2012.

2. Agence d’Aide a la Coopération Technique-Pharmaciens Sans Frontière (ATCTED-PSF) from October 2010 to September 2012 for the implementation of STI/HIV Prevention and Care for Most at Risk Population (MARP): the SMART girl and M-Style Projects in Phnom Penh.

3. AFESIP-CAMBODIA from January 2010 to December 2014 for the implementation of STI/HIV Prevention Programme for the Entertainment Workers in 8 districts in Phnom Penh and 7 other provinces (Koh Kong, Rattanakiri, Stung Treng, Siem Reap, Oddor Meanchey, Banteay Meanchey, and Pailin).

2.3 Guidelines, Curriculum and Standard Operating Procedures (SOP):
During this year, NCHADS developed and revised several important Guidelines and Standard Operational Procedure such as:

1. Strategic Plan Strategic Plan for HIV/AIDS and STD Prevention and Care, 2011-2015, was revised and updated by each technical working group.

2. Since its launching in 2003, the Comprehensive Continuum of Care (CoC) Framework for PLHIV, Cambodia has achieved the universal access target for HIV treatment, with over 90 percent of adults and children in need receiving antiretroviral therapy (ART). In July 2010, WHO issued new revised global guidelines on antiretroviral treatment for adults and adolescents to improve the quality of ART based on new medical evidence. The WHO recommendations focus on early diagnosis, early initiation of antiretroviral therapy, selection of less toxic antiretroviral regimens, and strategic laboratory monitoring in individuals living with HIV.

Based on this review, the guidelines were revised not only stem from recent WHO recommendations but also build on the vast experience acquired over the course of the past ten years by NCHADS and all its partners, including government, NGOs and donors. Through a series of AIDS care subcommittee meetings, staff from the NCHADS, the National Hospital as well as representatives from government departments, medical doctors, and other NGO partners to revise and develop these guidelines and documents as following:

- National Guidelines for the use of Paediatric Antiretroviral Therapy in Cambodia.
- National Guidelines for the Prevention and Treatment of Opportunistic Infections among HIV-exposed and HIV infected Adults and Adolescents.
- National Guidelines for the use of Antiretroviral Therapy in Adults and Adolescents in Cambodia.
• Training Curriculum on Antiretroviral therapy and Treatment of Opportunistic Infection for Children and Adult.

3. Concept note on increasing the access to HIV testing and Counselling for these groups (EWs and MSM) through community/Peer Initiated Testing and Counselling (C/PITC), 2011 to 2015, was developed by National Technical Working Group, and consulted with partners and implementers. This Concept Note (both in Khmer and English version) were approved by MoH and posted to NCHADS websites.

4. Standard Operational Procedure for Implementing the HIV Continuous Quality Improvement (CQI) for OI/ART services, was developed by National Technical Working Group, and consulted with partners and implementers. This SOP (both in Khmer and English version) will be finalized and submit to MoH for approval in year 2012.

2.4 Training/Workshop:
To improve the capacity building and strengthen coordination at the provincial and district levels, initial and refresher trainings, and coordination meetings were conducted to health staff based on the areas of strategic plan components such as:

- 2 sessions of refresher training to Outreach workers, Peer facilitators, Provincial support team on SOP for Continuum of Prevention to Care and treatment for Women Entertainment Workers in Cambodia;

- 3 sessions of Regional Coordination workshop on Continuum of Prevention to Care and treatment for Women Entertainment Workers in Cambodia with participated from Provincial HIV/AIDS and STI Program, STI clinic; Outreach workers, and Peer Facilitator and NGOs partners;

- 3 sessions of refresher training on Sexually Transmitted Infections (STI) and Reproductive Tract Infection (RTI) Case management with Laboratory support for EWs, and MSM,

- 5 sessions of Regional Network meeting for Health Care providers and Lab technician on Sexually Transmitted Infections (STI) and Reproductive Tract Infection (RTI) Case management,

- 2 session of initial training on Management of Opportunistic Infections and Anti-Retroviral Therapy for Clinicians and Paediatricians,

- 2 session of initial training on OI/ARV counselling for Clinicians and Paediatricians,

- 2 session of Refresher training on Management of Opportunistic Infections and Anti-Retroviral Therapy for Clinicians and Paediatricians,

- 2 session of Refresher training on OI/ARV counselling for Clinicians and Paediatricians,

- 3 sessions of Regional Clinician Network meeting on OI/ART Management,

- 1 sessions of Regional Paediatrician Network meeting on OI/ART Management,

- 2 sessions of Regional Home Based Care Network meeting,

- Orientation meeting for implement the Linked response approach for HIV/AIDS and Reproductive Health in 10 ODs,
- In collaboration with CNAT, twenty sessions of 2-days Orientation Workshop and Training of Three I's Strategy in 20 ODs

- In collaboration with NMCHC and supported from PSI, five sessions of 2-days Orientation Workshop and Training in Positive Prevention and Birth Spacing for OI/ART and Family Health Clinic Staff at Mong Ressey, Kampong Speu, Kampong Chhnai, Prey Veng and Siem Reap.

- One 1-day meeting on Quality Control for all VCCT was conducted at NIPH with 209 participants from all VCCTs

- 1 session of trainings on serology for HIV/STI testing including Syphilis screening, DNA, PCR for 16 Lab technicians

- 4 sessions of initial training on HIV/AIDS Counselling for 86 Counsellors for VCCT and for Linked Response programme

- 2 sessions of initial training on Laboratory for HIV testing for 39 lab technicians;

- 2 sessions of refresher training on HIV/AIDS Counselling for Counsellors and 2 session of refresher training on Laboratory for VCCT.

- 2 sessions of Regional Counselling Meeting and 2 sessions of Regional Lab technician meeting to share experiences

- 1 session of refresher training on Data Management,

- 2 sessions of Refresher training on Logistic Management and HIV test and OI/ARV drug quantification.

- 3 sessions of Regional meeting on Logistic and Supply Management to sharing the information on use of the report form, request form for drugs and reagents,

- Three 5-days training course on HIV/ADIS Programme management for OD coordinators with 90 participants from 45 ODs;

- Two 5-days training course on Build Capacity of management & leadership for PASP and NCHADS staff, which was held in Battambang and Takeo province;

- One Annual Review and planning workshop with 24 provinces and partners to develop work plan for year 2012 etc.

2.5 Management of GFATM-HIV-SSF grant:

NCHADS was continued to be one of the Principal Recipient (PR) to manage HIV/AIDS Component under the Global Fund SSF Grant which combine of 2 rounds; Round 7 phase 2 and R9 phase 1. Under this Grant, there are 22 Sub-Recipients (SRs):3 of them are new SRs and 19 others are existing SRs under the previous GFATM rounds. The 22 SRs are including: AHF, CHEC, CPN+, CRS, CWPD, FHI, FI, HACC, KHANA, MEDICAM, MoSVY, MSC, NAA, NCHADS, NMCHC, NPH, PSI, RHAC, SCA, SHCH, WOMEN, and WVC.

The program title is “Continued achievement of Universal Access of HIV/STI Prevention, Treatment and Care services in Cambodia”. There were 7 goals and 20 Objectives, which will implement by 22 Sub-recipients.

The SSF CAM-H-NCHADS grant was official singed on 25th March 2011. The final Budget for 1st commitment period January 2011 to 31st December 2013 is USD 85,288,879 and the official signed is USD 81,466,687 which included the budget commitment from R7 phase1, and then PR-NCHADS prepared to sign MoA with SRs in April and May 2011.
During Year 1 of implementation, the programme has shown significant achievements over the last period report July-December 2011.

By consolidating the reports submitted by all SRs, there are 8 impact and outcome indicators and 19 consolidated programmatic indicators are shown as following:

a. Among the 8 impact and outcome indicators, there are only 2 impact indicators that have the targets and need to be report in this year:

   a. Percentage of adults and children with HIV known to be on treatment 12 months after initiation of antiretroviral therapy which achieved 92.6% against the target 88% for Adult only, but the data not yet available for Children because only have data for 2 out of 33 pediatric sites since 29 sites do not have electronic databases since they don’t have computers and are not able to clean the data.

   b. Number and percentage of infants born to HIV infected mothers who are infected which achieved 13% (176) against target 10% (250).

b. With regards to programmatic performance, despite the late implementation of the grant (disbursement in Q2 2011) out of the 19 program indicators: 12 over-achieved (101%-168%), 4 almost achieved (82.97%), 2 underachieved (40% to 60%), and with 1 not having a target set in this year. Most treatment/health facility services were achieved or overachieved. Among the 2 indicators underachieved were: #1: “Number of IDU reached by needles/syringe program” (40%) and # 18”Number of data verification/supervision visits to sub-national level by NAA” (60%). (please see the Annual Report 2011 of HIV-SSF in annex 1).

2.6 Surveillance:

i  HSS 2010:
The result of HSS 2010 was disseminated in a public forum to all partners and provinces with explored the key findings and recommendation for policy makers and implementers for their future action and planning. The slide presentations (both in Khmer and in English) were posted in NCHADS website.

ii  SSS 2011:

- The protocol, Specimen collection form and field Guideline for SSS 2011 were developed and reviewed through technical working group.
- Developed the checklists for listing the target groups and conducted the situation assessment and listing the target groups for SSS 2011.
- The training for interviewers on Data Collection for SSS 2011 was conducted including: One 5-days Training on Data collection for 36 Interviewers and 22 counsellors, One 2-days Training on Data Collection for 44 lab technician and One 2-days Training on Data Collection for 39 Medical Doctors from 17 provinces (Kampong Cham, Prey Veng, Battambang, Siem Reap, Phnom Penh, Preah Sihanouk, Banteay Meanchey, Koh KOng, Pursat, Kandal, Kampong Thom, Kampong Chhnaing, Kampong Speu, Takeo, Preah Vihear, Oddor Meanchey and Pailin).

iii Monitoring of HIV Drug Resistance Early Warning Indicators:
To monitor and prevent the occurrence of HIV Drug Resistance, NCHADS has implemented program such as Surveillance of primary HIV DR transmission through threshold survey of recently infected people, Monitoring of secondary HIV DR occurring among patients on ART sentinel sites and the collection of Early Warning Indicators from ART sites. The Monitor of Early Warning Indicators has been
3 rounds of EWI were conducted which collected data from OI/ART sites, and since then the data have been collected annually. EWI data at ART sites are collected including ARV patient registered book, ARV patient records, computer database (if available), ARV drug records, inspection of the ARV drug storage condition in the pharmacy, Interview with clinicians and Interview with patients who are on ARV etc.

7 Early Warning Indicators for HIV Drug Resistance were defined to collect from all OI/ART sites:

- EWI#1: Percentage of months in which there were no ARV drug stock out;
- EWI #2: Percentage of months no expired ARV drug was found at ART site;
- EWI #2b: Percentage of months no emergency request for ARV drug was found at ART site;
- EWI #3: Storage conditions of ARV drugs;
- EWI #4: Percentage of patients started on standard recommended first line ART regimen;
- EWI #5: Percentage of patients not lost to follow up at 12 months after ART initiation;
- EWI #6: Percentage of patients still on first line regimen at 12 months after ART initiation;
- EWI #7: Proportion of patients who kept all appointment;

The Key finding results of each round of EWI were disseminated and feed back to all OI/ART Team, PAOs, PHD and partners for their future action and planning to improve the quality services, and survival of PLHIV. The slide presentations (both in Khmer and in English) were posted in NCHADS website.

- 1st round in 2008: the data from 16 OI/ART sites for Adults and 10 Paediatric sites were collected.
- 2nd round in 2009: 42 OI/ART sites for Adults and 25 Paediatric sites were collected.
- 3rd round in 2010: 35 OI/ART sites for Adults and 24 Paediatric sites were collected.
- And 4th round in 2011: 31 OI/ART sites for Adults and 20 Paediatric sites were collected.

B. RESULTS FROM SERVICES DELIVERIES:

1. HIV/AIDS prevention activities

In 2011, there were a total of 61 Family Health Clinics (32 specialized government STI clinics covering 21 of 24 province-cities (except Kandal, Mundulkiri province and Kep city and 29 NGO STI clinics; RHAC: 19 clinics, Marie Stopes: 6 clinics, MEC: 1 clinic and PSF: 1 clinic, Chhouk Sar: 2 clinic).

Of the 32 family health clinics, 32 (100%) are upgraded with laboratory support to perform RPR testing and basic microscopy. Of those, 32 labs are functioning. This laboratory support enables specialized clinics to use refined algorithms for the management of STIs in high-risk populations.

In addition to family health clinics, 210 health centers in 71 OD/21 provinces provide STI services using the syndromic approach. At these HCs, in 2011, 5,958 consultations for male patients and 41,375 for female patients were reported to the data management unit of NCHADS.
Of 4,568 male patients who having STI/RTI syndromes reported, 4,289 of those (93.9%) suffered from urethral discharges; 259 (5.7%) from Genital ulcers and 20 (0.4%) from Genital warts respectively. Of 39,243 female patients who having STI/RTI Syndromes reported, 20,525 of those (52.3%) suffered from vaginitis, 16,924 (43.1%) from cervicitis and vaginitis; 1,558 (4%) from PID, 156 (0.4%) from Genital ulcers and from genital warts 80 (0.20%) respectively. A total of 4,140 male partners and 8,811 female partners of STI patients were notified and treated for STI.

240,420 consultations were provided at a total of 61 specialized STI clinics (32 government and 29 NGO STI clinics, Among those consultations, 17,812 consultations were provided to male patients, 8,103 to MSM, 171,144 to low-risk women, and 43,361 to brothel entertainment workers (BEW) and non-brothel entertainment workers (NBEW) (1,472 for BEW; 41,889 for NBEW) of which 19,520 were monthly follow-up visits] (Figure 1).

The RHAC clinics attract mostly low risk women whereas the 32 government STI clinics are used mostly by brothel entertainment workers and non-brothel entertainment workers. Most MSM population visited MEC clinic in Phnom Penh city.

At the 61 specialized STI clinics, among the 13,605 male patients who having STI syndromes reported in this year, 12,180 (89.5%) got urethral discharges, 52 (0.4%) got anal discharges, 838 (6.2%) got Ano-genital ulcers, 451(3.3%) got Ano-genital warts, and 29 (0.2%) were inguinal bubo. Among the 1,897 MSM patients having STI syndromes, 1,319 (69.5%) suffered from urethral discharges, 83 (4.4%) from anal discharges, and 233 (12.3%) from ano-genital ulcers respectively.

At the 61 specialized STI clinics, among the 181,541 low-risk women having STI syndromes reported that 152,268 (83.9%) were treated for vaginitis, 26,778 (14.8%) were treated for cervicitis and vaginitis, 569 (0.3%) were PID, 1,391 (0.8%) were ano-genital ulcers and 535 (0.3%) were ano-genital warts.
During the one 2011, of the 586 BEW who attended specialized clinics for their first visit, 504 (86%) were diagnosed with a STI, including 179 (30.5%) with cervicitis. Among the 886 BEW who attended specialized clinics for monthly follow-up visits, 478 (54%) of those were diagnosed with a STI, including 231 (26.07%) with cervicitis. In 2011, of the 23,255 NBEW who attended specialized clinics for their first visit, 15,967 (68.7%) were diagnosed with a STI, including 6,350 (27.3%) with cervicitis. Of the 18,634 NBEW who attended specialized clinics for monthly follow-up visits, 7,928 (42.5%) were diagnosed with a STI, including 3,031 (16.3%) with cervicitis.

Of a total of 4,517 RPR tests were conducted in 2011 at the 32 government specialized STI clinics, and PSF and MEC clinics, 153 (3.4%) were positive.

During this year, specialized STI clinics have referred 8,941 patients to VCCT, 123 of HIV/AIDS patients (PLHA) to OI/ART services, 248 pregnant women to ANC, and 414 women to Family Planning Services. In the other hand, specialized STI clinics also received patients that were referred from the other services including 2,895 patients from VCCT, 627 of patients from OI/ART services, 251 pregnant women from ANC and 153 women from Family Planning services.

2. Comprehensive Care for people living with HIV/ AIDS (PLHA)

2.1. VCCT

The number of VCCT services has increased drastically over the last 11 years, from 12 sites in 2000 to 255 sites by the end of 2011 (Figure 2).

![Figure 2: Trend in number of VCCT sites from 1995 to 2011](image)

Of the current 255 VCCT sites, 226 are supported directly by the Government and 29 by NGOs (RHAC:19, Marie Stopes:4, MEC:1, Center of Hope:1, Institut Pasteur Cambodia:1 and Chhouk Sar Clinic : 2). There are 6 VCCT sites were stopped their activities in 2011 (RHAC 3 clinics, Marie Stope Koh Kong 1, PASP Battambang were moved to Battambang RH 1 and PASP were moved to Kampong Cham RH 1) and 2 sites never reported(Kuntheak Bopha and Chey Voraman Hospital).
In 2011, of the 704,979 (including 329,570 ANC attendees from NMCH) VCCT clients, 252,439 (35.8%) were self-referred, 342,072 (48.5%) were referred by ANC services, 8,445 (1.2%) were referred by STD clinics, 16,624 (2.4%) were referred by TB program, 35,226 (5.0%) were referred by HBC/NGO, 24,578 (3.5%) were referred by general medicine, 1,335 (0.2%) were referred by Pediatric care services, 4,423 (0.6%) were referred by Maternity services, 2,136 (0.3%) were referred by BS/FP services, 15,319 (2.2%) were referred by Health Center and 2,382 (0.3%) were referred by other services (Table 1).

<table>
<thead>
<tr>
<th>Self-</th>
<th>STD Clinic</th>
<th>TB Services</th>
<th>HBC/NGO</th>
<th>General Medicine</th>
<th>Paediatric Care Service</th>
<th>Maternity Service</th>
<th>BS/FP</th>
<th>ANC</th>
<th>* Others Services</th>
<th>HCs</th>
</tr>
</thead>
<tbody>
<tr>
<td>35.8%</td>
<td>1.2%</td>
<td>2.4%</td>
<td>5.0%</td>
<td>3.5%</td>
<td>0.2%</td>
<td>0.6%</td>
<td>0.3%</td>
<td>48.5%</td>
<td>0.1%</td>
<td>2.2%</td>
</tr>
</tbody>
</table>


Table 1: Percentage of VCCT clients referred from other services in 2011

A total of 704,201 clients have been tested for HIV in 2011, including 374,631 VCCT clients, 15,611 TB patients, 275,381 pregnant women and 54,189 male partners of pregnant women.

The figure 4 and Table 2 below show the trends and characteristics of the subset of VCCT clients and TB patients tested for HIV at VCCT services, these figures do not include pregnant women. A total of 374,631 VCCT clients and TB patients have been tested for HIV at VCCT sites in 2011 (Figure 4).

![Graph showing trend in numbers of people tested for HIV from 2006 to 2011](image)

Figure 4: Trend in numbers of people tested for HIV at VCCT services from 2006 to 2011

Of the total number of VCCT clients and TB patients tested in 2011, 207,951 (55.5%) were female and 347,606 (92.8%) were aged 15-49 years (Table 2).
In 2011, 99.0% (range: 82.7% - 100% across sites) of VCCT clients and TB patients tested received their result through post-test counselling.

In 2011, of the 704,979 VCCT clients, 16,624 (2.4%) were referred from the TB program (Figure 5).

Table 2: Characteristics of clients tested at VCCT sites, In 2011

<table>
<thead>
<tr>
<th>Age</th>
<th>People tested for HIV</th>
<th>People tested HIV positive</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N= 374,631</td>
<td>N=6,875</td>
</tr>
<tr>
<td></td>
<td>No. (%)</td>
<td>No. (%)</td>
</tr>
<tr>
<td>≤14 years</td>
<td>9,357 (2.5%)</td>
<td>481 (7.0%)</td>
</tr>
<tr>
<td>15-49 years</td>
<td>347,606 (92.8%)</td>
<td>5,899 (85.8%)</td>
</tr>
<tr>
<td>&gt; 49 years</td>
<td>17,668 (4.7%)</td>
<td>495 (7.2%)</td>
</tr>
<tr>
<td>Sex</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>166,680 (44.5%)</td>
<td>3,269 (47.5%)</td>
</tr>
<tr>
<td>Female</td>
<td>207,951 (55.5%)</td>
<td>3,606 (52.5%)</td>
</tr>
</tbody>
</table>

In 2011, of the 374,631 VCCT clients and TB patients tested at VCCT sites nationwide, 6,875 (1.8%) were detected HIV positive at VCCT sites (Figure 6).

Figure 5: Trend in number of VCCT clients referred from TB program from 2006 to 2011

In 2011, of the 374,631 VCCT clients and TB patients tested at VCCT sites nationwide, 6,875 (1.8%) were detected HIV positive at VCCT sites (Figure 6).
2.2. OI and ART services

End of December 2011, there are 57 health facilities offer OI and ART services in 46 Operational Districts in 21 provinces and cities. These 57 OI and ART services are supported by the government 53 sites and 4 sites by NGOs and partner. Of the total 57 OI/ART sites, there are 33 sites provide paediatric care in 31 Operational Districts.
a. **Laboratory Support**

In 2011, 71,401 CD4 tests have been conducted in the seven regional laboratories with the leased FACS counts (Takeo, Kompong Cham, Battambang, Neakleoung OD, NCHADS, NIPH in Phnom Penh and Banteay Meanchey Province) (Figure 8). CD4 test is also available at Pasteur Institute in Phnom Penh, which has 1,564 tests examined in 2010. CD4 % tests in percentage for children are performed at Pasteur Institute of Cambodia (IPC) in Phnom Penh and at NIPH. The figure of government below is shown the trend of CD4 tests increased compared to previous year in 2010 but for the IPC slightly decreased than 2010.

![Figure 8: Trend in the total number of CD4 tests conducted in Cambodia at 6 government sites and IPC in 2006 and 2011](image)

In 2011, there are 3,488 HIV RNA viral load tests were conducted at Institute Pasteur of Cambodia (IPC) and other 1,528 HIV RNA viral load also conducted at NCHADS in quarter 3 and quarter 4 2011 (Figure 9).

![Figure 9: Trend in the total number of RNA Viral Load tests conducted in Cambodia at NIPH, IPC and NCHADS from 2008 to 2011](image)
In 2011, 1,223 DNA PCR tests for early infant diagnostic (EID) found 77 positive were conducted at NIPH. Another place at Institute Pasteur of Cambodia (IPC) in 2011 the total number of DBS screened are 1,198 found 70 positive and Number of infant screened for the 1st time (excluding DBS for confirmation) are 775 which the number of infant diagnosed positive at time of 1st screening are 66, and the total number of HIV DR tested are 213.

(Source: report from NIPH and IPC)

By the end of year 2011, a total of 46,473 active patients including 42,034 adults and 4,439 children are receiving ART (Figures 11 and 12).

The end of 2011, female adult patients accounted for 53.6% (22,554) of all active patients on ART. At OI/ART sites, a total of 6,059 new patients (including 463 children) started OI prophylaxis and management and 5,336 new patients (including 506 children) started on ART in whole year 2011 (Figure 13). The number of new patients on Pre-ART care has been decreased
than 2010. On the other hand, the numbers of new patients on ART were significantly decreased than 2010 too. In this year 2011 there are 1,385 patients lost and 267 patients died in Pre-art care.

![Figure 13: Trend in numbers of new patients on OI and ART from 2006 to 2011](image)

There were a total of 5,283 active adult patients and 1,373 child patients with opportunistic infections who are not eligible for ART yet at the end of Q4-2011. Of those, 3,338 (63.2%) were female patients represented mostly the spouses of male patients who are started on OI/ART care since years ago.

A total of 1,074 adult patients and 198 child patients on OI care were eligible to prepare on ART at the end of December 2011.

b. **Patient mobility across services, lost and died**

In 2011, a total of 1,099 ART patients were transferred out to new ART sites located closer to their home residence, moreover there are 1,176 ART patients lost treatment and 602 patients died during this year.

c. **Drug and logistic support**

By the end of Q4 2011, the number of patients on different ART regimens has been reported from all ART sites. Most AIDS patients were prescribed for 1st line of regimen, including d4t+3TC+NVP, d4t+3TC+EFV and AZT+3TC+NVP; whereas 4.2 % of adults and 8.5 % of children were on PI-based regimens (Table 3).
**Table 3:** Distribution of antiretroviral drug regimens prescribed for HIV infected patients in Cambodia, Q4-2011

*Regimen data do not match exactly the actual the number of people on ART.

<table>
<thead>
<tr>
<th>ARV drug regimen</th>
<th>Adults</th>
<th>Children</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N= 42,034*</td>
<td>N= 4,439*</td>
</tr>
<tr>
<td>Q4 - 2011</td>
<td>No. (%)</td>
<td>No. (%)</td>
</tr>
<tr>
<td>d4t+3TC+NVP</td>
<td>16,752</td>
<td>3,119</td>
</tr>
<tr>
<td></td>
<td>38.9 %</td>
<td>69.4 %</td>
</tr>
<tr>
<td>d4t+3TC+EFV</td>
<td>5,608</td>
<td>438</td>
</tr>
<tr>
<td></td>
<td>13.0 %</td>
<td>9.7 %</td>
</tr>
<tr>
<td>AZT+3TC+NVP</td>
<td>11,456</td>
<td>402</td>
</tr>
<tr>
<td></td>
<td>26.6 %</td>
<td>8.9 %</td>
</tr>
<tr>
<td>AZT+3TC+EFV</td>
<td>4,406</td>
<td>138</td>
</tr>
<tr>
<td></td>
<td>10.2 %</td>
<td>3.1 %</td>
</tr>
<tr>
<td>PI-based regimens</td>
<td>1,799</td>
<td>384</td>
</tr>
<tr>
<td></td>
<td>4.2 %</td>
<td>8.5 %</td>
</tr>
<tr>
<td>Other regimens</td>
<td>3,085</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>7.2 %</td>
<td>0.4 %</td>
</tr>
</tbody>
</table>

In 2011, there were 6,059 new Pre-ART patients registered at OI-ART Sites (Adult and Children). Of these 5,596 new adult patients on Pre-ART, 4,757 (85.0%) were screened for TB symptom during the quarter. Of the 1,899 patients suspect TB infected was screened for TB, 778 were detected as TB Pulmonary and TB Extra-pulmonary, among 778 TB Diagnosed detected 680 were TB treatment.

### d. TB Screening of new OI Patients

During the year 2011 there're remain three sites implemented TST are at Battambang PH, Serei Sophorn RH and Mongkul Borei RH, by the way the other three sites dropped TST and implemented non-TST normally are Kampong Cham PH, Thbong Khmom RH and Smapov Meas RH. A total of 3,946 new Pre-ART patients registered at 36 sites implementing the Three "I" Strategy (3 TST sites=848 new patients and 33 Non-TST sites = 3,098 new patients). Of these, new Pre-ART patients 3,589 patients was screen for TB Symptom and 2,230 not found any TB symptom, so there are 768 patients started IPT (TST sites=56 patients and non-TST=712 patients), and 1,305 active patients on Pre-ART started IPT (TST sites =70 patients, and non-TST sites=1,235) among all active patients adult on Pre-ART = 6,357.

### e. Implementation of Three "I" Strategy

#### Isoniazid Prevention Therapy (IPT)

During the year 2011 there were 5,596 of new adult Pre-ART patients registered at O1/ART sites. Of these, 4,575 received TB symptom screening that identified that 1,899 patients had at least one of three TB symptoms in the last 4 weeks (fever, cough and drenching night sweats for two weeks or more). Among the 1,899 patients with screened positive for TB symptoms, 778 were diagnosed to have TB (BK+/-, EP), 680 started TB treatments, and 768 started IPT as they did not present TB symptom and put on IPT. There were 777 active patients on Pre-ART diagnosed with TB (BK+/EP), of which 693 patients started TB treatment, 648 TB-HIV patients started cotrimoxazole prophylaxis and 1,305 patients started on IPT during this quarter.

#### Pre-ART (OI)

During this year, there were 5,596 of new adult Pre-ART patients registered at O1/ART sites. Of these 4,575 received TB symptom screening that identified that 1,899 patients had at least one of three TB symptoms in the last 4 weeks (fever, cough and drenching night sweats for two weeks or more). Among the 1,899 patients with screened positive for TB symptoms, 778 were diagnosed to have TB (BK+/-, EP), 680 started TB treatments, and 768 started IPT as they did not present TB symptom and put on IPT. There were 777 active patients on Pre-ART diagnosed with TB (BK+/EP), of which 693 patients started TB treatment, 648 TB-HIV patients started cotrimoxazole prophylaxis and 1,305 patients started on IPT during this quarter.

#### ART

In 2011, 4,830 new ART patients registered at O1-ART sites. Of these, 420 were diagnosed with
TB (BK+/- EP), 294 patients started TB treatment. Of the 778 of active patients on ART who were diagnosed as having TB (BK+/-, EP), 479 started TB treatment and 637 of TB-HIV patients started cotrimoxazole prophylaxis during this quarter.

- **Pregnancy and abortion**

This year there were 3,047 new Pre-ART female patients registered at OI/ART sites, among these new female 292 became pregnant. Of all 4,006 active female patients on Pre-ART until this last quarter, 418 got pregnant and 183 of them started ARV prophylaxis. 16 women were reported to have spontaneous abortion, and other 10 women were reported to have induced abortion during this quarter.

There're 2,701 new ART female patients registered at OI/ART sites, among these new female 183 became pregnant. Of all 22,554 active female patients on ART by the end of this year 747 of them got pregnant. 24 women were reported to have spontaneous abortion, and other 14 women were reported to have induced abortion during this quarter.

- **Survival of patient on ART**

Survival data were analyzed at 34 ART sites for adult cohorts started ART in 2010 and 2009, 31 sites for adult cohorts started on ART in 2009 and 25 sites for adult started on ART in 2006. The data not yet available for Children because only have data for 2 out of 33 pediatric sites since 29 sites do not have electronic databases since they don't have computers and are not able to clean the data.

<table>
<thead>
<tr>
<th>Survival Period</th>
<th>Percentage of adults with HIV known to be on treatment</th>
<th>Number of adults who are still alive and on ART</th>
<th>Total number of adults who initiated ART including those who have died and those lost to follow-up</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 month</td>
<td>92.6%</td>
<td>3,393</td>
<td>3,666</td>
</tr>
<tr>
<td>24 month</td>
<td>84.2%</td>
<td>2,978</td>
<td>3,535</td>
</tr>
<tr>
<td>60 month</td>
<td>78%</td>
<td>3,882</td>
<td>4,975</td>
</tr>
</tbody>
</table>
2.3. Linked Response

**68 Reporting LR ODs, October to December 2011**

By the end of 2011, of the 68 ODs implementing the Linked Response Approach, 68 ODs had reported data. From January to December 2011, of a total of 285,103 first ANC attendees at Linked Response sites and outreach services, 226,933 (79.60%) were tested for HIV. Amongst couples where the woman attended an ANC consultation at a Linked Response site, 48,180 (16.9%) husbands/partners accepted testing. Among the 192,785 pregnant women who received an HIV test, 349(0.18%) was HIV positive.

A total of 519 HIV-infected pregnant women delivered their babies at PMTCT maternity sites between January and December 2011. Of this year, 485 (93.4%) accessed ARV drugs: 334 (68.9%) received ART and 151 (31.1%) received ARV prophylaxis. Of 527 infants born to HIV-infected mothers at PMTCT maternity sites, 490 (93%) received NVP, 284 (53.9%) received Cotrimoxazole and 249 Exposed infants received DNA-PCR1 tests before 2 months and 152 after 2 months of age, 16 was DNA-PCR1 positive and 7 exposed infants was died.

2.4. Community-based services

**Home-based care (HBC)**

As reported by the end of quarter 4, 2011, there are 354 HBC teams covered over 881 Health Centers in 72 operational districts (OD) in 19 provinces. Preah Vihear province has no report, because NGO that operated CoC finished their project in coverage and supporting PLHAs (Figure 13) within the CoC established in place.
These HBC teams are currently supporting for a total of 32,080 PLHA (Annex: HBC indicator 2), which 7,256 were registered in Pre-ART (Oi) and other 24,824 were registered in ART.

C. CHALLENGES AND CONSTRAINTS

- Late HIV testing at 3rd/4th stage progression to AIDS remains a persistent issue, especially in respect of Most-at-Risk Populations where treatment outcomes are often compromised.
- Delay in disbursement, and approved for reprogramming leads to delay in implementing some necessary activities and need to reschedules and also leads to save budgets.
- Basic needs for living of the beneficiaries in the community could not be fulfilled because of the limited budgets and high demands.

D. LESSON LEARNED

- Good coordination and collaboration with all partners, local authorities, Health Facilities at all levels and Communities are the key success of the program.
- Partnership between NCHADS, NMCHC and CENAT is particularly important in the fight against HIV/AIDS and joint collaborative activities have to be strengthened at OD level to reach the ambitious targets set for MDG 2015.
- Education and awareness rising of the community and the target group allows them to undertake the health education, information and health services and reduce stigma and discrimination towards MARP.
- Improved utilisation of HIV/STI services by MARPs is necessary to ensure universal access for this population group.

E. CONCLUSION AND RECOMMENDATION

Overall, NCHADS and its partners were made great achievements against the target sets in 2011, we can therefore, conclude that working in partnership, the HIV/AIDS Prevention, Care and Treatment programs in Cambodia is moved towards. However, we should ensure long-term funding and political commitments to run the HIV/AIDS programs. If development partners withdraw assistance for HIV/AIDS too quickly, Cambodia could face significant difficulty in sustaining HIV/AIDS efforts.

F. ACTION POINTS

- NCHADS and partners will review the current new approach for improving condom use between EW and sweethearts. Currently NCHADS together with Partners to develop a concept note on making available of birth spacing at OI/ART, and STI services to improved access for PLHAs and EWs to birth spacing.