

# **HIV/AIDS Division**

## **Ministry of Health**

### **Republic of South Sudan**

#### **Annual report**



July 2011- June 2012

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## 1.0. BACKGROUND

Based on available antenatal surveillance data (2009), South Sudan has a generalized low HIV epidemic with a prevalence rate of 3% among the adult population. UNAIDS South Sudan HIV /AIDS estimates put the number individuals living with HIV in 2012 at 151996 adults and children. Recent MOH behavioral and sero-prevalence studies indicate high risk behaviors' among young people, the military and among PLWHA and low condom use suggesting that the epidemic could rapidly increase and reach as highly as nearly 6% by 2015, unless current interventions are scaled-up and sustained. Geographic disparities exist between urban and rural areas and also across states: Juba 6 percent; highest estimates in Western Equatoria at 7.2 percent and lowest in rural areas at 1percent. The 2010 household survey data show that only 53 percent of women 15-49 years old have ever heard of HIV or AIDS, and only 19.3 percent know of a place to get tested. In addition, only 15 percent of women who give birth two years prior to the study and had access to ANC services received HIV counseling and testing, while only 9 percent of these women were tested for HIV while seeking antenatal care

**Table 1: Projected adult HIV prevalence, new infections and PLWHA in need of ART and PMTCT services in South Sudan**

Year	2005	2006	2007	2008	2009	2010	2011	2012	2013
HIV Adults + Children	119359	124555	129513	134236	138687	143048	147284	151996	157315
HIV Adults 15+	108553	112730	116679	120432	123993	127558	131103	135283	140217
HIV population-Children	10806	11825	12834	13804	14694	15490	16182	16712	17098
Prevalence Adult	2.99	3.03	3.05	3.06	3.06	3.06	3.05	3.06	3.08
New HIV infections- Adult	12157	12044	12076	12260	12539	12758	13064	13316	13200
New HIV infections-Children	2558	2639	2703	2751	2773	2767	2731	2613	2476
Need for ART-Adult (15+)	16350	18286	20165	21927	23546	25066	26693	49515	52176
Need for ART-Children	4334	4732	6463	6874	7239	9674	10015	10230	10322
Mothers needing PMTCT	7306	7483	7617	7718	7786	7825	7839	7846	7877

The southern Sudan HIV epidemic and response review report (SSAC 2011) gives a summary of findings of two recent behavioral studies, the Household Health Survey 2010 (HHS) and the Kajo Keji Country Behavioral Survey 2009 (KKBSS), demonstrating that there are several biological and behavioral factors that may be contributing to continuing HIV incidence in South Sudan. These include;

- A high rate of sexually transmitted infections (STIs)
- Most men in Southern Sudan who are not Muslim are not circumcised
- Early age of first sex and a low level use of condoms
- Multiple sexual partners
- A low level of knowledge in both men and women about the means of transmission of HIV and how to protect themselves
- A high level of stigma and discrimination against people who might be HIV-positive

The national AIDS response of South Sudan is coordinated by the South Sudan HIV and AIDS Commission (SSAC) that was established in 2006 by a presidential decree. The mandate of SSAC is to coordinate the development of policy frameworks and strategies for curbing and combating the spread of HIV. SSAC works closely with the Division of HIV/AIDS whose mandate is to develop health sector response to HIV/AIDS by among other objectives ensuring the accessibility of quality, equitable HIV prevention services, treatment, care and support for the people infected with and affected by HIV/AIDS.

With leadership from SSAC and the MOH, the GoSS developed the Southern Sudan HIV/AIDS Strategic Framework (SSHASF 2008-2012) which is currently driving HIV/AIDS response in the country. The strategic framework comprehensively addresses HIV/AIDS prevention, treatment, care and support services in the post-conflict context, with an overall goal of reducing HIV transmission and mitigating the impact of HIV/AIDS through improvement of the quality of life of those infected and affected by HIV/AIDS. The SSHASF clearly articulates the need for targeting specific populations in a multi-sectoral response: women and girls, youth, sex workers, orphans and vulnerable children. Also outlined in the SSHASF is an HIV policy for other specific vulnerable population settings such as the workplace, schools and prisons.

SSAC and MOH have developed a number of guidelines and policy documents in the past few years, including: HIV/AIDS Behavior Change and Communication (BCC) strategy (2008), HIV/AIDS Monitoring and Evaluation (M&E) framework (2008), Guidelines for ART use in adults and children (Revised 2010), Guidelines for syndromic management of STIs (plus training manuals)-2009, National blood safety strategy (2009), Guidelines for Voluntary Counseling and Testing (VCT) (2008), Guidelines for Prevention of Mother-to-Child-Transmission (PMTCT) 2010, PMTCT training curriculum for trainers and trainees, Job aids and training slides (2010), National Condom Strategy, Maternal, Neonatal and Reproductive Health (MNRH) Strategy and 5 year Health Sector response work plan.

The review process of 2008 – 2012 SSHASF has started and the reviewed strategic framework (2012-2017) is designed to be in line with South Sudan Development Plan & HSDP.

## 2.0. HIGHLIGHTS and CHALLENGES

### 2.1. Key highlights for the 2011 - 2012.

1. With US government support procurement of PMTCT commodities. These commodities arrived in country in April 2012
2. With World Bank support procurement of ARVS and Test kits for HIV, Syphilis and pregnancy. The commodities are expected in August 2012.
3. The division with support of partners conducted training of TOTs and service providers on HCT and PMTCT.
4. With support of UNDP trained 25 Lab technologists/technicians on the CD4 Machine.
5. The division in collaboration with UNDP conducted a seven days training for the HCP on the Management of HIV/AIDS among pediatrics.
6. The Division of HIV/AIDS commenced HIV Sentinel Surveillance survey
7. Review Antiretroviral Patients monitoring and reporting tools
8. Survey on mapping and size estimation of Female sex workers in South Sudan
9. Epi-Aid Investigation of High HIV Prevalence in Western Equatoria State

### Program results for 2011/2012

- A total of **105,647** individuals counseled and tested for HIV in HCT settings
- A total of **34,857** pregnant women were tested in PMTCT sites and **88%** of those who tested HIV positive were offered ART prophylaxis for PMTCT.
- A total of **18188** individuals since 2006 have been registered for HIV clinical care at ART sites in South Sudan. While currently a total of **4134** HIV patients are on ART.
- A total of **8373** PLWHA received Cotrimoxazole prophylaxis for the month of December 2011

### Scale Up of sites

The division of HIV/AIDS with support of partners scaled up HIV/AIDS services by opening new sites as follows; HCT – 34, PMTCT – 25, ART – 7

### Partners

The ministry of health implements HIV/AIDS activities at national, State, County and other levels in conjunction with partners including;

- PEPFAR (USAID, CDC )
- Global Fund
- UN Agencies (UNICEF, WHO, UNFPA, UNDP)
- Faith based organizations



### 2.2. Key Implementation Challenges

- Staffing shortages
- HIV commodities and supplies stock-outs
- Weak budgetary support from the government

### 3.0 TECHNICAL PROGRAM ELEMENTS (PROGRESS AND RESULTS)

#### 3.1. *To expand and strengthen HIV surveillance and sero-surveillance surveys*

##### Activities undertaken this Year:

1. The Division of HIV/AIDS with support of CDC and Intra Health commenced round 3 of HIV Sentinel Surveillance. The survey is being conducted among pregnant women aged 15 – 49 years attending the first ANC visit. The data is being collected at 35 ANC sites in all of the ten states of South Sudan. The objectives of the survey are;
  - a. To estimate HIV and syphilis prevalence among pregnant women in South Sudan.
  - b. To understand the geographical spread of HIV infection and to identify emerging pockets.
  - c. To understand the trends of HIV epidemic among general population as well as high risk groups in different states.
  - d. To provide information for advocay, programs planning and programs evaluation

84 Health care providers underwent a three days training on Dried Blood Spots samples and data collection from April 30th-april 5th. The survey started on the 8<sup>th</sup> of May and the final report is expected by the end of October 2012.

2. With support of WHO, the division of HIV/AIDS started a survey on mapping and size estimation of Female sex workers in South Sudan. The survey is expected to cover all the ten states in South Sudan, but because of initial shortage of funds, the focus is first for Juba and Yambio cities. The approach to be used involves;
  - Defining high-risk activities: as high risk sex and commercial sex work among women. This will provide a simple but clear definition of “What is the risk” in focus, as well as “Who is involved”.
  - Providing information on “How many” are there. Thus estimates of the number of people (not occupation-wise, but risk-wise) involved in these activities will be generated.
  - In addition in the context of place and time, the methodology will identify various locales (locations and spots): “where and when” high-risk activity takes place and prepare a detailed profile of these locales.
  - Ascertaining the sub-types of high-risk activities and individuals within one larger group (typology of high risk activity e.g., street based FSW, brothel based FSW etc.)

The survey stated at mid June 2012 and the final report is expected by the end of August 2012

3. The Division facilitated a CDC team conducting an Epi-Aid Investigation of High HIV Prevalence in Western Equatoria State in June 2012. The objectives of the study are ;
  - o Describe the epidemiology of HIV infection from existing data sources in WES and contiguous areas
  - o Identify risk factors for high HIV prevalence in WES
  - o Provide recommendations to state and national health officials

The final report for the Epi-Aid investigation is expected later in July 2012. However in the preliminary results, the study confirmed the reported high HIV prevalence in the state and advanced the following as the key factors for the same;

- Early sexual debut
  - Multiple sexual partners
  - Unprotected sexual intercourse
  - Transactional sex
  - History of conflict and instability
  - Cross-border migration
  - Community acceptance of risky sexual behaviors
  - Limited HIV prevention services
- 
- Health System Strengthening: Assessed four states (Central Equatoria, Western Equatoria, Western bahr Ghazel and Jonglei) in South Sudan in Nov. 2011. The assessment focused on Human resources, financial resources and service delivery.
  - Created awareness on Universal Precaution and Infection Control by training of health care providers including auxiliary staff across the ten states of South Sudan
  - Improved Laboratory service through training of 25 personnel on CD4 Machine operation and maintenance. The Division of HIV/AIDS in addition to provided equipment and reagents health facilities.
  - Strengthened capacity of HIV/AIDS division staff on data management. One staff from division was trained on the district health information system.
  - IEC Materials: Supported Upper Nile State in their Health Campaign by producing and printing 500 IEC Materials on HIV/AIDS.

### **Challenges faced this Year**

- Universal Precaution (UP): HBV Vaccine for health care providers was not available.
- Limited availability of Universal Precaution materials for practical demonstration e.g eye goggles, aprons e.t.c
- Health System Strengthening:
  - Poor Coordination between the Central, State, County and other levels
  - Poor Service delivery at health facilities, due to limited resources.
  - Inadequate qualified staff at health facilities
- HIV Sentinel Surveillance survey: Expiry of HIV testing reagents before completion of data collection period
- Mapping and size estimation of Female Sex workers:
  - Very limited funds for the study to cover the whole country.
  - Lack of equipment for production of separate enlarged Zonal maps for field work.

### Planned activities this year:

- Expand the mapping and size estimation of Female Sex workers study to include all the ten states of South Sudan.
- Completion of HIV Sentinel Surveillance survey.
- Send two Division of HIV/AIDS staff to the HIV/AIDS Conference at Washington DC in July 2012.

### ***3.2. To develop capacity of health care provider in the 10 States to provide quality services for HIV Prevention, treatment, support and care services***

#### **3.2.1. PMTCT**



**Figure 1: Pregnant mothers at an ANC site**

Mother to Child Transmission is by far the most significant route of transmission of HIV infection in children below the age of 15 years which occurs during pregnancy, during child birth or breastfeeding. The effects of the epidemic among young children are serious and far-reaching. AIDS threatens to worsen child survival in South Sudan a country that has one of the worst infant mortality rates in the world.

The Ministry of health is using the WHO/UNICEF/UNAIDS strategies that are essential for achieving maximum effective reduction of MTCT of HIV:

1. Primary prevention of HIV among “would be parents”,
2. Prevention of unwanted pregnancy among HIV positives,
3. Prevention of HIV transmission from HIV infected females to their infants [through antiretroviral therapy to pregnant females (reduce maternal viral load with ARV drugs)],
3. Prevention of avoidable exposure to maternal virus at birth through improved obstetric practices (strict application of infection prevention (IP) precautions, and where applicable, caesarian section) and reduction of exposure to HIV through breast feeding or replacement feeding for the infant and to
4. Provide appropriate treatment, care and support to women living with HIV, their children and families.

The guiding principles of the PMTCT program include; ***Integration:*** PMTCT service must be integrated in to all maternal newborn and child health, antiretroviral therapy, family planning and sexually transmitted infection services, ***Equity:*** Access to services must be equitable, with prioritization of scale up of PMTCT services to the most affected, higher prevalence communities, ***Standardization:*** Women and children attending maternal, newborn and child health services should be provided with an integrated package of services, ***Human Rights, Confidentiality, and voluntary informed consent,***

**Community participation and mobilization, Family centered care:** Identifying women living with HIV in PMTCT programmes should be used as an entry point to recommend HIV testing and counselling to other family members, **Involvement of PLHIV:** The participation of peers, especially women living with

**HIV, Partner involvement in PMTCT:** PMTCT interventions should be based on the principle that both mother and father have an impact on HIV transmission to the infant.

## **PMTCT Program results**

### **Activities undertaken**

1. The Ministry of Health in collaboration with International HIV/AIDS Alliance conducted a training work shop for health care providers on PMTCT from 7-12 November 2011 in Yei. A total of 14 participants were trained using PMTCT training manual.
2. The Ministry of Health in collaboration with International HIV/AIDS Alliance conducted a training workshop on PMTCT for health care providers in Torit. A total of 18 participants were trained.
3. The Ministry of Health in collaboration with UNICEF conducted a training workshop on PMTCT in Malakal for health care providers from 15 August – 22<sup>nd</sup> August 2011 . This training brought together participants from different counties of Greater Upper Nile region. A total of 21 Health providers were trained using South Sudan PMTCT training manual.
4. Distribution of PMTCT data collection and reporting tools
5. Supportive supervision to facilities. During the period under review three supportive supervision visits were conducted to the sites. The aims of the supervision visits included offering programmatic support to the sites, on job training and mentoring and data verification. The following sites were visited Yei Civil Hospital, St. Bakhita PHCC, St Martha PHCC, Yei SPLA VCT, Lasu PHCC, Ombasi, Kay PHCC, Wodabi.
6. With support from Health Net TPO the Ministry of health conducted TOT training on PMTCT in Wau from June 12-23. 8 participants drawn from Unity, Western Bahr el Ghazel, Northern Bahr el Ghazel and Warrap states were trained.
7. In collaboration with MSH the Ministry of health conducted PMCT refresher training in Juba from the 26 - 31 March 2012. The 12 participants they were drawn from Western Bahr el Ghazel, Upper Nile, and Central Equatoria states. The participants included Midwives, Nurses, VCT counselors, and community health workers .

### **Number of sites**

In 2011 a total of 25 facilities started offering PMTCT services in South Sudan. This brings the total number of facilities offering PMTCT services to 65. All these facilities are located in all the ten states of South Sudan and receive support from the Ministry of health and partners including; Global Fund, UNICEF and PEPFAR.

### Counseling and Testing at PMTCT Sites

In 2011 the number of pregnant women counseled and tested at ANC, Maternity and Post Natal care as figure 2 below shows were 34875, from a low of 3089 pregnant women in 2008. This is a tenfold achievement since the PMTCT services were started in South Sudan in 2008. This brings to a total of 84185, the number of pregnant women tested at PMTCT sites since 2008.

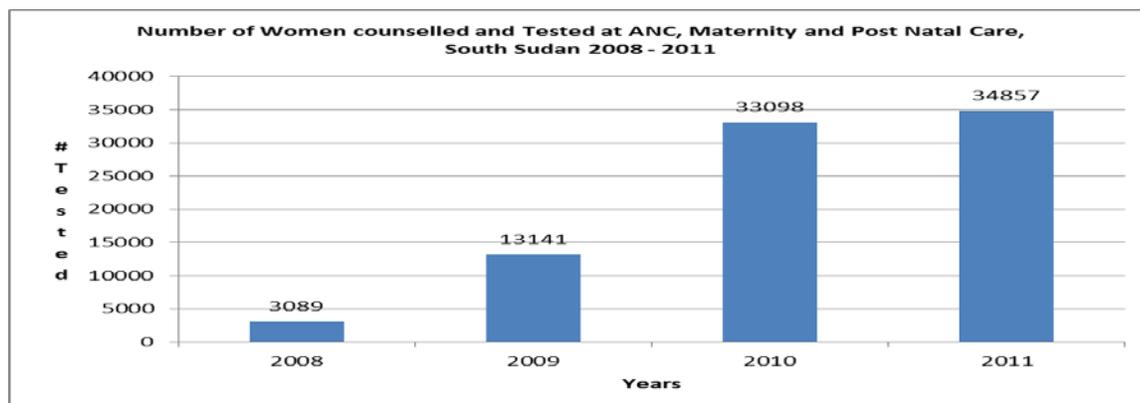


Figure 2: Number of women counseled and tested at PMTCT sites, South Sudan 2008 - 2011

### Provision of PMTCT Services in Various States

As figure 3 below on testing for HIV at PMTCT for Global fund supported sites shows more pregnant women were tested in 2010 than in 2011. The reason for this an acute shortage of HIV test kits towards the end of year. The data also reveals that majority of the pregnant women tested in 2010 and 2011 were in Central Equatorial State, Jonglei and Western Bar El-Ghazal. Whereas states such as Eastern Equatorial State, Unity, Warrap and Northern Bar El-Ghazal reported the least pregnant women tested at PMTCT sites.

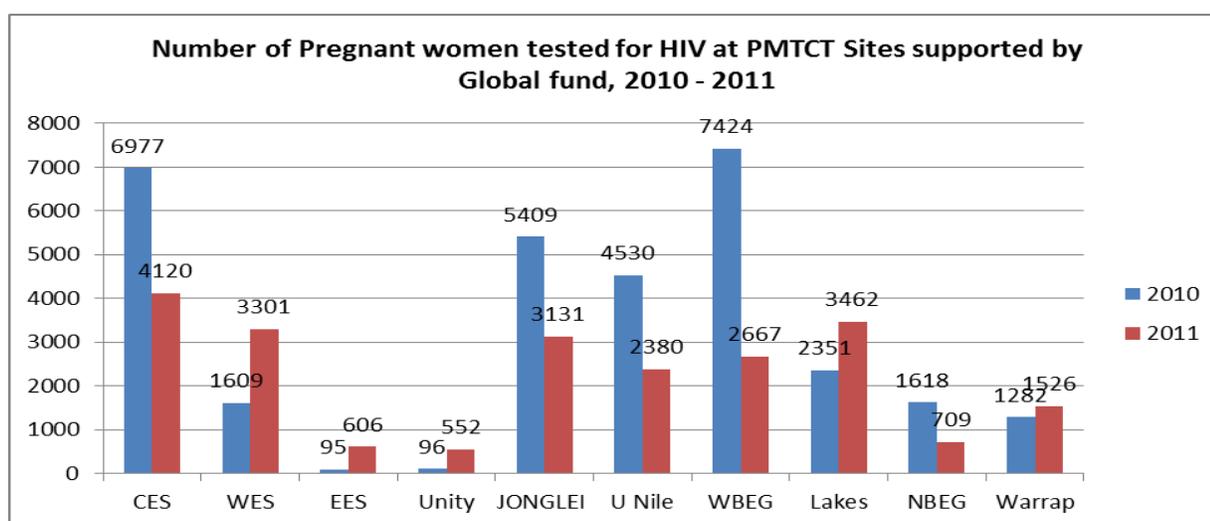


Figure 3: Number of Pregnant women tested for HIV at PMTCT sites supported by Global fund by States

## HIV Testing uptake at PMTCT

The number of pregnant women tested for HIV at PMTCT sites increased from 33098 in 2010 to 34857 in 2011. However PMTCT uptake at first ANC declined in 2011 when compared to 2010 as figure 4 below shows

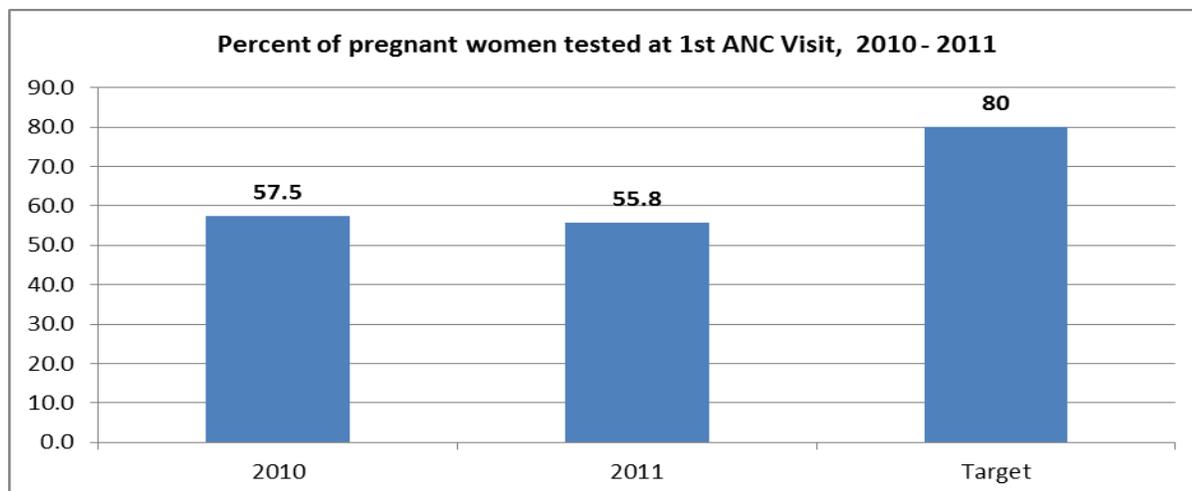


Figure 4: Uptake of PMTCT Services at 1<sup>st</sup> ANC Visit, 2010 - 2011

In 2011, a total of 1037 pregnant women tested positive for HIV in all the PMTCT sites. Eighty eight percent (88%) of who were given antiretroviral for preventing mother to child transmission of HIV.

### Challenges faced this Year

- Stock outs HIV Test kits
- Inadequate qualified staff
- Inadequate funding for training and other programmatic activities
- In appropriate selection of PMTCT training participants with inadequate or little educational back ground
- For refreshers and TOT training some of participants they did not go under the basic training

### Planned activities for the next year:

- Establish 5 new PMTCT sites
- Training of 200 health care providers on PMTCT
- Training of 280 health care professional on HBC

### Ways forward

- To improve on Criteria for selecting participants for PMTCT training

### **3.2.2. HIV Counseling and Testing**

In South Sudan HIV testing is done at both VCT sites where a person is counseled and tested for HIV on his/her own volition (Client Initiated) or at PITC sites (Provider Initiated), where one is advised by a health service provider on the need to take a HIV test.

These sites are the entry points for reinforcing HIV prevention messages and linking the HIV positive people to HIV care, support and treatment services. When availing counseling and testing services, people access accurate information about HIV prevention and care, and undergo an HIV test in a supportive and confidential environment. People who are found HIV-negative are supported with information and counseling to reduce risks and remain HIV-negative. People, who are found HIV-positive, are provided psychosocial support and linked to treatment and care.

#### **Program results**

##### **Activities undertaken**

1. The Ministry of Health in collaboration with UNICEF conducted HCT training for Greater Bhar El Gazal in Wau from 10-28 September 2011 for 21 days according to South Sudan HCT training Guidelines. A total number of 28 participants were trained. The methodology used in the training included Group discussion, role plays and practical's on HIV testing.
2. The Ministry of Health also conducted HCT training in collaboration with International HIV/AIDS alliance in Yei for Central Equatoria and Eastern Equatoria from 21 November – 10 December 2011. The curriculum used in the training was based on South Sudan HCT training Guidelines. A total of 23 Health providers were trained.
3. The Ministry of Health in collaboration with UNICEF conducted HCT training for the counselors in Malakal from 24 October – 16 November 2011. This training brought together 23 participants from greater Upper Nile region.
4. The Ministry of Health in collaboration with Health Net TPO conducted HCT TOT training in Wau from 12-28 June 2012 for 17 days. 9 participants drawn from Unity, Western Bahr el Ghazal, Northern Bahr el Ghazal and Warrap states were trained.
5. In collaboration with UNIDO, the Ministry of Health in collaboration conducted a HCT training from the 17<sup>th</sup> April to 7<sup>th</sup> May 2012. The participants were drawn within Unity state in Leer, Mayandit, penyiger, and Boau . The number of trainees was 12

##### **Number of sites**

In 2011 a total of 34 facilities started offering HCT services in South Sudan. This brings the total number of facilities offering HCT services to 112 as figure 5 below shows. All these

facilities are located in all the ten states of South Sudan and receive support from the Ministry of health and partners including; Global Fund, UNICEF and PEPFAR.

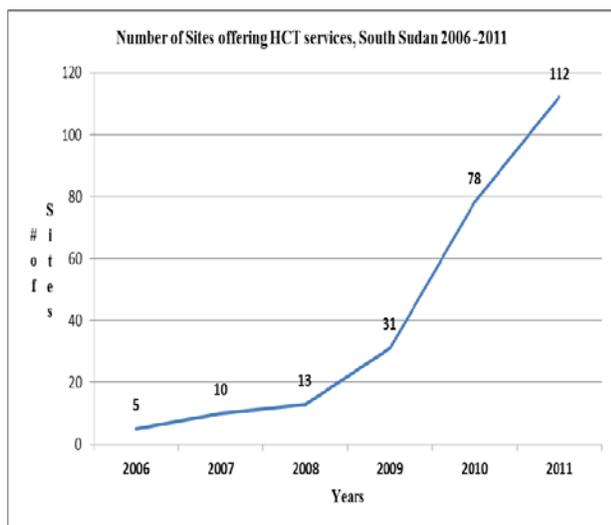
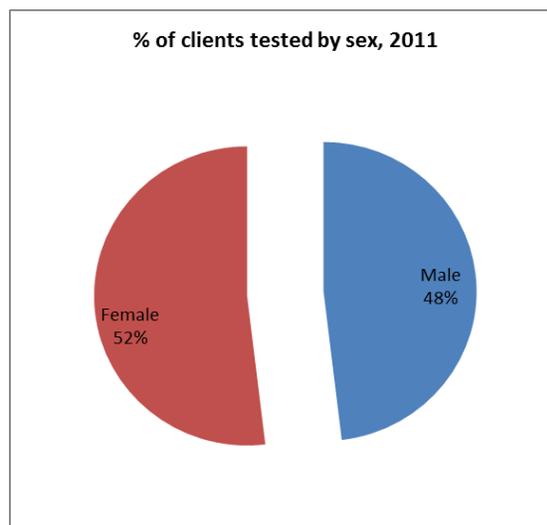


Figure 5: Number of HCT Sites, 2006-2011



% of HCT clients tested by sex, 2011

### Number of Individuals Counseled and Tested

The number of individuals counseled and tested increased from 66301 in 2010 to 105647 in 2011. The data for 2011 as figure 6 above shows that females access HIV testing more than males. Further analysis of HIV testing data reveals females also have a higher sero-prevalence in all age groups except among children below 5 years as figure 7 below shows.

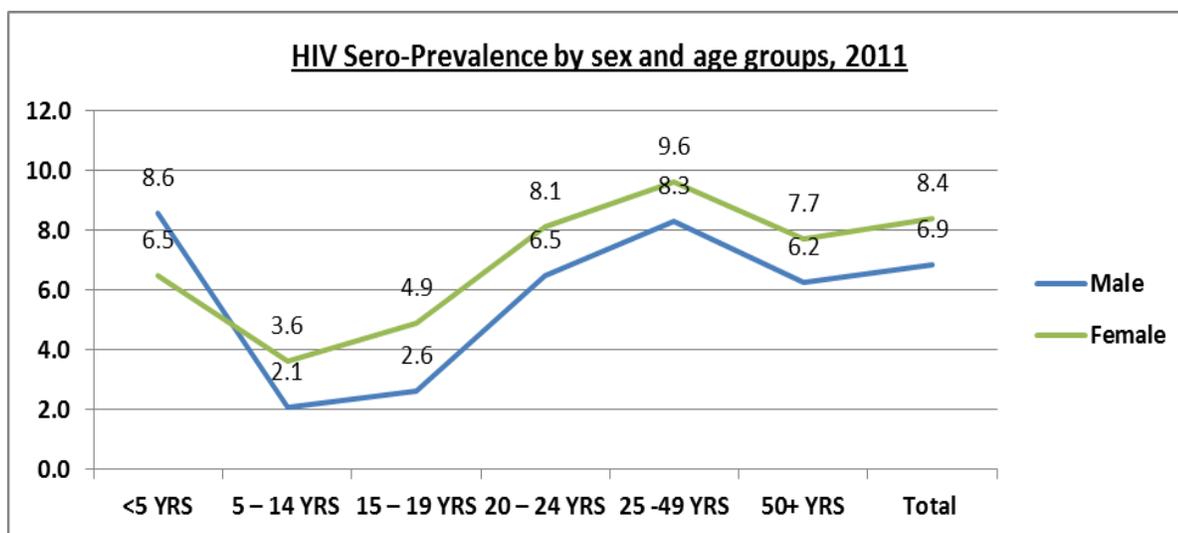


Figure 7: HIV Sero-Prevalence by sex and age groups, 2011

### Challenges faced this Year

- Stock outs HIV Test kits
- Inadequate qualified staff
- Inadequate funding for training and other programmatic activities

### **Planned activities for the coming year:**

- Conduct 10 Training workshops for 250 counselors, 25 trainees per training with support of Partners
- HCT Refresher training for 25 counselors. This training will be conducted with the support of partners

### **3.2.3. HIV/AIDS: Treatment**

One of the major objectives of the Ministry of Health is to provide greater care, support and treatment to the larger number of PLHIV in South Sudan, with ultimate goal of universal access for all those who need it. The Care, Support and Treatment component of the HIV/AIDS Division aims to provide comprehensive management to PLHIV with respect to prevention and treatment of Opportunistic Infections including TB, Anti-retroviral Therapy (ART), psychosocial support, home-based care, positive prevention and impact mitigation.

Anti-retroviral Therapy (ART) for eligible persons living with HIV/AIDS was launched in 2006 in three hospitals. Since then, the programme has been scaled up both in terms of facilities for treatment to 22 and number of beneficiaries seeking ART. The Main services provided to PLHIV under care, support and treatment include:

- Registration of PLHIV for ART and pre-ART services;
- Assessment of eligibility of ART based on clinical examination and CD4 count;
- Provision of first line ART to all eligible PLHA and CLHA
- Follow-up of patients on ART by assessing drug adherence, regularity of visits and periodic examination and CD4 count (every 6 months)
- Care, support and home-based services
- Treatment of opportunistic infections; and
- Provision of alternate first line and second-line ART to those experiencing drug toxicities and treatment failure, respectively

### **Program Results**

#### **Activities undertaken in 2011:**

1. The HIV/AIDS/STI Division in the Directorate of Community and Public Health, Ministry of Health – Republic of South Sudan (MOH-RoSS) in collaboration with UNDP organized and conducted a seven days training for the Health Care Providers on the Management of HIV/AIDS in pediatrics. The training took place in Yei town at Crop Training Center from 8 - 15, Aug. 2011. This training was done among the ART site clinicians for the first time in the Republic of South Sudan. The participants were those who had already been trained in IMAI and were still practicing in the ART facilities. A total of 27 participants attended the training from all over 10 States of South Sudan. The learning Objectives were:
  - a) Explain briefly and in basic terms what HIV is and how it is transmitted to Infants and children. Describe how to assess and classify a child for HIV/AIDS. Describe how to assess, classify and treat acute common illnesses in young infants and children classified for HIV/AIDS.

- b) Describe how to assess, classify and treat common opportunistic infections in infants and young children classified for HIV/AIDS, with a focus on skin and mouth conditions.
  - c) Describe how to prevent common illnesses in infants and young children classified for HIV, Describe how to effectively communicate with the HIV positive mother.
  - d) Describe different feeding options and the processes involved in counseling the HIV positive mother about feeding. Describe how you would follow up children born to HIV positive women, and be able to differentiate between:
  - e) Follow up of children classified as HIV exposed
  - f) Chronic care for children with suspected symptomatic HIV or confirmed HIV infection
2. The Division of HIV/AIDS staff conducted Supportive supervision visits to health facilities providing ART in three states (Eastern and Western Equatoria and Western Bahr El Ghazal) of South Sudan. The objectives of the visits included;
- Visit the ART, PMTCT, VCT clinics to evaluate HIV related activities
  - Provide clinical mentorship to the ART team
  - Meet with the ART staff members to provide feedback of the visit
  - Meet with the hospital director to debrief on the visit findings and recommendations

The methodology used in the supportive supervision visits comprised of interviews with health workers, data verification/validation and observation of service provision.



**Figure 8: Division of HIV/AIDS staff verify ART Registers and monthly ART report data at Torit State Hospital**

### Some of the challenges facing the ART sites;

- ARV and other medicine stockouts which leads to patients dropping from treatment
- Limited availability of stock cards, poor knowledge of filling the stock cards and how to place orders
- Poor quality of medical care due to unavailability of medicines most of the time.
- New patients are not thoroughly examined for proper staging
- Weak home based care and support to HIV patients. Health workers have problems accessing patients at home due to poor means of transport
- Lack of power supply to the facility can contribute to poor storage conditions of test kits that need cold chain
- Inadequate space in the labs for installing required equipment
- Inadequate training in operating CD4 machines
- There is poor recording of registers, compilation of monthly reports and weak reporting system at most of ART sites in South Sudan which leads non reporting, delayed reports or inaccurate reports being sent to the HIV/AIDS/STIs division in the MOH.
- Limited provision of maintenance services to the CD4 and Humacount machine is always a problem because the agents for the manufacturers are not based in South Sudan.
- Drug distribution to some facilities in time remains a big challenge

### Recommendations from the Supportive Supervision visits include;

- Drug exchange( e.g CTX) basing on the need among the different ART facilities in the state to reduce cases of out stocking and over stocking
- Supply chain management refresher training for the store keepers and dispensers
- Proper arrangement for drug delivery to the health facilities
- The current services provision to both CD4 and Humacount machines should be reconsidered
- Regular supportive supervision of a joint team between the MOH,UNDP and WHO should be organized for a good technical support on the ground
- Monitoring of the initial enrollment of HIV clients into either care or on ART according to STGs
- Strong counseling on adherence to treatment, care and support should be improved

### Program Results

#### Number of sites

In 2011/2012 7 new facilities started offering HIV Care and treatment services in South Sudan. This brings the total number of facilities offering HCT services to 22 as figure 9 shows. All these facilities are located in all the ten states of South Sudan and receive support from the Ministry of health, Global Fund and WHO.

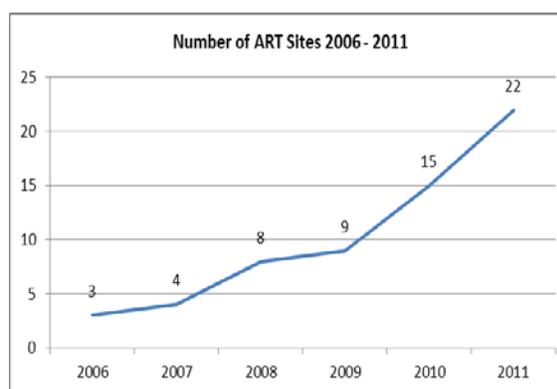
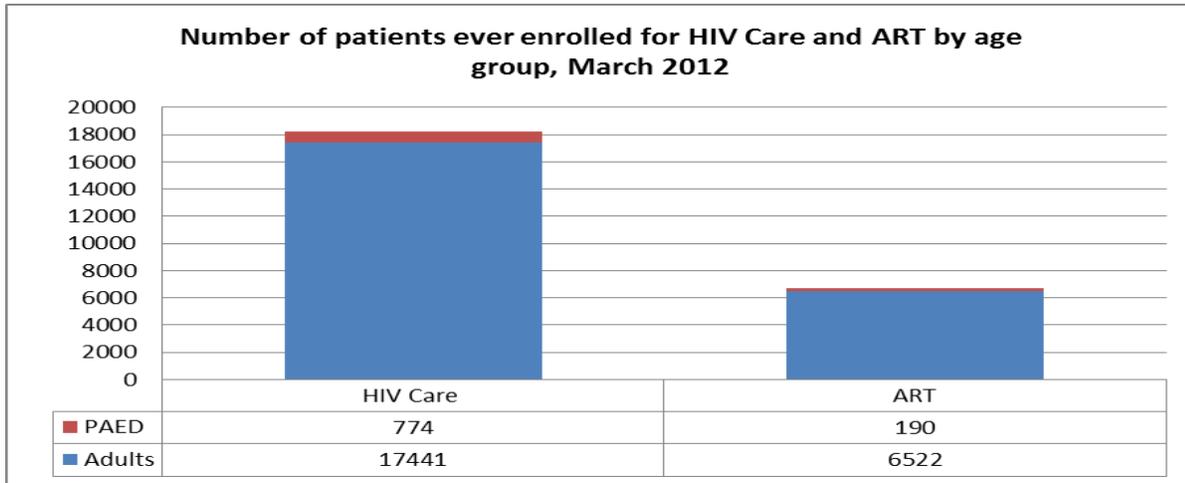


Figure 9: Number of ART Sites 2006-2011

**Number of adults and children ever enrolled on HIV Care and ART**

As figure 10 below shows majority of patients ever enrolled for HIV Care (17441) and ART (6522) are adults. Only about 774 and 190 children have ever been enrolled for HIV Care and ART respectively. This shows the need to put more children on HIV Care and ART.

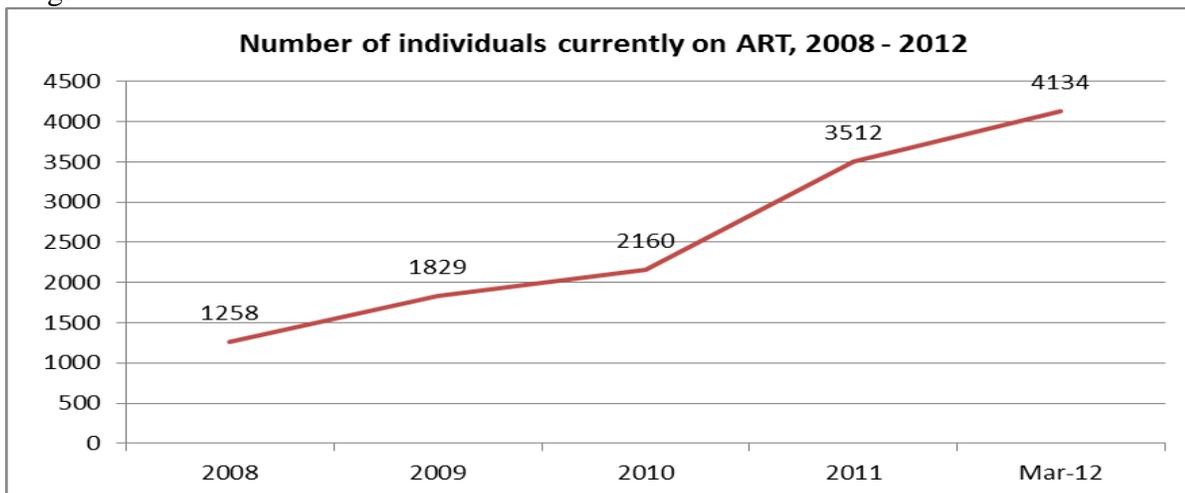


**Figure 10: Number of HIV Patients ever enrolled for HIV Care and ART by age, March 2012**

**Number of individuals currently on ART**

Adherence to ART is an essential component of individual and programmatic treatment success. Higher levels of adherence are associated with improved virological and clinical outcomes. Rates of adherence exceeding 95% are desirable in order to maximize the benefits of ART. This means taking the correct dose of drugs at the correct times while observing any dietary restrictions

As of march 2012, there were 4134 individuals currently on ART. As figure 11 below shows this is a great improvement from 1258 the number currently on ART 2008. However this number does not compare well with the total number of individuals (6712) ever enrolled on ART. This means that about 39 percent have either died, lost to follow up or did not pick their drugs.



**Figure 11: Number of individuals current on ART, 2008-2012**

### Number of individuals currently on Cotrimoxazole Prophylaxis

According to the Ministry of Health guidelines for the use of Antiretroviral drugs in adults and children, all HIV-infected individuals, regardless of age, treatment or immunological status, should be given cotrimoxazole unless contraindicated. Studies have suggested Cotrimoxazole is effective against common causes of death and risks of disease including malaria in people with HIV regardless of whether they are on ART or not.

Contraindications include allergy to cotrimoxazole which commonly manifests as a rash that can be severe and progress to Stevens Johnson Syndrome. This recommendation is in line with the 2006 WHO guidelines for use of cotrimoxazole prophylaxis in resource-limited settings where bacterial infections and malaria are prevalent and cause significant morbidity across a wide immunological spectrum in PLHIV.

Approximately 7600 patients received cotrimoxazole in the month of March 2012 in all the HIV Care and ART facilities that reported. This figure can be used as a proxy for estimating the number of HIV positive individuals currently on HIV care. This includes the number of patients on ART

### Standardized Antiretroviral Drug Regimens

The Ministry of Health, Republic of South Sudan has decided on standardized antiretroviral drug regimens in line with the revised (2006) WHO Guidelines on ART in resource limited settings. The choice of regimens reflects the imperatives of a public health approach to scaling up of ART. Further, the regimens chosen have been selected with efficacy, tolerability and opportunities for second line treatment in mind.

**Table 2: Number of Patients on 1<sup>st</sup> Line ARV Regimen by sex and age, March 2012**

On 1st line regimen	Male	Female	Total
<b>Adults (&gt;14 years)</b>			
ZDV-3TC-EFV	244	320	564
ZDV-3TC-NVP	708	1728	2436
d4T-3TC-EFV	16	16	32
d4T-3TC-NVP	304	643	947
TFV-3TC-EFV	3	1	4
TFV-3TC-NVP	2	2	4
ABC-3TC-EFV	0	0	0
ABC-3TC-NVP	0	0	0
<b>Children (0-14 years)</b>			
ZDV-3TC-EFV	8	6	14
ZDV-3TC-NVP	56	36	92
d4T-3TC-EFV	0	0	0
d4T-3TC-NVP	25	16	41

### Pediatric HIV Care and ART

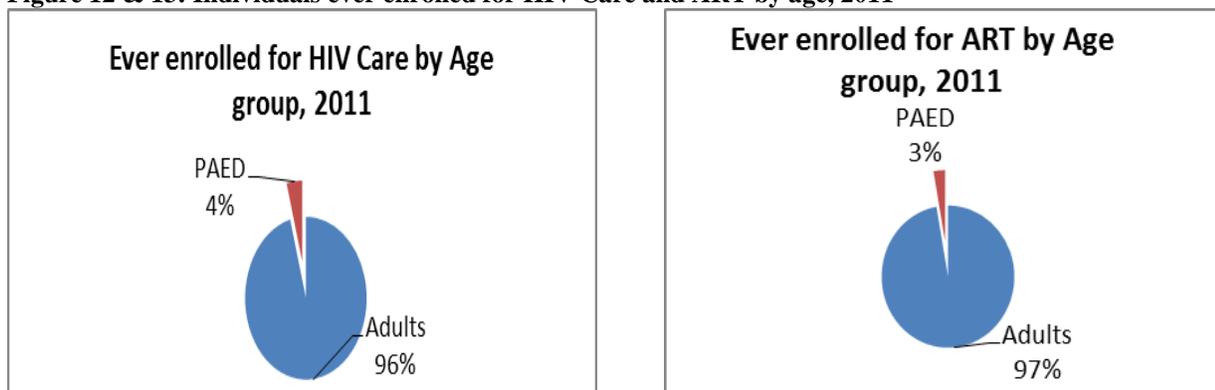
Most children acquire HIV infection in-utero, during delivery or through breastfeeding.

Thus the most efficient and cost-effective way to tackle paediatric HIV is to reduce mother-to-child transmission. However, every day there are new infections in children under 15 years of age and most being associated with MTCT.

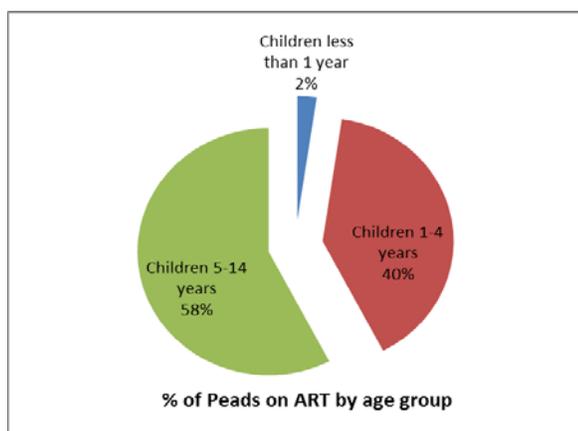
HIV-infected infants frequently present with clinical symptoms in the first year of life, and by one year of age an estimated one-third of infected infants will have died, and about half by 2 years of age. There is thus a critical need to provide antiretroviral therapy (ART) for infants and children who become infected despite the efforts being made to prevent such infections.

As figures 12 & 13 below show there are very few children enrolled both on HIV Care and ART in South Sudan

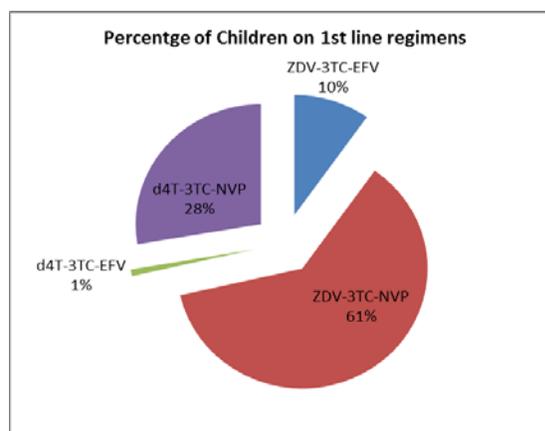
**Figure 12 & 13: Individuals ever enrolled for HIV Care and ART by age, 2011**



As figure 14 below shows majority of children on ART are aged between 5 and 14 years. Only about 2 percent are aged less than 1 year. 61 percent and 28 percent are on ZDV-3TC-NVP and d4T-3TC-NVP respectively.



**Figure 14: % of PEADs by age**



**Figure 15: % of PEADs by 1<sup>st</sup> line regimen**

### **TB - Screening and Treatment at ART Sites**

Tuberculosis (TB) is a significant cause of morbidity and mortality in HIV-infected patients. The risk of developing tuberculosis (TB) is estimated to be between 20-37 times greater in people living with HIV than among those without HIV infection.

The *Three I's* for HIV/TB (Intensified case finding for TB, Isoniazid preventive therapy, and Infection control) reduces the burden of TB among people living with HIV and therefore must be urgently implemented by all HIV services. People living with HIV need early diagnosis and treatment of active TB disease. If TB is not present, they should receive Isoniazid preventive therapy (IPT). The treatment should be free of charge and is not expensive for the health system

**Table 3: TB Screening and treatment at ART Sites, 2011**

	Male		Female		Total		
	PreART	ART	PreART	ART	PreART	ART	Total
Number TB Screened, found with no signs of TB	610	620	1361	1419	1668	1905	4010
On INH prophylaxis	0	0	0	0	0	0	0
Sputum: TB suspect Sputum sample taken	15	17	12	12	27	29	56
TB Refer: TB suspect referred for investigation	12	5	23	13	14	5	53
TB Rx: On TB treatment during the month	17	30	15	29	32	58	91
TOTAL whose TB status was assessed at last visit during the reporting period	654	671	1419	1468	1750	1991	4312

Isoniazid (INH) is an anti-tuberculosis medication which when taken regularly can significantly reduce the rate of later development of active TB disease. As table 3 above shows no TB/HIV patients were on INH prophylaxis in South Sudan for 2011.

### 3.2.5. HIV/AIDS Commodities and Supplies

#### Updates on HIV/AIDS Commodities and Supplies

- With World Bank support procurement of ARVS for 3400 patients for 24 months and HIV, Syphilis and pregnancy Test kits for 6 months in June. The commodities are expected in August 2012
- With US government support procurement of PMTCT commodities. The commodities procured include;
  - ARVS
  - HIV Test Kits
  - Syphilis test kits and treatment
  - OI drugs

These commodities arrived in country in April 2012 and are expected to last for 2 years

#### Activities undertaken this Year:

- LMIS and capacity building field visits to Greater Bahr El Ghazal (Wau Hospital, Raja Hospital, Awiel Hospital, Gordim PHCC, Kowajok Hospital, Nyamlel PHCC), Upper

Nile State (Malakal Hospital, Melut PHCC, Renk Hospital) and Western Equatoria State (Lui Hospital, Mundri PHCC, Maridi Hospital, Ibba PHCC, Yambio Hospital, Yambio PHCC, Tambura Hospital, Ezo PHHC counties)

- Supply chain management Training for 49 Healthcare workers from Western Equatoria and Jonglei States through the support of International HIV/AIDS ALLIANCE and UNDP/GF
- Universal precautions Training for 86 health workers from Western Equatoria, Eastern Equatoria and Northern Bahr El Ghazal States through the support of UNDP/GF

#### **4.0. HIV/AIDS Division Institutional Strengthening**

##### **Updates on Institutional Strengthening**

A training workshop on Leadership and HIV/AIDS/TB Management was organized by Abt Associates, HIV/AIDS Division and Christian Aids Association. The workshop brought together a total 21 staff from HIV/AIDS/STIs Directorate and SSAC in all the 10 states. The training highlighted the following issues in leadership & management.

- How to motivate and delegate,
- Program planning and priorities setting,
- The role of communication and coordination
- Importance of staff supervision
- The role & important of data collection and reporting.
- Strengthening quality assurance and improvement