
A survey on HIV/AIDS in

Sudan



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This report is based on the literature from the Internet. The views expressed are not necessarily the point of view of the assigning organizations

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Abbreviations

ART	Anti Retroviral Treatment
CBO	Community Based Organisation
CCM	Country Coordinating Mechanism
CTG	Functional Country Theme Group
FBO	Faith Based Organisation
GoNU	Government of National Unity
GONS	Government of North Sudan
GOSS	Government of South Sudan
FMOH	Federal Minister of Health
HAC	Humanitarian Aid Commission
IDP	internal displaced people
MDG	millennium development goal
MDTF	Multi-Donor Trust Fund
NSP	National Strategic Plan HIV/AIDS
NAC	National Aids Council
NGO	Non Government Organisation
PES	National Poverty Eradication Strategy
PLWHA	People living with HIV/ AIDS
PMTC	Prevention mother to child transmission
PEP	Post Exposure Prophylaxis
RH	Reproductive Health
RBAS	Regional Bureau for Arab States
RANAA	Regional Arab Network Against AIDS
STI	Sexual Transmitted Infections
SNAP	Sudan National Aids Programme
SNAC	Sudan National AIDS Council
SAN	Sudan Aids Network
SMOH	State Minister of Health
VCT	Voluntary Counselling Testing
VCCT	Voluntary Confidential Counselling and Testing

1. Background

With a total area of 2.505.813 square kilometres, Sudan is the largest country of Africa. It is a multi-ethnic country. About 500 ethnic groups are living in Sudan. They differ in language, religion, culture, and ethnicity. The so-called 'Arab', pre-dominantly Muslim population mainly located in the North and the so-called 'black African' population in the South are often in opposition [1]. Islam is practiced by around 60%, Christianity by 15%; the remaining 25% follow a variety of animist religions

The country is known to have a long history of conflict and war. After more than 20 years of war in S. Sudan a peace agreement has been signed January 2005 between North and South Sudan. Thanks to this agreement it is now possible to enter areas in South Sudan which were previously unreachable for either emergency or development aid. However in Darfur serious conflicts and violation of human rights are still going on.

Sudan has an estimated population size of 36 million people for 2007 [2, 3] with an annual population growth rate of 2.6 %. Of the total population 63% lives in rural scattered areas and 29% in urban areas. Less than 8% is nomadic. Southern Sudan has an estimated population of 7.5-9.7 million. The population is expected to grow by as much as 3 million in the next six years as a result of natural increase in population and the return of refugees and IDPs[23]. Sudan has the largest population of internal displaced people(IDP) in the world; 3 to 4 million and an estimated 1.8 million live in Khartouma area, 900.000 in other government controlled areas and 1.5 million in non-government controlled areas[4]. Population under 15 years of age constitutes 45.2% of total population and women in reproductive age constitute 24.7% of total population. Although there is no single reliable estimate of poverty available, there is consensus among Sudanese analysts that its prevalence exceeds 50% in the North, with higher levels in Darfur and Kordofan and Red sea foothills and up to 90% in Southern Sudan [20, 21].

Sudan is characterized by a poor health status of its population. Like other poor countries with high fertility rate(4.4 N. Sudan and 6.7 S. Sudan) and high mortality rate (509 N, Sudan, 1.700 S. Sudan) and not yet gone through demographic and epidemiological transitions, combating maternal and child health problems are very important for future development of Sudan. Sudan has a high infant mortality rate (100) a high under five mortality rate (164) and a high maternal mortality rate (509 Sudan) [5]. The high maternal mortality numbers are linked to poor access to quality reproductive health services, including family planning. The combination of communicable diseases and malnutrition is the most aggravated prevalent public health problem in Sudan. HIV epidemic is generalized with an estimated adult HIV prevalence (15-49 y.) in 2003 of 2.6. (average for Sub Sahara region is 6.1 and global HIV prevalence 1.0. [6] (*Overview of global aids WHO/UNAIDS Report 2006*). There is a large regional difference in health status of population. In general health status of people living in S. Sudan, East Sudan and Darfur are very poor. In North Sudan people living in rural areas have more health problems compared to people in urban and city towns. This corresponds with areas where high poverty rate, low or non-existent access to qualitative good health services, low or no education rate among the population, low employment rate, food shortages and destruction of infrastructure and agriculture due to long periods of war, do exist.

2. Demographic Data HIV/AIDS

At the moment there is quite a considerable lack of data information about HIV/AIDS in Sudan. Overall HIV prevalence in South Sudan is difficult to estimate as the past 40 years of war and conflicts has led to the collapse of infrastructure, inducing lots of isolated areas along with widespread poverty and illiteracy. The HIV prevalence in much of these counties

is not known. Also data about sexual behaviour and attitude and knowledge about STIs and HIV/AIDS is poor, except for a few research papers in some areas and districts.

The lack of precise information can also be attributed in part to a general conservatism of country's population and culture and to the fact that presence of HIV/AIDS was until very recently ignored or denied. Also limited testing facilities contribute to lack of precise data [24]. For the purpose of management of HIV/AIDS prevention and care and monitoring and evaluating of projects it is essential that more reliable data will become soon at hand.

Figure 1: HIV indicators Sudan .source: overview of global aids WHO/UNAIDS Report 2006

HIV indicators	date	estimate	source
Adult prevalence HIV/AIDS (15-49y.)	2003 2005	07-.7.2% 2.6	WHO/UNAIDS WHO/UNAIDS*
Estimated number of people living With HIV/AIDS (0-49 y.)	2003	120.000- 1.300.000	WHO/UNAIDS
Cumulative number of reported AIDS cases	2001	4.004	WHO/UNAIDS
Number of children with HIV/AIDS	2003 2005	21.000 30.000	WHO dec.2005 fact sheet UNAIDS 2005
Reported number of people receiving Antiretroviral therapy (15-49y.)	June 2004	400	WHO
Estimated number needed antiretroviral Therapy in 2005(0-49y)	Dec.2005	43.000	WHO/UNAIDS
HIV testing and counselling sites	Oct.2005	15	Sudan National aids programme MOH 2005
Number of people tested at all sites	June 2005	2.478	Sudan National Aids Programme
HIV prevalence among adults with TB (15-49Y)	2002	13.8%	WHO

* Some reports are mentioning a HIV prevalence of 2.3 (WHO country report 2005), 2.6 %(UNAIDS) and 1.6(SNAP) among adults age 15-49years.

2.1 Data interpretations HIV/AIDS epidemic Sudan

Inadequate HIV/AIDS surveillance and behaviour surveillance in Sudan make it very difficult to describe patterns and trends of this diverse epidemic, especially among risk groups like sex workers, men having sex with men and drug users. Lack of data could be an important constraint in management of HIV/AIDS in Sudan. In light of spreading the disease, it would be worthwhile to compare data of HIV/AIDS for Sudan with his neighbouring countries because of several reasons:

- From a regional perspective, the country is very important to the treatment scale up efforts in the WHO Eastern Mediterranean Region (EMRO) because 73% of people requiring ART in the region have estimated to live in Sudan. [22].
- Sudan is also home for refugees from neighbouring countries and they are a well recognised vulnerable group to HIV/AIDS. No exact data on HIV rates among refugees is currently available in Sudan, but some of the refugees come from countries that have a higher infection rate.

2.1.1 HIV prevalence

Sudan is in the early stages of a generalized HIV/AIDS epidemic, with almost an exclusively heterosexual pattern. There are quite remarkable regional differences. At this moment Sudan

has a HIV/AIDS prevalence of 2.3 among adults age group 15-49 years, although some reports state a HIV prevalence of 1.6- 2.6 . The prevalence rate 2.3 is based on estimation from mostly data of North Sudan, because profound data on prevalence in S. Sudan is still not available. Nevertheless WHO states in his country report 2005 that S. Sudan is facing an environment favourable for accelerating the spread of HIV.

The most reliable indication of the extent of the epidemic comes from the 2002 Situation Analysis Study, carried out by Sudan National AIDS Programme and covering 14 states both in North (11) and South (3).

According to the survey prevalence rate is as follow [7]:

- Prevalence among general population 1.6%. (A total of 7385 blood samples were tested in 2002 and out of those 118 were positive)
- Prevalence among women attending the antenatal clinics 1.0%.
- Prevalence among the refugees 4.0%
- Prevalence of the other high risk groups was:
 - 4.4% among female sex workers
 - 1.6% among TB patients
 - 2.5% among tea sellers (are engaged in casual and commercial sex)

According to more recently data from sentinel survey conducted by SNAP in 2004 (not all the counties were involved in this survey), HIV prevalence was estimated as follows:

- 1.0% among pregnant women
- 2.3% among people with TB
- 1.9% among people with STD

Sudan is surrounded by sub-Sahara countries with a high level of HIV prevalence. Compared to these countries adult HIV prevalence in Sudan is lower [figure 2 HIV Prevalence data]. Of growing concern for Sudan, is the high migration level of people crossing borders from and to neighbouring countries with a high HIV prevalence (figure 2). This combined with a lack of knowledge about transmission of HIV and prevention, limited access to testing facilities, continuation of armed conflicts (Uganda Lord Resistance Army attacks) and changing life-styles, induces the risk of increased HIV prevalence in Sudan for the coming years. Also return of IDP's to South Sudan forms a potential risk for increase in HIV infection. The late Dr. John Garang de Mabior stated at the signing of the CPA in January 2005 "that after the war AIDS would be Southern Sudan's biggest enemy" (Sudan Tribune.com 2006. Preventing HIV/AIDS in Sudan)

Figure 2: HIV prevalence in neighbouring countries. Source Aids epidemic update UNAIDS December 2006

country	HIV prevalence 15-49years	HIV prevalence females	Rural/urban	knowledge	source	Risk groups
Libya	Localized among areas				UNAIDS 2006	Drug users HIV prevalence prisoners 18%
Ethiopia	2.1 % (male 1.4%)	2.8%	Urban 5.5% Rural 0.7%		Central statistic Agency ORC Macro 2006	
Eritrea	2.8%	2.4%(2003)	7%Assab(south) 6% Assia centre 0% Shieib(centre)		MOH Eritrea UNAIDS	

			also)		2006	
Chad	3.3%		Urban 6% and *(Capital)	8% of men/women used condom during last sex.contact basic knowledge about HIV transmission and STI's and prevention is poor	National HIV Survey 2005	
Central Africa republic	11 %(range 4.5- 17.2%)			Poor knowledge about HIV transmission/preventi on >1/3 women do not know about prevention	UNAIDS 2006	
Egypt	<0.1%					
Democratic Republic Congo	No exact data estimate ; 1 million people(100. 000 children) were living with HIV					
Uganda	6.7 %(5.7%-7.6%)	Almost 8% women (men 5%)	Lower prevalence West Nile region, higher (over8 %) Kampala, Central and North Central regions		UNAIDS 2006 MOH Uganda	
Kenya	6 % (5.2- 7.0%)				UNAIDS 2006	

Compared to countries in North Africa/ Middle East, Sudan with HIV prevalence of 2.3 has the highest HIV prevalence rate. Between 120.000-1.300.000 people are living with HIV/AIDS in Sudan and an estimated 68,000 people became newly infected in 2006. An estimated 36,000 adults and children in 2005 died of AIDS-related conditions (*Amfar Aids Research*).

2.1.2 Estimate numbers of death due to AIDS

Approximately 34.000 people have died due to AIDS (2005 UNAIDS).

2.1.3 Estimate numbers of women and children with HIV/AIDS

It is estimated that in 2005, 180.000 women are living with HIV/AIDS and a number of 30.000 children (*UNAIDS 2005*).

2.1.4 Number of AIDS orphans

There is no data available about AIDS orphans in Sudan. In 2005 approximately 60.000 children are orphans due HIV/AIDS. (*UNICEF Unite for children Khartoum 2005*). However it is not mentioned if data is representative for whole Sudan or for the North and some areas in the South. A total number of 300.000 children are nowadays living with HIV/AIDS

2.1.5 Number of people tested in VCCT and receiving treatment

Sudan National AIDS programme; there are 15 VCCT centres in North Sudan and about 2.478 people have been tested at these sites. (Data June 2005). No reliable data for S.Sudan has been found.

2.1.6 Drug users

No data has been found about number of drug users in Sudan and number of HIV infected drug users.

2.2 Geographic Patterns of the Epidemic

The geographical concentration pattern for Sudan and particularly S. Sudan could change rapidly in time.

The limited data available from South Sudan suggest relatively higher infection rates for S. Sudan compared to the North. Reasons for this assumption are:

- The return of IDP's back to South Sudan
- Migration of people alongside borders with countries as Uganda, Kenya, and Democratic Republic of Congo with a higher infection rate.

These factors combine with lack of knowledge about HIV prevention could inevitably increase the rate of HIV transmission among general population in South Sudan and other vulnerable areas.

For example, HIV prevalence as high as 4.4% has been found among some formerly displaced adults in Yei in the South, along the Ugandan border (Kaiser et al., 2006). Another study shows HIV prevalence rate of 2.7% among general population in YEI (2003) and 7% in Yambio (2000). [HIV treatment scale up plan 2005-2009]

HIV prevalence of over 2% has been found among women seeking antenatal care in the White Nile state (Ministry of Health Sudan, 2006). In general HIV prevalence among pregnant women is estimated at 1%. Also some locations in East Sudan have a higher HIV prevalence rate.

HIVAIDS epidemic is not only confined to the South or Darfur or some areas in East Sudan [MOH, Sudan 2005]. In North Sudan HIV prevalence among general population is estimated at 0.95% pregnant women, 1.9% STI patients and 2.3% TB patients (SNAP 2004). For vulnerable groups in N. Sudan HIV prevalence is estimated as follows (2002 study WHO EMRO):

- IDP's 1%
- Female tea sellers 2,5%
- Refugees 4%
- Female sex workers 4.4%

A 2005 study among police officers in Khartoum State, for example, found that 1% was HIV-infected. Knowledge of HIV was extremely poor: only 2% of the men knew that condoms can prevent HIV transmission (Abdelwahab, 2006). In addition, unsafe sex between men appears to be a contributing factor in the epidemic in Khartoum State, according to another study which found HIV prevalence of 9.3% among men who have sex with men. Almost all the men participating in the study claimed to have more than one sexual partner, and two thirds said that they had sold sex. Just over half the men were unaware of the risk of HIV infection during unprotected anal sex and only 3% of them said that they used condoms consistently (Elrashied, 2006). A study done by SNAP and Care among IDP antenatal mothers in Khartoum reveals a HIV prevalence of 1.6%, very similar to 1.5% for general population women in Red Sea State.

2.3 Underlying factors leading to risk of HIV infection

There are several factors which contribute to the HIV epidemic in Sudan:

- Poverty
- Gender

- Illiteracy
- Access to resources
- Poor quality health systems
- Unemployment
- Lack of knowledge
- Stigmatization
- Power relations
- Religious values: until very recently the idea was that people in the North have no risk for HIV infection due to strict religious values. This assumption could also reinforce a perception of relatively safety and inaction for communities in N. Sudan.
- Geographical location of the country with extending borders with other countries, some of which with high prevalence rates.
- High population movement in Sudan, due to:
 - Civil War.
 - Natural disasters.
 - Economic factors.
 - Immigration for work

2.4 Sub populations at risk

Although there is an important lack of knowledge about epidemiological HIV/AIDS data, it is generally agreed that Sudan is in the early stages of a generalized HIV/AIDS epidemic, with almost an exclusively hetero sexual transmission pattern. There are clear indications that South Sudan has a higher prevalence rate than N. Sudan.

Groups who are particularly vulnerable for HIV/AIDS infection are (data from national government controlled areas N. Sudan):

- IDP's due to disruption of family cohesion and change in sexual norms
- Refugees (4% HIV prevalence)
- Prison inmates (2% HIV prevalence)
- Members of armed forces
- Widows
- Commercial sex workers(4% HIV prevalence)
- Tea sellers (10% among tea sellers in S. Juba).
- Street children(1.3 % HIV prevalence)
- Truck drivers (1% HIV prevalence)
- Victims of sexual violence(rape)
- Pregnant women (1% HIV prevalence among women antenatal care centres)
Government controlled areas)
- Girls married at a young age
- People with TB (between 2002-2004 level of HIV prevalence among TB patients is rising; reaching 8.2%[strengthening health sector response to HIV AIDS in East Mediterranean])
- People who undergoes a blood transfusion
- Blood donors (HIV prevalence (0.8–1.8%) [strengthening health sector response to HIV AIDS in East Mediterranean])
- People living in poverty
- Drugs users
- Men having sex with men

Increased risks for HIV prevalence among these vulnerable groups are:

- Unsafe sex related to long civil wars and lack of knowledge how to prevent HIV infection

- Displacement and high mobility of people
- Poverty

2.5 Awareness of HIV/AIDS among population

Behavioural data is also limited to the Situation Analysis 2002 study [7, 8]. This study reveals that in general awareness of HIV/AIDS is low in Sudan. Although 78% of people have heard of HIV/AIDS, only 20% recognized it is caused by HIV and 53 % appear to be aware of sexual transmission risk. More than 60% of participants have never heard or seen a condom and less than 10% mentioned condom as a means of prevention.

At the same time wrong beliefs of HIV/AIDS are common as were related stigma indicators. Wrong beliefs/ Stigma indicators:

- 28% belief mosquito could transmit disease
- 24% believes sharing a meal could transmit disease
- 44% would not share a meal with a HIV infected person
- 31% would not nurse a patient
- 31% believes an infected child or teacher should not attend school

Recently a KAP study has been done in North Sudan among youth and adolescent. This will be discussed in chapter 7 paragraph 7.6.

For South Sudan there is no data available about awareness of HIV/AIDS; one may suggest that it would be the same, or even less, because of a very poor health system in the South and lack to access and information.

2.6 Stigma

Sudan is a multi ethnic country with indications of variations in culture, including sexual norms. In the North, the culture is mostly Muslim with strict religious values. The South is predominantly Christian or animist.

Studies of the impact of cultural differences on HIV/Aids epidemic and vice versa could not be found. However there are some indications that stigma against people living with HIV/ AIDS (PLWHA) are more pronounced in the North due to strict social/ cultural and religious background [15, 8]. Quite often PLWHA are outcasts, mostly they are abandoned by their community and rejected by their family. Also families with a member with HIV/AIDS are often suffering from discrimination. PLWHA loss their jobs, have no social welfare and in most cases can not afford treatment.

In the South, for instance in Juba, PLWHA are more openly active in promoting prevention of HIV and care services.

There is a possible other explanation that religious values and perceptions may be linked to stigma. In the South the Sudanese Council of Churches is already quite active in both prevention and care activities, even in the North. They have also strong linkage with PLWHAs Association. Most Muslim faith- based organisations are not involved in prevention and care activities and are not represented on existing multi-sectoral forums.

For developing prevention and care activities in the field of HIV/AIDS it is of most importance to include Muslim organisation in planning strategies.

Stigmatization against PLWHA is also present among health workers and incidents of refusal to provide care or VCT test on account of ignorance, fear or judgemental attitudes to PLWHA have occurred in the country.

3. National Policies

In general the Government of Sudan is committed making structural reforms and reducing poverty by addressing root causes of poverty.

The North-South Peace Agreement has allowed the government to take a new direction in addressing socio-economic disadvantages. The tenets of the peace agreement have been designed to redistribute wealth and authority more evenly, and surplus revenue from oil exports will be allocated for poverty reduction.

Sudan has signed various international declarations and resolutions on HIV/AIDS. Among them are: The UN General Assembly Special session on HIV/AIDS(UNGASS), MDG, Abuja Declaration and Framework for action on HIV/AIDS, TB and other related Diseases and several conventions on Human Rights.

3.1 National Health policy

In 2006 a draft of the Sudan National Health Policy has been published. This policy outlines the key strategies for the development of Sudan's Health sector

[<http://www.fmoh.gov.sd/nhpcbwn/Nationa%20Health%20Policy.pdf>]. The mission of the National Health Policy is to ensure provision of health care to all citizens of the Republic of Sudan, with emphasis on the health needs of the poor, underserved, disadvantaged and vulnerable that they can lead a socially and economically productive life.

The present local and international initiatives, for which Sudan is signatory are staying valid, including the convention on child health (1990), millennium summit and the MDGs, and the primary health care approach and its recent development

3.2 General Strategies in relation to HIV/AIDS

National Poverty Eradication Strategy (PES): In 2004 the Government of Sudan and the Sudan People's Liberation Movement reached an agreement regarding the main objectives of the policy framework for a National Poverty Eradication Strategy (PES). The PES has two overall objectives [IFAD Sudan]:

- Achieving lasting peace and reducing the risk of future conflicts
- Making substantial progress towards reducing poverty and other development goals

The strategy is based upon the need to share the benefits of economic growth widely and equitably throughout the country.

Rural development priorities focus on poverty reduction, restoration of livelihoods, provision of essential infrastructure and services and investments in agriculture, especially the rain fed sector. The PES addresses rural development from a number of aspects that are relevant to the structural causes of rural poverty, by:

- Building a decentralized and multi-layered governance structure that is characterized by transparency, accountability and adequate resource allocation
- Implementing comprehensive capacity building and institutional strengthening programmes
- Creating an enabling environment for private sector development with special emphasis on rural development
- Empowering local communities and vulnerable and marginalized social groups including women and young people

- Implementing environmentally sound management of natural resources

Another strategy is The National Strategic 25 years Plan for Health Sector [FMOH website].

The National Strategic 25 years Plan for Health Sector [FMOH website] aims at providing a road map for identifying key priority areas” and defining the contextual “framework for health systems and services development” in the given period. HIV and AIDS are reported in the strategic plan to be among the priority health problems of Sudan. In terms of HIV and AIDS it provides an eight-point agenda of *strategies* including:

- Development of a strategic plan at states level
- Health education and awareness raising
- Providing clinical care and psycho-social counselling for HIV/AIDS patients and others
- Providing indicators – e.g. the “percentage of population seeking voluntary HIV testing”.

In the strategic plan it is considered possible to reach the MDG 6 – to halt and begin to reverse the spread of HIV and AIDS and the incidence of Malaria, Tuberculosis and other major diseases.

3.3 HIV/AIDS Strategies/ Policies

Between 1987 when the National Aids Program was formed and 2002, efforts to combat the epidemic were sporadic and on a very low level. The findings from the situation and response analysis by the government “HIV prevalence rate of 1% in 2002 among pregnant women” have spurred the response of the Government [7]. The result was the development, together with the aid of UN Country Theme Group on HIV/AIDS, of a National Strategic Plan 2003-2007. An updated National Strategic Plan 2004-2009 has been developed and apart from health sector other sectors are involved in the Plan: eight government ministries and one NGO Sudanese General Women’s Union. They all have identified HIV/AIDS activities to be implemented as part of National Strategic Plan. The eight government ministries are:

- Ministry of defence
- Ministry of education
- Ministry of interior and Police forces
- Ministry of Guidance
- Ministry of Information and communication
- Ministry of higher education
- Ministry of youth and Sports
- Ministry of General Education

A ministerial decree by the government and stakeholders March 2004 declared HIV/AIDS as a priority disease and recommended that national response strategy be based on simplified treatment and care guidance; in accordance with international standards issues and HIV testing are also included in the policy. However one may not forget that malaria and other endemic diseases (especially in S. Sudan) are also responsible for a high level of mortality and morbidity.

3.3.1 The National Strategic HIV AIDS Plan 2004-2009

This plan aims at reduction of HIV and AIDS on to a level in which it is no longer a public health problem. Through a multi-sectoral response to the disease the overall goal of the National HIV/AIDS Strategic Plan could be in reach.

Main objectives are:

- To improve quality of live for PLWHA
- Reduced morbidity and mortality
- Mobilise political and community leaders to ensure their commitment in the fight against HIV and AIDS

Also high priority will be given to capacity building of human resources at national, states and local level to ensure effective participation in the national strategic plan. All sectors are expected to play an active role in the resource mobilization, planning, implementation and monitoring of the national response”.

The national multi- sectoral strategic frame work for HIV/AIDS (2004-2009) achievements are lying in the field of:

- 1- Care management including the development of the national guide lines
- 2- Voluntary counseling and testing
- 3- PMTC.
- 4- Home based care.
- 5- Laboratory diagnosis
- 6- Standardizing modules in these fields

Goals to achieve by 2009 are:

- Distribution of ARVs to 16,000 people
- Maintaining 2 percent prevalence
- Fostering traditional believes and practices encouraging youth to marry
Increase percentage of population that can identify modes of HIV transmission and preventive from 10% to 70%
- Provide PMTCT to 1500 mothers and their infants
- VCT provided at 270 testing sites in Public Health Facilities that will have tested/ counselled having 2.5 million people

3.3.2 National Strategic HIV AIDS Treatment scale up plan fore the Republic of Sudan 2005-2009.

This plan is a follow up from the 2003-2005 strategy. Main focus points of the Plan are [8]:

- Awareness rising
- VCCT [Voluntary Confidential Counselling and Testing]
- PMCT [Prevention of Mother to Child Transmission,
- Blood safety
- Management of sexually transmitted infection and treatment
- Care and treatment
- Decentralization & capacity building
- Monitoring and Evaluation
- Surveillance and research.

3.3.3 Other policies related to HIV/AIDS prevention/ treatment

Different National Policies related to HIV/AIDS are [FMOH website]:

1. National Policy on HIV/AIDS 2004: The National Policy on HIV/AIDS declared June 2004, is built on the principles of all conventions, commitments and agreements concerning HIV and AIDS and human rights that have been signed by the GOS. It recognizes HIV as a developmental rather than pure health issue and therefore calls for a multisectoral, multidisciplinary national response that “engages all actors from government, UN, civil society, NGO’s and private sector as well as bilateral and multilateral agencies”.

The policy document stresses:

- The importance of a surveillance system + monitoring and evaluation + research.
- The rights of PLWHA
- The principles of care and support for infected and affected people
- The prevention of AIDS and sexually transmitted infections (STIs)
- The need to focus on youth, gender and high risk groups.

The policy upholds the right of PLWHAs to holistic care, access to counselling and information to protect themselves and others from further HIV transmission. It also activates the duty of health care providers to treat PLWHAs with respect and without any form of discrimination on their HIV sero - status. The policy provides guidance for required legislation related to HIV/AIDS.

2. National Policy on Reproductive Health[FMOH] is for development and implementation of the appropriate strategies for control of HIV and AIDS /STIs among women in reproductive age.

Other key policy elements include:

- Coordination and collaboration between RH Directorate and SNAP at federal and state levels
- The right of every Sudanese citizen in access to service and information about HIV/AIDS/STIs
- The detection and management of HIV/AIDS/STIs among pregnant women and their right to access quality care without being subjected to any sort of discrimination or stigmatization

Adolescent and youth health is identified as a cornerstone of RH and therefore key policy elements are aiming at “improved access of the youth to quality services and information”, “improved quality of school health services and university based services” and - in collaboration with SNAP – “access to the information, education and services necessary to develop the life skills required to reduce their vulnerability to HIV infection”.

3. Policy Framework for the return of displaced persons in a post-conflict Sudan (2004): a joint Humanitarian Aid Commission (HAC) and Sudan Relief and Rehabilitation. The Health Care of Displaced Persons falls under Article six – Statement of Rights and Obligations. It is recognized that there is a potential risk for the increase of “contagious and infectious diseases, including HIV and AIDS, among displaced persons, especially in areas of return”. Authorities are instructed to pay special attention to the prevention and containment of these diseases and regard health education as a priority. It is emphasized that the “displaced shall not be discriminated against on the basis of any existing health conditions”.

4. Sudan Child Health Policy Situation Analysis: The prosperity of Sudan is closely related to the wellbeing of its children who are forming the majority of its population. Child health has become one of the “top priorities” of the FMOH. The FMOH works – with the support of the WHO Regional Office for the Eastern Mediterranean (WHO-EMRO) – on the development of a child health policy. However there is no indication on what role HIV and AIDS will play in this policy.

5. The National AIDS Program (SNAP) of FMOH has put together a draft for Anti Retroviral Treatment Policy.

3.4 Multi-sectorial approach

HIV/ AIDS is not only a health problem, but also a development problem and affect, apart from health sector, all other sectors in civil society. For this it is beyond doubt that HIV/AIDS must become an integral part of other government policies and activities.

UNAIDS and WHO state that in general HIV and AIDS response in Sudan can be characterized as being multisectorial with several government sectors, besides the MOH, realizing the importance of their role in the national response. This is combined with an active civil society with NGOs and UN agencies working in the field of HIV and AIDS [UNAIDS undated: Sudan, p. 2. WHO 2005 HIV/AIDS Treatment Scale up Plan, p. 8].

Brief description of stakeholders will be given in chapter 4.

3.4.1 Government response:

Military and Police: They are provided treatment for their personnel in Khartoum and Juba. The police hospital in Khartoum was involved in ART provision in the past. They are also provided care and treatment to civilians in this area. A program has been started with peer education

Ministry of Education: In Northern Sudan, the Ministry of Education has given its authorisation for the development/revision of HIV/AIDS curriculum for primary and secondary schools, and guides for teachers, students and parents. Prevention activities developed included peer education [9]

Ministry of higher education is supporting the formulation of Anti-AIDS students association in all Sudanese universities which were found to be a very good platform for peer education, awareness raising and out reach activities. Moreover, VCT centres were established in collaboration with the Ministry of Health in a number of universities [13].

Ministry of Interior: has initiated a package of interventions for prison inmates (behavioural communication and peer education)

Ministry of Welfare: As member of the CCM the Ministry of Welfare and Social Affaires is engaged in social support for PLWHA and vulnerable groups.

Ministry of Youth and Sports: is involved in different project were sports activities are combined with health education including HIV/AIDS among youngsters.

Ministry of information and communication: UNAIDS, UNICEF, the Ministry of Health, the Ministry of Information and Communications and SNAP have launched a campaign to focus on children living with HIV/AIDS in 2005.

A radio project for S.Sudan to raise awareness about health topics, including reproductive health and HIV/AIDS is also an action from ministry of communication.

Ministry of Guidance: With cooperation by UNAIDS, religious leaders and Ministry of Guidance a curriculum on advocacy and awareness raising of HIV/AIDS for religious leaders has been developed in 2004 and tested in a Workshop.

Ministry of Guidance has issued a decree to formulate this council with clear mandates of mobilizing the religious leaders to effectively contribute to response to the epidemic and seizing the opportunity of mosques and churches as good setting for HIV/AIDS awareness and education due to their large outreach. However the council remains inactive due to lack of resources and also due to other factors.

3.4.2 Civil Society Response

A range of national and international NGOs are involved in HIV AIDS work in Sudan. Most of these agencies work has to do with awareness raising and some of them are sub recipients of Global Fund resources for activities targeting vulnerable groups [8].

Combined Action:

In Project "Right to play", a community based rehabilitation program in South Sudan (Juba), Unicef together with local NGOs and Ministries of Education, Youth and Sport and Social Welfare, are working together in promoting healthy development of children that is essential to the future of healthy communities and the re-building of civil society, on a local and global level [<http://www.sportanddev.org/en/projects/see-all-projects/sportworks-community-based-reintegration-cbr-project-in-sudan-juba.htm>].

3.4.3 Private Sector

Private sector can play an important role in response towards HIV/AIDS. In 2005, SNAP with some private companies started to investigate ways to mobilize private sector to play a part in HIV/AIDS battle. In 2004 some private companies provide, mostly ad hoc, support to National HIV/AIDS Response. Given the current economic bloom in the country and the introduction of many multi-national businesses, it is more important now than ever to advocate for more institutionalized involvement of private sector and the elaboration of their corporate social responsibility towards addressing HIV/AIDS in Sudan [13].

3.5 Focus groups in National Strategic Plan HIV/ AIDS

The National Strategic Plan mention in her plan vulnerable groups and high risk groups as well as PLWHA. The target population addressed in National Strategic Plan includes general population, displaced, refugees, police forces and their families, new recruits in the police forces, military forces, youth, teachers, school youth, university students, women within women societies and women at risk group and orphans. The strategic plan also mentions vulnerable groups such as female sex workers, tea sellers, truck drivers, prison inmates and street children.

Disabled people however are not mentioned directly in the National Strategic Plan and this is the same for other policies like reproductive health policy. Mainstreaming disability in HIV prevention and care programmes is a prerequisite if Sudan wants to reach Millenium goals by 2015 and reduce poverty. Disabled people have the same Human Rights and by that also equal access to health/HIV /AIDS information and to treatment. Therefore it is essential that international and local NGO's acknowledge that their programmes must be accessible for physical disabled people, people with sensory loss (blindness/deaf) and mental disabled people. Certainly if one considers the fact quite a high percentage of people living in Sudan who are blind due to eye infections and people living with a disability due to malnutrition and micronutrient deficiency.

3.6 Integrating HIV/STI interventions in other health programmes

HIV/STI interventions should be an element in relevant health programmes. A holistic way of service delivery, in particular within the framework of services for other communicable diseases (such as tuberculosis, malaria), drug dependency treatment, malnutrition and reproductive health services can result in mutual reinforcement of the individual programmes.

The WHO states:

“Linking HIV/AIDS and sexual and reproductive health (SRH) programmes has the potential to significantly curtail the AIDS epidemic. Furthermore, it also addresses the unmet need and rights of women and men living with HIV/AIDS to SRH services.”

— World Health Organization, *Linking Sexual and Reproductive Health and HIV/AIDS*

3.6.1 Integrating SRH into the HIV/AIDS component of Sudan’s policy

The five core aspects of sexual and reproductive health are [10]:

1. Improving antenatal, prenatal, postpartum and newborn care
2. Providing high-quality services for family planning, including infertility services
3. Eliminating unsafe abortion
4. Combating sexually transmitted infections including HIV, reproductive tract infections, cervical cancer and other gynaecological morbidities
5. Promoting sexual health

The majority of HIV infections are sexually transmitted or associated with pregnancy, childbirth and breastfeeding, and are therefore preventable. The interactions between sexual and reproductive health and HIV are now widely recognized. In addition, sexual and reproductive ill-health and HIV share same root causes, including poverty, gender inequity and social marginalization of the most vulnerable populations.

HIV affects or potentially affects all the dimensions of women’s sexual and reproductive Health; pregnancy, childbirth, breastfeeding, abortion, use of contraception, exposure to diagnosis and treatment of STIs and, exposure to gender-based violence.

The National Policy on Reproductive health clearly states that every person has the right to access of information about prevention HIV/AIDS and STIs and other reproductive health issues as access too treatment of HIV/AIDS. However there is a huge gap between this statement and practice in Sudan. In general access to reproductive health services (RHS) is low as is quality of RHS. The percentage of deliveries attended by trained birth attendant (not necessarily skilled) is 56% in North Sudan and only 5% South Sudan. Contraceptive prevalence rates are low, at 7% in North and 1% in South Sudan. Fistula is a priority for national programmes and majority of cases are found in the South deprived and remote areas of Sudan, Darfur, and Kordofan States. However there are no prevention programmes and repair is not available in hospitals in Darfur, Southern Sudan. [23]. Those examples illustrate the lack of access to proper reproductive health services. Reasons for lack of reproductive health services (in general the same reasons as for general health services) are:

- Sub-standard quality of services
- Small coverage of health facilities vis a vis number of population
- Unequal distribution of health facilities, human resources and equipment
- Brain drain of skilled staff, shortage of trained counsellors.
- Discrimination of people infected with HIV/AIDS by health as mentioned earlier under paragraph stigma.

From 2007 onwards UNFPA starts with new strategies targeting specific planning and programmatic issues regarding RHS. One of these includes scaling up negative socio-cultural practices affecting RH status through behaviour change and communication techniques. [23]. Also there is an urgent need for more efficient and cost effective implementation modalities with increased focus to states and local administrative units (capacity building, strengthen local human resource capacities) as private sector.

3.6.2 Linkage with FP

Sudan has a high fertility rate; 4.4 for N. Sudan and 7.6 for S. Sudan. There is an unmet need for family planning [16]. Possible reasons are for this are:

- Deficiency in knowledge about contraception and birth spacing
- Family planning services are not accessible for women (gender issues)
- Unaffordable or not acceptable (low quality of services) to those with unmet needs
- Gender and culture aspects

There is a lack of knowledge about the use of condom as dual protection within married couples to prevent the risk of STIs and HIV infection. In general condom use is very low in Sudan as is knowledge about transmission of HIV.

It is globally acknowledge that FP and HIV/AIDS interventions should be integrated. Overall, it is estimated that 75% of both Sudanese men and women may not know how to protect themselves against infection [www.unsudanig.org Sudan gender profile]. It is beyond doubt that HIV/AIDS has to be integrated into Sexual Reproductive Health services and family planning.

For the integration of sexual and reproductive health services, family planning and HIV/AIDS in the communities, it is essential to involve men and religious and community leaders from the onset of projects.

3.7 Impact of HIV/AIDS on Sudanese people

There are no studies available on the topic impact of HIV/AIDS on Sudanese people. However it is likely that the additional cost of illness associated with HIV/AIDS has a devastating effect for already impoverished families.

For most Sudanese people AIDS is related to sexuality and drug use and by that associated with stigmatization and fear. A large number of people being infected with AIDS equate with promiscuity and homosexuality. As such those infected with HIV/AIDS tend to keep silent out of fear of being stigmatized, rejected and/or losing employment. Women suffer disproportionately, even at cases where women may be infected through blood transfer or through sex with infected partners; they remain to be stigmatized as well. Moreover because women have a low status in Sudan.

Women also bear the bulk of the responsibility of caring for those infected. A woman often has little choice but to take care of an infected member of the family, yet if found infected it is women who are mostly thrown out. For this the impact of HIV/AIDS on women is severe.

There is much need in Sudan to give more attention on gender dimensions of HIV/AIDS and on disproportionate suffering of women.

Some related factors here are:

- Sudan is a country with a long war history and still ongoing conflicts with displaced women who are exposed to rape and sex exchanges.
- Migration of men due to conflicts + drought period (search for food)
- Sudanese women get less than 1/3 of men's income.
- One in five women are unemployed(men one in eight)
- 40% of women are literate. This has this has implication for passing on health messages, bargaining power for safe sex and reproductive health.

4. Implementation HIV/AIDS programs through partnership

Reducing the risk of HIV prevalence among risk- and vulnerable groups and general population and securing treatment for people with AIDS, ask for a holistic approach. For this partnership between all the organizations involved in HIV/AIDS prevention and treatment is a prerequisite. WHO/UNAIDS Sudan work on capacity building of human resources between different institutions.

4.1 National Structure

The framework of the national structure to combat HIV/AIDS in Sudan is organized around two pillars: North Sudan and South Sudan with the Interim national Constitution of Sudan on top.

Figure 4:

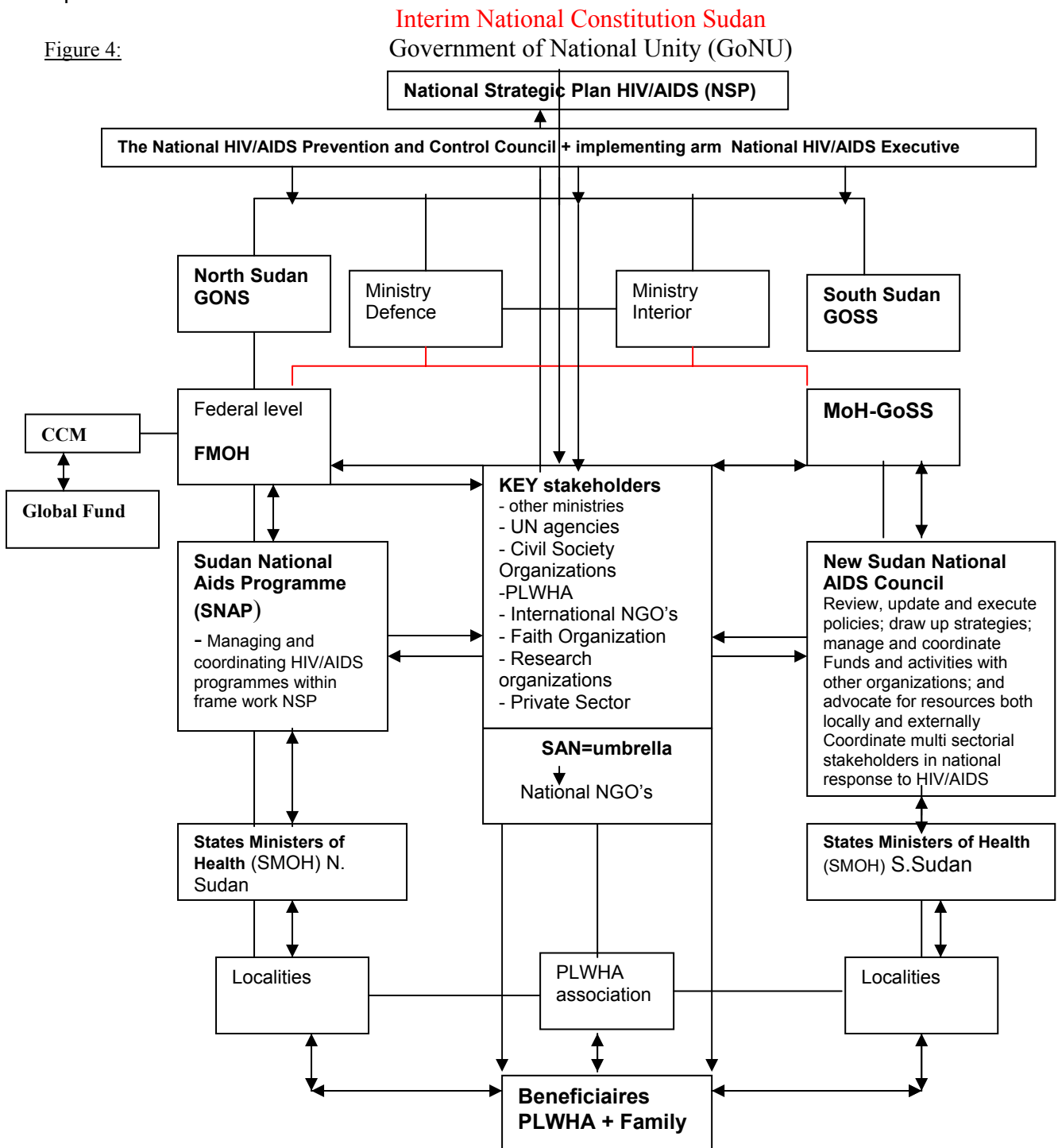


Figure 4 gives an overview of different organizations involved in the delivery of health services for HIV/AIDS patients and HIV prevention (due to shortage of place the other 5 Ministries are not included in the diagram). North Sudan has a national strategic framework for HIV/AIDS "SNAP". South Sudan established June 2006 New Sudan National Aids Council, The Government of South Sudan through New Sudan Aids Council, together with UNPD and UNAIDS is in the process of developing a Policy of Aids for S. Sudan.

4.2 Stakeholders

There are a number of stakeholders working at various levels and with different interests in the HIV and AIDS problematic in Sudan. The number of NGOs involved in the subject has increased extensively in the past years and missing leadership and coordination at government level has led to a serious lack of transparency. This will have an impact on the effectiveness of HIV/AIDS prevention and care programmes in Sudan.

The FMOH and the GOSS have recently signed acts and developed policies for a better control of and collaboration with the NGO sector [Secretariat of Legal Affairs and Constitutional Development 2003]. [11]

Several Associations like the *Women's Association for AIDS Prevention and Sudanese PLWHA Care Association* are dealing with social support to PLWHA and vulnerable groups.

Stakeholder matrix

A stakeholder analysis gives information about stakeholders involved in HIV/AIDS related topics in Sudan. Because there are quite a number of stakeholders involved in Sudan, a matrix of some stakeholders mentioned underneath has been done [appendix fig.1 Stakeholder matrix 11]. The stakeholder analysis shows a strong commitment to collaboration and most of stakeholders are participating in CCM for the GFATM. Stakeholders cover vulnerable groups, civil society in general, PLWHA and risk group's children and women. They also mention education in their programs, but it is not clear at what extend.

A critical note in stakeholders analysis is that there is no or almost no primary data available of stakeholders working at grass root level and from other ministries [12].

Also there is lack of transparency in policies of 8 ministries regarding HIV/AIDS issues. Financial constraints experienced by stakeholders have a negative impact on the scale and possibilities of involvement in HIV/AIDS related issues.

4.2.1 National Institutions

National Council on Communicable Diseases and Epidemic Control: Established in 2001 as a high level policy and advisory body to the Government on control of all communicable diseases.

Country Coordinating Mechanism [CCM]: Established in 2002. Country Coordinating Mechanisms are central to the Global Fund's commitment to local ownership and participatory decision-making. These country-level partnerships develop and submit grant proposals to the Global Fund based on priority needs at the national level. Country Coordinating Mechanisms include representatives from both the public and private sectors, including governments, multilateral or bilateral agencies, non-governmental organizations, academic institutions, private businesses and people living with the diseases. Some of the following organisations are participating in CCM: Federal Ministry of Health, WHO, South Sudan SPLM Health Secretariat, Sub-CCM Sudan / South, Alternate Sudan, National AIDS Control Programme officer, UNDP CCM South Sudan programme officer and World Vision International programme officer. A complete list of CCM members is to be found on website: <http://www.theglobalfund.org/programs/CCMMembers.aspx?CountryId=SUD&lang=>

Sudan National Aids Program (SNAP): Technical department of Government and responsible for HIV/AIDS national level policies, planning and coordination. In collaboration with several UN agencies, mainly UNAIDS, SNAP is the author of the National Policy on HIV/AIDS and Sudan National Strategic Plan and Sectoral Plans on HIV/AIDS 2004 – 2009. SNAP is a member of the CCM and designated to prepare proposals, give technical and financial input and act as component coordinator and focal point for HIV/AIDS activities in the two GFATM projects.

SNAP also liaises with several government ministries who have HIV/AIDS activities. SNAP has a clinical counselling and Management Department that is responsible for treatment and other care and support in relation to HIV/AIDS.

Sudan National Control Aids Programme: Prevention; epidemiologic monitoring; control, diagnosis and monitoring of STIs, HIV/AIDS.

Ministry of Welfare and Social Affairs

As member of the CCM the Ministry of Welfare and Social Affairs is engaged in social support for PLWHA and vulnerable groups.

New Sudan National AIDS Council (NSNAC)

The NSNAC was formed by the newly assigned GOSS to mobilize the response to HIV and AIDS in Southern Sudan. Its mandate is “to review, update and execute policies, draw up strategies, manage and coordinate funds and activities with other organizations and advocate for resources.

SPLM Health Secretariat Overall policy and supervision of the health system in Southern Sudan

4.2.2 Government and international Agencies

Beside Government, international agencies; WHO, UNDP, UNICEF, UNAIDS, WFP and Ocha are participating in Functional Country Theme Group(CTG), which is currently chaired by UNFPA. Technical officers for these agencies also meet in a technical working group which is also attended by SNAP and representatives from several international and national NGOs[8].

World Health Organization (WHO)

WHO EMRO holds a WHO country office in Sudan. Its overall objective is to “see mortality and morbidity among the most vulnerable people reduced, and help the Country progress towards the attainment of the Millennium Development Goals under the leadership of the UN”²⁷⁴. Its emphasis is on working towards improved access to ART through the 3 by 5 initiative. The country office has recently published a draft for a *HIV/AIDS Treatment Scale-up Plan for the Republic of Sudan 2005 – 2009* and several HIV/AIDS fact sheets.

United Nations International Children's Emergency Fund (UNICEF)

Guided by the *Convention on the Rights of the Child* UNICEF is “mandated by the United Nations General Assembly to advocate for the protection of children's rights, to help meet their basic needs and to expand their opportunities to reach their full potential. As one of the two UN agencies who initiated the OLS, UNICEF looks back at a long history of involvement in Sudan. Lately UNICEF has produced and tested *Life Skills-Based Education Materials* for HIV/AIDS prevention and Health/Sanitation in Southern Sudan. Another programme is Operation Lifeline Sudan. As CCM member UNICEF was involved in the proposal preparation for the round 3 and 4 of the GFATM.

UNAIDS USAID's program for increased use of health, water and sanitation services and practices strengthens capacities of 20 targeted county health departments and their nongovernmental partners (international and Sudanese) through grants to deliver high impact primary health care, HIV/AIDS, and water and sanitation services. The program also supports the Government of Southern Sudan - Secretariat of Health (GOSS/SOH) and the

New Sudan National AIDS Council (NSNAC) in building capacity to provide strategic leadership in the health, sanitation and AIDS sectors.

UNDP: A co-sponsor of UNAIDS, UNDP is focused on three areas: intervention HIV/AIDS, Human Development Governance of HIV/AIDS Responses(building consensus among all partners) and Enabling Human Rights and Gender Environment (protecting people's rights, especially the rights of the most vulnerable)

The UNDP Regional Bureau for Arab States (RBAS) in partnership with BDP and through the support of the HIV/AIDS Thematic Trust Fund developed its first-ever Regional Programme on HIV/AIDS in the Arab region to respond to HIV/AIDS. HARPAS launched October 2002 has implemented a multisectoral approach in the HIV/AIDS response through key initiatives including the Religious Leaders Initiative, Private Sector Initiative, Legal Review Initiative, Arts and Media (A&M) Initiative, Regional Arab Network Against AIDS (RANAA), Greater Involvement of People Living with AIDS (GIPA) Initiative, Women's Leadership Initiative, Sub-Regional Initiatives. HARPAS is also active in Khartoum.

OCHA: United Nations Office for the Coordination of Humanitarian Affairs (OCHA) Sudan

Foreign donor countries involved in HIV/Aids development aid are: USA, UK, Japan, private NGOs, Norway, The Netherlands, Canada, Switzerland, Sweden, European Commission, Italy, France, Finland, Germany, and Cyprus.

4.2.3 International and National NGO's:

A range of international and national NGO's are involved in HIV/AIDS work in Sudan. Most of their work consists of awareness –raising and some of them are involved in activities targeting vulnerable groups.

National NGO's coordinate their work under the umbrella of Sudan AIDS Network (SAN). As an HIV/AIDS umbrella organization, Sudan AIDS Network (SAN) was formulated in June 1996. One of its main goals is to coordinate efforts and promote collaboration between members and other stakeholders nationally and with other partners at regional and global levels.

The executive board of this network is composed of 7 NGOs (International), 2 NGOs, (National) one faith-based organization and one PLHIV. Over 55 civil society organizations are registered in this network to date including organizations, associations, unions, groups and individual members (2005).

Some other national NGOs are:

PLWHA Association Southern Sudan

The PLWHA Association was formed in 2003 by 32 PLWHA, 45 counsellors and 360 orphans of AIDS in Equatoria States Southern Sudan. Its objective is:

- To strengthen PLWHA
- To fight stigma and discrimination
- To support and care for PLWHA
- To raise prevention and the awareness of people on HIV/AIDS.

As CCM member it is dedicated to advocacy, human rights, orphans & AIDS, counselling and access to care and treatment.

Women Association for AIDS Prevention

The Women Association for AIDS Prevention is a member of the CCM and engaged in VTC.

International NGO's are involved in awareness raising for various targeting groups. One, MSF Holland is starting ART for Leishmaniasis patients who have AIDS. MSF Holland; has been working In Sudan as a NGO for quite a long time. Beside reproductive health services

they are also focusing on ARV treatment for vulnerable groups and Post Exposure Prophylaxis as part of gender based violence. Several agencies in Darfur are reported to be providing ARV's for post exposure prophylaxis (PEP) as part of gender based violence interventions.

Ockenden International

Ockenden International has worked as a NGO with displaced people in Sudan for over 20 years. Its involvement in HIV and AIDS is at regional level through implementing comprehensive HIV and AIDS programs focusing on preventive Education in Eastern and Southern Sudan. Ockenden International with support from DFID is implementing a two years programme in Red Sea and Kassala States. The programme used different methods for awareness raising and is targeting refugees. The involvement of many local stakeholders (more than 80 active partners) as key players in the theme of HIV/AIDS prevention is a major success that distinguished Ockenden intervention as unique throughout the country. At national level Ockenden is involved in policy development and advocacy. As CCM member Ockenden is giving technical and financial input to the GFATM proposals. Adventist Development and Relief Agency (ADRA) - South Sudan; Education, Emergencies, Nutrition, Health

4.2.4 Faith-based organisations:

The Sudanese Council of Churches, a Christian faith-based organisation is active in both preventive and care activities even in the North. They are a member of CCM and they have strong linkage to the activities of PLWHA associations [14]. Action by Churches Together, a coalition of faith-based NGO's groups, The Sudan Council of Churches and Caritas International, a Catholic relief group, are working together in the fight against HIV/AIDS.

Muslim faith based organizations are minimal. Representations on formal HIV/AIDS prevention and care activities are minimal. They are not represented on existing multi-sectorial forums. A curriculum for training Muslim leaders on HIV/AIDS advocacy and awareness raising is developed, prepared sermons distributed and dialogue workshops conducted by SNAP in partnership with Ministry of Guidance, during 2004. However implementation of intervention programmes by Muslim FBOs has not yet occurred [8, 11]. It is important to invite Muslim leaders in early stage of preparing reproductive health programmes and HIV/AIDS issues for regions in Muslim areas. Their opinion has an impact on the stigma of AIDS and on discrimination of PLWHA.

4.2.5 Community-based organisations:

Because of low awareness and possibly stigma, many Aids patients are reported to stay and die at home, without even reporting to health services. At the moment no formal home based medical care activities have started. Only PLWHA association in Juba recently started with home based programme and apart from counselling also food distribution (collaboration with WFP) and limited training income generation. PLWHA in the North are less openly active in communities because of fear for strong reactions from their families such as rejection.

4.2.6 Media

Ministry of Information and Communication, together with the assistance of UN agencies have developed a media programme for Health related and HIV/AIDS issues in South and also some parts in North Sudan.

4.2.7 Private sector

Marwaco, a private pharmaceutical act as agent for CIPLA, importing drugs including Trimune which it sell to Ministry of Defense as well to individuals whose payment are covered by Zakat Fund. The current market price for Trimune at Marwaco adds up to annual cost of US\$ 600. Marwaco and SNAP are in negotiation to lower the price for HAART. Marwaco is also provider for private practitioners who provide ARV treatment [8, 11]. Some other Multinationals support HIV/AIDS programs.

4.3 Multi-sectoral participation and collaboration

Partnerships between health institutions / professionals, civil society groups, local Communities, religious leaders, community leaders, local NGO's , international NGOs and SMOH and FMOH and other relevant ministries like Youth and Sport, Education, Social Welfare, Interior, are essential for strong national responses. In particular people living with HIV/AIDS have an important role in educating communities, in advocacy, reducing stigma, motivating persons to come forward for testing and treatment and in providing peer support and promoting treatment.

4.4 Civil society representation and participation

Civil society organizations have made significant contribution in the HIV/AIDS response in the country. The civil society organizations include both National and International Non-Governmental Organizations (NGOs), Community Based Organizations (CBOs), Faith Based Organizations (FBOs) and Networks /Support groups of People Living with HIV. In 2004, PLHIV formed the Sudanese Association for Care and Support of PLHIV with the support from different key stakeholders such as civil society organizations in addition to UNAIDS and other UN agencies. The association aims to address the stigma and discrimination associated with HIV and changing the attitudes of society in that respect, provide psycho-social support to those infected, as well as train PLHIV on how to live positively. The association has over 250 members including people who are positive, counsellors, AIDS orphans and volunteers. So far, 12 branches have been established in different states including in South Sudan. Through the association PLHIV are now represented in different platforms both nationally and internationally and are able to voice out their concerns and need and advocate for the promotion of rights of PLHIV. SNAP recognizes the important role played by civil society organizations in effectively addressing the grassroots and endeavours to ensures their involvement in planning as well as implementation of the HIV prevention, care and support and treatment programme. Some of the NGOs are involved in treatment and some have a close collaboration with PLWHA association.

In close cooperation with civil society four parallel health service delivery system work towards reducing the impact of HIV/AIDS in Sudan [8]:

- Public health system(primary health care structure with 300 rural hospitals and referral structures at state level)
- Health services of the Police (including areas to all 43 state prisons)
- Armed Force Health System (also treating civilians)
- Health services of non-governmental organizations working with many of the 4 million IDPs.

Civil society organizations are key constituencies of the existing coordination, planning and implementation structures and mechanisms. This includes the National AIDS Council,

Country Coordinating Mechanism (CCM), HIV/AIDS Technical Working Group and ad-hoc task forces.

4.5 Financial Status and funding by stakeholders

No recent data about funding for 2007 has been found. The financial data from different stakeholders such as Government, UN agencies and International, national organizations and faith based organizations during period 2004-2005 were collected by SNAP [13]. There is no information from other government sectors funding which is disbursed on HIV/AIDS programme for period 2004-2005 and 2006-2007. Also amount of distribution of funds to North and South Sudan is not clear. For the year 2004-2005 there were different sources of funding [13]:

- Government: from the Ministry of Health; mainly used for securing necessary supplies such as running cost and logistic. Small proportion also goes for blood banks to ensure 100% screening policy for transfuse blood and SNAP staff salary at national and states level.
- UN agencies and NGOs; funds which are provided by them include their own funds through direct funding from different donors in addition to the pooled funding mechanism. The donors who contribute to the HIV/AIDS programme include Department for International Development (DFID), the embassy of Netherlands GTZ and Italian fund
- Global Fund: is the main pooled funding mechanism for the HIV/AIDS programme [17].
- Multi Donor Trust Fund: (a pooled funding mechanism) A HIV/AIDS proposal is prepared by the SNAP (2004) and in turn it will be submitted through the Ministry of Health endorsed by the Ministry of Finance.

Figure 5: Financial Status. Note: Out of 40 organizations participated in the compilation of this report, only 25 partner organizations provided their financial data Source: HIV AIDS Integrated Report North Sudan 2004-2005

Stakeholders	Amount Obligated US\$		Amount Disbursed US\$		Amount Utilized US\$	
	2004	2005	2004	2005	2004	2005
Government	368,300	400,000	368,300	400,000	368,300	400,000
International NGOs	432,059	708,508	406,259	695,145	835,777	921,305
National NGOs	6,064	105,065	6,064	105,065	106,719	113,697
Faith Based Organizations	150,000	459,176	94,000	194,000	118,000	186,826
UN agencies	836,977	2,283,067	398,721	1,689,376	641,721	1,594,065
GF R3		3,540,136		1,784,858		1,784,858
Total	1,793,400	7,495,952	1,273,344	4,868,444	2,070,517	5,000,751

Some recent information about UN activities in Sudan and their national programmes/ funding can be found in Sudan Work plan 2007 on website:

http://www.unsudanig.org/workplan/2007/docs/national-programmes/WP07_NP_project_overview_by_sector_RD.pdf

Examples about some programmes concerning HIV/AIDS topics are:

- RCO: Strengthening the Coordination of Recovery and Development in Sudan ; national programmes Abbey, [BN] = Blue Nile, [SK] = Southern Kordofan, [E] = Eastern States, [KN] = Khartoum and Other Northern States
- UNAIDS: Strengthen HIV/AIDS Coordination at National and State Levels and Mainstreaming HIV in Humanitarian Response. Strengthening HIV National Coordination and Developing Key Partnerships
- UNICEF: Prevention of HIV/AIDS among Young People AND Rolling Situation Analysis, Vulnerability Analysis and Risk Mapping AND HIV/AIDS Curricula for Primary and Secondary Schools [NP] (RD) and Institutional Capacity Building and Development of a legal framework to protect the basic human rights of people living with HIV/AIDS (PLWHA) including capacity building.
- UNIFEM: Awareness Raising for Basic Education Teachers in Gender Concept, Gender Analysis and Gender Sensitive Language
- UNDP: Create an enabling legal and human rights environment to protect the rights of People Living With HIV/AIDS .

5. Law and Legislation

No data has been found on this topic. The National Policy on HIV/AIDS (published 2004) provide guidance on required legislation related to HIV/AIDS, stating that while wilful transmission of HIV is a crime, laws should enhance community mobilisation efforts to live positively with HIV/AIDS and should protect PLWHAs against discrimination and social injustice. The policy also recognises the need for further review of existing law to the above principles [8].

Work on a draft of a law on HIV/AIDS addressing legal and ethical issues has been started by SNAP [13]. In collaboration with the institute of Legal and Administrative Reform and Ministry of Justice has drafted a special law on HIV/AIDS that encompasses legal and institutional reform to support the PLHIV. The drafted law has yet to be endorsed. In addition, the promotion and protection of human rights has also been mentioned in the HIV/AIDS policy developed by the national AIDS Programme as follows:

- PLWHA have the right to comprehensive health care and other social services, including legal protection against all forms of discrimination and human rights abuse.
- PLWHA shall have access to holistic health care. This includes clinical, medical care, counselling and social welfare services. Health care shall extend beyond the hospital patients to include planned discharge and back up for home based care.
- Institutional and community care providers have a duty to care for people infected with HIV without discrimination on the basis of their HIV sero-status.
- HIV infection shall not be grounds for discrimination in relation to education, employment, health and any other social services.
- HIV infection alone does not limit fitness to work or provide grounds for termination. HIV/AIDS patients shall be entitled to the social welfare benefits like other patients among the employees.

The HIV/AIDS policy developed by the SNAP also states the equal access to prevention and care services for both men and women and most at risk group and highlighted or promote protocols for specific research on HIV/AIDS that involved Human right subject.

6. HIV/AIDS programmes financing

Detailed information about budget spending on HIV/AIDS prevention and treatment programmes by the government is scarce and scattered.

6.1 Health Expenditure

Government health expenditure for Sudan in general is very low. [World Health Report 2006]. Data for 2003 indicates that government spending per capita on health added up to US\$3.50-4.20, or up to 0.6% of GDP. This spending is less than 2.2% seen in other low income countries (less than 500US\$ per capita) However these data do not include data from S. Sudan.

In general health expenses are financed by:

- Government
- Local sources: Insurance system
Out of Pocket money
Loans
- Donors (bi lateral and international/ national)

6.2 Local Sources

The low health expenditure by government is partially due to the result of user fee. In general, with the exception of emergency medicines within 24 hours after admission, medicines are not free of charge in government facilities.

Insurance system

There are three insurance systems in Sudan [8]:

- National Health insurance system; catering for only 8% of population of whom ¾ are government employees
- Zakat Fund (Up lift the poor from poverty by providing means of production with the objective to improve their living conditions)
- National Social Insurance Fund

The policy on HIV testing and treatment states that, under approval of HIV/AIDS grants from the Global Fund to fight Aids, TB and Malaria, services for voluntary testing and counselling and antiretroviral therapy and care for eligible people will be free of charge in public sector [WHO fact sheet Dec. 2005].

However equity and universal access to ART treatment has yet not been translated into government spending. The Military department however is an exception. Their personnel can consistently have access to ARVs, procured with government resources. For the rest of people in need of ART access to public funding from Zakat Fund is depending to a large extent on the influence of the physician with local Zakat Fund.

6.3 International Contribution

Despite having limited resources, the government of southern Sudan is gradually implementing HIV prevention strategies. The aid from international donors and international and local NGO's is indispensable.

However a general synopsis of the total amount of grants in US\$ for HIV/AIDS programmes in Sudan could not be found for the year 2007. Information is scattered and related to projects of NGO's. Some multinationals also participate in projects (funding).

In general most of donors described in Sudan Health are also active in HIV/AIDS projects.

The Global Fund fighting Aids, TB and Malaria

[<http://www.theglobalfund.org/programs/keycontacts.aspx?&countryid=SUD>]

Sudan Proposal to fight HIV/AIDS (UNDP) Round 3 Global Fund has been approved in 2005 for a grant of \$ 20.682.531,00.

Project Proposal HIV prevention and Care Programme for S. Sudan round four Global Fund has been approved 2005 for a grant of \$ 28.435.3611, 00.

Scaling up National response for Prevention and treatment HIV/AIDS Sudan (UNDP) approved Dec. 2006 Round five for a grant of 29.421.145, 00 phases 1.

Round 6: Integration of Sexual and Reproductive Health into HIV/AIDS Programming. Global fund has developed a Guide for Submitting HIV/AIDS Component Proposals to the Global Fund to Fight AIDS, Tuberculosis and Malaria, Round 6 and beyond. This guide is designed to support SRH and HIV implementing organizations in countries eligible for Global Fund funding in submitting SRH-HIV proposals under the Global Fund's HIV/AIDS component for Round 6. This is an important issue for international and local NGOs in Sudan, who needs global funding for their projects.

Bill and Melinda Gates Foundation: No exact data could be found of funding HIV/AIDS projects in Sudan. However it is known that for a variety of programmes in Sudan, the UN refugee agency (UNHCR) has received a \$10 million emergency relief grant from the Bill & Melinda Gates Foundation for a variety of health, education, water and sanitation projects aimed at supporting the return and reintegration of hundreds of thousands of refugees and internally displaced people to devastated Southern Sudan. In the basic health care sector, the grant will fund the rehabilitation and reconstruction of 60 primary health facilities. It will also ensure they are stocked with medical equipment and supplies; provide training for 200 medical staff; and educate 1,000 police, immigration and military personnel, agency workers and community leaders in the prevention of HIV-AIDS and sexual and gender-based violence. Southern Sudan's health infrastructure is in ruins, with extremely high under-five and maternal mortality rates, particularly due to malaria, diarrhoea and respiratory infections.

Clinton Foundation

The Clinton Global Initiative is involved in funding water, health, sanitation and education projects in Sudan. However the amount of funding is not known.

Pepfar President's Emergency Plan for AIDS Relief

Since then, the Emergency Plan has worked in partnership with host nations Sub-Saharan Africa of which Sudan is one of the countries. PEPFAR is supporting antiretroviral treatment for approximately 822,000 men, women, and children through bilateral programs in the focus countries through September 2006. As of last September, PEPFAR also supported care for nearly 4.5 million, including care for more than 2 million orphans and vulnerable children.

The Emergency Plan supports the most comprehensive prevention program in the world, supporting an array of efforts, including: sexual transmission, mother-to-child transmission, and transmission through unsafe blood and medical injections. PEPFAR additionally supports greater HIV awareness through counselling and testing. No data has been found about funding sum for Sudan.

European commission

ECHO has always funded a wide-ranging programme in Sudan focusing on the most urgent needs: health and nutrition, water and environmental sanitation, emergency preparedness and response, food security, operational support (e.g. transport and security of the

humanitarian community) and special mandates (e.g. humanitarian co-ordination, protection activities, etc).

Over the past five years the health and nutrition sector has accounted for more than one third of Echo's annual funds for Sudan. Food security has been the second largest sector of intervention.

The Sudan Multi-Donor Trust Funds (MDTFs)

MDTFs are a means for donors to coordinate the reconstruction and development needs of both Northern and Southern Sudan. The MDTFs are funded by donor countries and managed by two technical secretariats, one for the MDTF-National, which focuses on war-affected areas of Northern states (based in Khartoum), and a second MDTF-Southern Sudan (based in Juba). Both trust funds provide funding for priority projects and programs that are both pro-peace and pro-poor.

The donors include The Netherlands, Norway, United Kingdom, European Commission, Sweden, Germany, Denmark, Finland, Italy, Iceland, and Greece.(amount of funding 2005 4500 million for both MDFTs and Canada 40 million and Saudi- Arabia 50 million and the World Bank 10 million dollars..

[<http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/AFRICAEXT/SUDANEXTN/EXTAFRMDTF/0,,menuPK:2193680~pagePK:64168427~piPK:64168435~theSitePK:2193668,00.html>]

Eatam Collaborative fund guarantee :information 2005

[<http://www.hivcollaborativefund.org/?id=73>]

Funded two projects for NGOs in Sudan working at grass root levels;

HIV/AIDS Education and Awareness [Sudanese Women HIV/AIDS Awareness (SWAAP)]

HIV/AIDS Awareness Program [New Sudanese Treatment Access Movement (NSTAM)]

7. Detailed description of health services for HIV/AIDS

Until the last two years, general denial and misconceptions have characterized the efforts of Government of Sudan to respond to the HIV/AIDS epidemic. Until very recently the belief was that Sudan as a conservative country was naturally protected from the epidemic. However this argument was far from correct as the number of aids patients has grown since late 1980s (N. Sudan). The last several years political commitment and the environment have improved a lot. With limited resources of their own and with aid from international donors and organizations the Sudanese Government is gradually, since 2002-2003, implementing HIV strategies and treatment strategies for Aids patients.

7.1 Health Services

In general, Sudan's health system suffers from a weak infrastructure in terms of human resources, health service coverage and funds. It is characterized by major disparities in the distribution of services and resources between and within states, between rural and urban areas and in states affected by conflict [Sudan Country Analysis Health, 2007 -Jam, 2005]. This also counts for prevention and treatment services HIV/AIDS. With a weak health structure, Sudan struggles to cope with growing needs for HIV testing, counselling and treatment [Sudan Country analysis health, 2007]. The availability and accessibility of HIV/AIDS prevention and treatment / care are poor.

Major bottlenecks for scaling up treatment and care for PLWHAs in Sudan include [WHO 2005 fact sheet HIV/AIDS]:

- Stigma and discrimination
- A lack of entry points (services for voluntary testing and counselling)
- Poor health care services in general and special for RHS
- Lack of human capacity in the public system and civil society
- Insufficient human resource capacity and systems for ART and other HIV/AIDS care facilities
- Delays in procuring HIV drugs and related supplies due to inadequate and parallel procurement and supply management systems.
- Blood-banking facilities and regulations for blood testing do not exist in the South
- Serious lack of health care personnel in general and specific trained in antiretroviral therapy for S. Sudan
- Lack of reliable data of HIV/AIDS
- Health seeking behaviour pattern

To improve access to health services, quality of health services and health providers, financing health services and to improve health care management for basic health services as well as services for HIV/AIDS prevention and treatment the following areas in general are essential to work on [Jam, 2005 and WHO Work plan 2006- 2007];

- A review of health care financing, with technical assistance and capacity building in the areas of policy development, planning/regulation/supervision, financial management, human resources, pharmaceutical policy and regulation, and health information systems;
- Improving coordination and cooperation between NGOs
- Support for strengthening decentralization through the transfer of financial resources and administrative authority and capacity building to the state level

- Investments in infrastructure and human resources
- Expanding access to education, health services and water-sanitation
- Developing standard treatment guidelines
- Mainstreaming HIV/AIDS prevention in other programmes

To halt and reverse the spread of HIV/AIDS in Sudan, alongside programmes to meet the needs of PLWHA, preventative action is urgently needed. This requires a multi sectoral approach. This means:

- Establishment of more VCTs
- Strengthening health services targeting HIV/AIDS
- Implementing awareness building campaign
- Integration HIV/AIDS education in school curriculum
- Building local government capacity to provide HIV/AIDS services and create legal aid services for PLWHA

Health providers and educators need to be trained to use innovative methods to inform the mostly illiterate population (especially in S. Sudan with a high illiterate rate). Religious leaders, traditional healers, community leaders and local authorities are important agents of change.

7.1.1 Human Resources for HIV/ AIDS treatment and prevention

There is a serious lack of human resources for HIV/AIDS treatment and counselling. Some universities are passing out graduates with specific skills in counselling, making it relatively easier for them to be given additional HIV/AIDS counselling and training. However the counselling course is run by women's only institution in Khartoum. This results in a shortage of male HIV/AIDS counsellors. Thus the need for specific male counsellor remains high [23]. There is a need for additional training of comprehensive HIV/AIDS trainer teams [23] and HIV/AIDS counsellors.

7.2 Access to information

Access to information can be divided into 2 sections:

- A. Access to information concerning HIV/AIDS prevention and treatment (7.2.1-7.2.5)
- B. Access of information concerning ART treatment data/health status patients and M & E of service coverage in public and private sector

Available data indicates that only 45% of Sudanese population (S, Sudan 25%) have access to health services and by that to proper health information. Access to reproductive health services/information and family planning and information about HIV/AIDS is very low.

Lack of human resources for HIV/AIDS treatment and counselling is part of the problem.

International NGO's and local NGO's are focusing a part of their services on awareness raising for HIV/AIDS and how to prevent HIV infection. Also media plays an important role to improve access to information.

A. Access to information concerning HIV/AIDS prevention

Most information about access to information comes from North Sudan. The main prevention areas include information, education and communication & BCC to most-at-risk population and general population, reproductive and sexual health education for young people and people in reproductive age, work place interventions, blood safety programmes and programmes to ensure safe health care settings.

Under prevention falls:

- Information, education and communication (7.2.1.)
- Provision of STI management(7.2.2)
- Condom promotion (7.2.3)
- VCT (7.2.4)
- PMTC (7.2.5)

7.2.1. Behaviour change through communication (BCC)

Behavioural studies conducted in 2002 by the Sudan National AIDS Program (SNAP), revealed that only 0.9% of the adult population reported consistent condom use with a non regular sexual partner while only 2 % of males report condom use at last sex with a commercial partner. In addition, it is estimated that only 0.4% of the population are ready to seek voluntary testing; 27% believe HIV infection is transmitted through mosquito bites, while 24% believe it is through eating; 14.7% believe that there is no harm in re-using injections and 34% think that infection cannot be transmitted through breastfeeding. Median age at first sex among youth was found to be 12 years while amongst adults, 16 years. Only 0.6 % of youth (14-25yrs) reported using condom at their last sex.

Behaviour change intervention: Given the limit of time, no data has been found about the effect of behaviour change intervention programmes in Sudan. Only data about target groups in North Sudan. (internally displaced persons, refugees, sex workers, tea sellers, street children, truck drivers, prison inmates and members of the armed forces) are available. There is no data from South Sudan. However data do not precise region and target group. Also lack of data about knowledge, attitude and behaviour in those target groups (baseline) makes it difficult to design the appropriate intervention which fulfils need of the target group. Behavioural change communication through use of peer education strategies were the main approach used within these groups. Over 5,646 peer educators from different target groups were selected, trained and involved in the programme. This includes an average of 300 peer educators from different target populations has been selected and trained and they are actively involved in prevention activities [13].

Figure 6: gives an overview of target group reached by peer education [13]:

BCC & PE among target populations	2004	2005	Total
Number of HE or counselling sessions conducted among target groups	319	70,581	70,900
Number of people among target groups reached through HE sessions	379,450	949,611	132,9061
Number of IEC materials distributed to target groups	473,30	719,47	119,277
Number of peer educators involved in project	2,613	3,033	5,646

Youth Interventions [13] North Sudan

Several materials on HIV/AIDS prevention have been produced by different partner organizations during the reporting period. However there is a need for designing a specific training materials tailored to cater the needs of young people considering various aspects in Sudan, such as culture and geographical variations.

In 2004 SNAP initiated a new partnership with the National Service authority to orient thousands of young people on basics facts on HIV/AIDS which include both prevention and care and treatment. The national service training is a compulsory semi-military training for all boys from all secondary schools which are organized every year. This activity proved to be very efficient in reaching over 40,000 youth in every year.

Life Skills [13] Based HIV/AIDS Education in Schools in North Sudan

Partnership between SNAP, UNICEF and other international organizations such as Plan Parenthood Federation of America and AIDS committee within the Ministry of Education developed a school curriculum to mainstream HIV/AIDS education in school. Training curriculum for teaching life skills was developed and finalized in 2005 and the training workshop was conducted for varies school teachers by Ministry of Education in collaboration with SNAP.

An international organization-Planned Parenthood Federation of America International in collaboration with the SNAP has developed a training manual on life-skills for adolescent and youth.

A total of 161 primary and secondary schools has taught life-skill-based education and 3354 schools primary and secondary schools teachers were trained in life-skills-based education but none of these schools reported having life-skills education as part of their regular teaching subjects in schools.

Awareness raising among general population in North Sudan [13]

Information, education and communication and IEC materials development are the key activities implemented to improved knowledge among general population.

Figure 7: Awareness raising: number people reached in general population [13]

Awareness sessions among General population	2004	2005	Total
Number of mass awareness sessions held [video shows/TV spots aired]	471	804	1,275
Number of health education (HE) sessions on HIV/AIDS conducted	37,092	72,207	109,299
Number of IEC materials distributed to general population	234,947	222,923	457,870

PMC an international media NGO, works with national and local broadcasters to air locally-produced programs, to motivate family planning, HIV/AIDS prevention and respect for women. In August 2006, PMC completed a radio serial drama project dealing with reproductive health issues and elevation of the status of women and girls. PMC conducted formative and baseline research during the second half of 2003, and conducted a training workshop for the producer and writers in February 2004. The results of the formative research were presented during this training workshop, to provide a basis for development of the storyline, characters and scripts.[<http://populationmedia.org/programs/programdev.html>].

7.2.2 Sexual Reproductive Health services outcome

In general access to basic health services for Sudan and especially for S. Sudan, East Sudan and Darfur are poor. Lack of infrastructure plays an important role in access to Reproductive Health Centres (mostly part of primary health centres), thus reducing the uptake and potential of new services like VCT and PMTC. Only 1/3 of the population has

access to primary health services, and only one in 10 births takes place in health centres. Of the estimated 500,000 pregnant women in 2005, only 48, 6% attend ANC at least once [N. Sudan]. Low utilization of ANC services will be one of the causes for inaccessibility and or unavailability of sexual and reproductive health services. The burden of STI's is not well known. Trichomoniasis, gonorrhoe and Syphilis are the most common. Countrywide (North and South) there is no accurate data available about % of people infected. However some data is available [13];

SNAP(2004) reported 725 services delivery points providing STIs services, presenting only 25% from the total of 2939 health centres available countrywide. In addition, civil society organizations reported over 72 services delivery points providing STI services in different locations giving a total of 797 services delivery points.

A total of 34,680 women and men with sexually transmitted infections at health care facilities received proper treatment for sexually transmitted infection. Of which 22,802 were treated in government health facilities [13].

7.2.3 Condom promotion and distribution in North Sudan [13]

Condoms are available through free distribution by the government programmes, such as reproductive health programmes and HIV/AIDS programmes. Condom distribution programmes have been supported mainly by UNFPA. Non-governmental Organizations and other partners have also access to the freely distributed condoms and they in turn will distribute these to different target groups.

Condom distribution in Sudan has implementation problems such as, cultural and religious factors supported by low level of awareness of its importance.

The need for having a condom strategy is vital in improving knowledge and its usage.

Certainly if one consider the fact that from the latest KAP-survey 2005 on sexual behaviour and awareness about HIV/AIDS among youngster 12-24 years from both gender and in rural/urban areas in North Sudan , only a small proportion of young people (31.6%), who participated in this study, reported having heard of condoms. Still smaller number 97 participants (representing only 4%) mentioned it as a preventive measure for HIV transmission. Only 19.9% said that they have seen a condom and 20.8% stated that they know one or more places, where condoms can be obtained. The data very clearly reveals that there is very little knowledge, limited accessibility and also less use of condom which is one of the preventive measures for HIV/AIDS. Data for S. Sudan could not be found.

Knowledge about condom use is also low. Specially among females; Condom use by females during last sexual intercourse reported by 1.5%, regular use during last year by 0.6%, and sporadically by 0.3% of respondents [13].

7.2.4 VCT

Voluntary counselling and testing (VCT) is now a major component of HIV prevention and care programs in many countries. The AIDS epidemic has made governments and civil society aware of the importance of counselling. In most developing countries, prior to the onset of the HIV/AIDS pandemic, patients with infectious diseases rarely got any systematic counselling to help them cope with the psycho-social impact of the illnesses. Combining counselling with testing for HIV/AIDS has been shown to have many benefits all across the world. As a result, increasing amounts of resources today are being put to develop voluntary counselling and testing (VCT) services in health facilities, even in Sudan. There is however still limited use of the service probably linked to fear, stigma and inadequate information about VCT [WHO fact sheet B HIV/AIDS].

With the support of partners such as WHO and NGOs, the Sudan National AIDS Program is investing resources in the development of VCT services. It is official policy that VCT services are provided free of charge. In Khartoum state alone, there are about 20 VCT centres providing VCT. With the support of the Global Fund, VCT services are being strengthened along with HIV/AIDS treatment capacity in Kassala, Gedaref, Kadugli, Port Sudan, Wau,

Juba, Medani, El Obeid, and Nyala. The training of counsellors is being upgraded to ensure a high quality of service in terms of information provided, confidentiality and referral for treatment. A few hospitals are already taking the step to provide voluntary counselling services for those blood donors who wish to know their HIV status. This should be encouraged and supported.

However there is still a long way to go. Out of the estimated 600,000 people living with HIV in Sudan, the vast majority do not know that they are infected. The majority of men and women who are at risk of infection have not been tested. This is partially due to; fear of stigma, lack of knowledge, inequity in access to VCT, lack of qualified staff for HIV counselling/testing and treatment and discrimination by health providers and society. This limits their initiative to seek correct treatment.

There remains need to commit more resources by the government at federal and state levels as well as NGOs to make VCT more available and accessible in Sudan. Participation of NGOs in VCT are still very limited and coupled to a few initiatives in Malakal, run by MSF Holland and another in Red Sea, run by Ockenden and a few in East Sudan run by Ockenden [24].

VCT has an important role in preventing HIV, but its scaling-up faces challenges in Sudan as in most African countries. These include:

- A Limited number of facilities offering the service
- A large need to rapidly produce well trained counsellors to provide effective VCT
- Persisting stigma and discrimination of people infected with HIV, leading to fear of getting tested.

Furthermore existing VCT centres are struggling with some problems, for which yet no action has been undertaken:

- AIDS clinician- referred patients get asked to pay for services and for test (US\$ 25 for test), despite an official policy that VCT services be provided free of charge.
- There are no guidelines and standard procedures to ensure confidentiality or anonymity of clients
- Absence of minimum requirement for VCT centre is lacking. As a result space requirement for counsellors are not met. This is a serious constraint to the quality and confidentiality of counselling delivery and may be turning future prospective client off.
- No official guideline for lab technicians, so most of blood samples are sending off to Khartoum.
- No system for training and supervising counsellors.

To expand VCT centres, Sudan will require:

- Increasing investments in health care systems and staff
- Changing attitudes toward those living with HIV and AIDS
- Expanding opportunities for free testing and treatment.

7.2.5 PMTCT Prevention of Mother to Child Transmission

In general, HIV infected women infect their bay through different stages of pregnancy:

- During pregnancy ; risk 5-10%
- During labor delivery; risk 15%
- During breastfeeding 5-15%

Together this is adding up to a total risk of Mother to Child Transmission of 40%

This is a concerning high risk level which could be preventable with the right treatment. With no treatment the risk to a HIV infected baby is high. The reality of paediatric aids is that symptoms appear soon after birth and that they are often not recognized as symptoms of aids. In Sudan a high number of babies are born at home mostly under worse hygienic conditions. Symptoms of Aids are not recognized in time and without treatment most infected

children will not survive their second year. Infants dying of AIDS contribute to the high infant mortality and child mortality rate in Sudan.

Due to the late response to the HIV/AIDS epidemic in the country, the intervention for prevention of mother to child transmission was not implemented till early February 2005. Sudanese guidelines for PMCT were formulated by the Sudan National AIDS Program (SNAP), and a pilot project for PMCT was launched officially in March 2005. Under this project, trained staff and ARVs for PMCT have been made available in five teaching hospitals located in capitals of 3 states namely; Khartoum, Juba and Gedaref [8].

In Gedaref state, the Sudan Family Planning Association branch by end of March 2005 had provided counselling and testing to 262 women, of whom 20 turned out positive and are receiving appropriate counselling. This project is currently being evaluated to guide expansion of PMCT services to other locations in the country.

Prevention of Mother to Child Transmission is a cost effective intervention. Babies of HIV positive women need not get infected with HIV, but with treatment this risk can be brought down dramatically. The risk can be reduced even further with correct infant feeding practices: that is the avoidance of breastfeeding or limiting its duration, and replacing it with safe, affordable, and sustainable infant feeding. However, in settings of limited resources, the limited viable options to breastfeeding mean that many HIV positive mothers have no choice but to breastfeed their babies. Even when the choice of alternative feeding is viable, its use may be limited by potential stigma, and inferences that the mother is HIV positive, and that is why she is not breastfeeding. In some cultures, denying a baby breast milk may be shameful regardless of the HIV status of the mother. These are the challenges that have to be overcome in order to ensure utilisation of PMCT services in Sudan, even after they have been put in place.

For acceleration of PMCT in Sudan it is clear that Sudan will require use of the following basic approaches:

1. Limiting the risk of HIV infection among potential mothers: This requires that potential mothers have access to basic facts about HIV/AIDS prevention strategies. This has to be done through education and counselling. In addition they should avoid behaviours that put them to risk of acquiring HIV for their own sake and for their yet unborn children.
2. Giving HIV infected women the means to avoid becoming pregnant: Reducing the number of pregnancies among HIV positive women can potentially reduce the number of children born with HIV. However the woman should have full information to make an *informed choice* in this respect. HIV positive women who continue to be sexually active should be provided with counselling, and access to family planning methods to prevent pregnancy, if they choose not to conceive. Ideally, couple counselling should be provided to both the woman and her partner so that they are supportive to the woman's decision. Such counselling promotes harmony in the family, and paves the way for success with subsequent interventions such as antiretroviral therapy for either or both of the partners.
3. Provision of ART to HIV positive women to prevent mother to child transmission of HIV. Under this approach both the woman and her newborn baby are given ARVs to reduce risk of HIV infection. In addition, where hospital facilities are good, delivery by caesarean section can be encouraged to further reduce the risk of transmission to the baby. Because operative delivery entails other risks to the mother and a higher risk of infection to staff and they too need to be well trained in application of universal safety precautions. If these precautions are applied as routine for all patients, it helps avoid a situation where HIV positive women are obviously seen to be treated with extraordinary care, which this can inadvertently disclose the woman's HIV status, and result in harassment and discrimination against her. [WHO Sudan HIV AIDS fact sheet D, 13].

B. Access to data of ART treatment data/ health status patients and M & E of service coverage in public and private sector

Lack of reliable data about HIV information and the fact that data of Reproductive Health centres, VCT and PMTC are scattered (information from different projects in different areas) and for S. Sudan almost non existent are the reason that for describing the outcome of SRHS, VCT and PMTC only a general description could be given in the previous paragraphs 7.2.1.- 7.2.5

However in the light of M& E projects it is important that appropriate data (including baseline data) will become available in nearby future.

7.3 Harm reduction

Harm reduction means;” services to reduce the risks associated with injecting drug use including risk reduction education and support, needle and syringe exchange and drug substitution”. An important role in reducing HIV and STI infections is reaching out to those who do not have access to public health services (street children, drug users, and poor people).

Primary Prevention of HIV infection is of great importance:

- Can stabilize or reduce HIV infection rates
- Uses AIDS education. promotion/provision of condoms, prevention and treatment of STD/STI
- Important for Sudan because:
 - risk factors are present that can spread HIV
 - awareness of HIV/AIDS is low
 - condom use in general <1% and not known for use as dual protection
 - literacy levels are low and taboos exist against discussing sexual behavior

Prevention of HIV infection by raising awareness for HIV/AIDS, by sexual counseling and by promoting the use of condoms as dual protection is an important factor in the battle against HIV Infections for Sudan. Sudan National AIDS Control Program, 2004a reveals that among pregnant women only 5% knew that condom use could prevent HIV infection and more than two thirds of the women had never seen or heard of a condom.

Sudan National AIDS Control Program, 2004b reveals that even among people at special risk of infection (such as sex workers), HIV knowledge is poor and preventive behaviour is rare. When surveyed, more than half (55%) of sex workers said they had never seen or heard of a condom and fewer than 20% (17%) knew condoms could prevent HIV transmission. HIV prevalence among the women was 4.4%.

It is clear that programmes of HIV/AIDS prevention and care need to focus on risk and vulnerable groups and have to intensify their programmes. An important point here is that before implementation of programmes in communities a need assessment among the primary beneficiaries is a prerequisite.

7.4 ARV Drug resistance surveillance

At the moment there is no mechanism to monitor ARV drug resistance in Sudan. Bearing in mind the history of shortages of drugs from time to time indicates the need for establishing an ARV drug resistance surveillance system.

A shortage of ARV drugs is particularly strong in counties with an active PLWHAA. SMOH of Bahr el Jabel State had registered over 120 PLWHA on a waiting list, due to shortage of drugs in March 2005.

Importation and supply of medicines is under the responsibility of the Central Medical Stores Public Corporation. Under current system this institution operates on a cash and carry basis,

whereby the States are responsible for organising transportation, storage and distribution of medicines the procure centrally.

Unlike the Ministries of Defence, Social Welfare and Interior, the FMOH has no resources allocated to ARVs in its budget.

7.5 Post Exposure Prophylaxis (PEP)

SNAP has produced the first draft of guidelines for PEP, to provide guidance in what to do in event of sexual violence or other non-occupational risk of exposure to HIV. The draft is under discussion, for further development to fully adapt it to situations outside of health care setting exposure. In the meantime several NGO's are reported to be providing PEP as part of their Gender Based Violence care intervention. Because of political sensitivities around this issue, these agencies are reluctant to share freely their experience.

7.6 Blood safety

The Government of Sudan has adopted the 100% safe transfusion policy and as a result, the blood screening policy has been developed by infection control unit to ensure save blood supplies. The policy stipulates that all donated blood must be screened and only blood with no transmissible infection can be used. The prevalence among blood donors and the transmission rate are still unclear among the blood bank services. There is under reporting and poor/ lack of documentation, makes difficult to get the prevalence rate among blood donors

7.7 Knowledge, attitude, behaviour, skills

Apart from the study Knowledge, Attitudes, and Practices on sexual behaviours and HIV/AIDS prevention amongst young people (12-24 years of age) in North Sudan conducted by SNAP/UNICEF in 2005, currently surveillance systems are inadequate to monitor behavioural trends.

There is an enormous gap in information about knowledge SRH and Family planning HIV/AIDS, attitude and sexual behaviour among general population and population at risk and vulnerable populations.

The MICS in 2000 has revealed that the knowledge on HIV and AIDS among people In Sudan varies significantly by level of education and between people living in urban or rural and Northern or Southern parts of the country. While 40% of the 15 – 49 year olds in Northern Sudan and 67% of the respective age group in the towns of Southern Sudan have heard about HIV and AIDS, only 11% of the same group in the Northern Sudan and 16% of the same group in the towns of Southern Sudan knew that condom is a means of protection. The Survey also elaborated on “Discriminatory attitudes towards People living with HIV and AIDS (PLWHA)” showing that discriminatory behaviour towards PLWHA varies also widely between educated and uneducated people and between regions. PLWHA “are highly stigmatized” and according to the FMOH there are “very few well established and trained institutes to take care of them”. The partly very religious and socially conservative culture in Sudan and particularly in Northern Sudan contributes to the difficulties in encountering the disease.

Key elements of the KAP study among 12-24 years old youth North Sudan in 2005 by UNICEF and SNAP are [13]:

- **Knowledge on HIV/AIDS:**

Majority of the respondents (94.1%) said that they have heard of HIV/AIDS (93.5% of male, 94.8% of Female) and only 910 respondents (37.9%) knew that healthy individuals can transmit HIV (Male 39.8%, Female 35.6%). No one among the

respondents said that abstinence and faithfulness to a regular/single sexual partner as means for prevention of HIV/AIDS. (*Appendix figure 2*)

- **Sexual Behavior:**
Among 12- 24 years of age group, 83.4% of male and 86.2% of female respondents reported never had sex in their life (At the time of the study). 14.9% of men reported continuing to practice extramarital sex at present (At the time of the study) compared to 10.7% of women. While 1.6% men and 3.1% women reported past experience in extra marital sex (not sexually active at present time). However, the results of the study revealed very high rate of practicing extramarital sex (74.3%) among men specifically age between 19-24. (*appendix figure3*)
- **Knowledge on STI s and Treatment Seeking Behaviour**
comprehensive knowledge among youth about STIs in general is very low. 3.1% of female respondents reported having symptoms of STI; 3.4% of them received treatment, while 2.1% of male respondents had STIs and 2.4% of those with symptoms received treatment.
- **HIV/AIDS Related Stigma and Discrimination**
Results showed very high level of stigma relating to HIV/AIDS. Majority of respondents expressed more than one stigmatizing/discriminative attitude towards PLHIV.(*appendix figure 4*)
- **Knowledge on Condoms**
Knowledge about condoms is an important indicator of HIV/AIDS-related behaviours. Relatively small proportion of young people (31.6%), who participated in this study, reported having heard of condoms. Still smaller number 97 participants (representing only 4%) mentioned it as a preventive measure for HIV transmission. Only 19.9% said that they have seen a condom and 20.8% stated that they know one or more places, where condoms can be obtained. The data very clearly reveals that there is very little knowledge, limited accessibility and also less use of condom which is one of the preventive measures for HIV/AIDS. (*appendix figure 5*).
- **Knowledge of condom use (Self-efficiency)**
The efficiency rate of condom use is very low especially among female's respondents. This could be attributed to multiple factors like:
 - Weak promotion interventions
 - Stigmatizing attitudes
 - Inaccessibility.

Of those males 3.1% reported commercial sex; 1.8% of them used condom during last sexual encounter; 0.8% used condoms sporadically and only 2.7% used condom regularly during last sexual encounter.

Condom use by females during last sexual intercourse reported by 1.5%, regular use during last year by 0.6%, and sporadically by 0.3% of respondents.

7.8 Health seeking behavior

In general treatment-seeking behaviour is related to cultural beliefs about the cause and cure of illness severity, patient's gender and parents' educational level. Attitude towards providers is also an important factor as is distance to the nearest available health centre.

For health seeking advice at VCT centres a percentage of people are reluctant to go to these centres because of fear for:

- Stigmatization (especially in the North were disease is equalled with bad behaviour and not living conform religious norms.)
- discrimination by health providers

Other reasons are:

- User fee; people can not afford testing and treatment

- Lack of infrastructure
- Gender
- Lack of basic health services

8. Treatment

In the East Mediterranean Region approximately 77.500 HIV infected people are in need for ART. Three quarter of them (58.125 people) live in Sudan [6]. The reported treatment coverage of known cases in need of ART is less than 10 % (July 2005).

8.1 Access to treatment

The only available data here are data from WHO/UNAIDS and do not cover whole Sudan. For North Sudan an integrated report (SNAP and UNAIDS) is available for year 2005. Access to care, support and ART for PLWHA in Sudan is low. One may say that huge shortfall in treatment for PLWHA leads to high death numbers and has a serious impact on people's life. In 2003 the WHO / UNAIDS estimated Sudan's total treatment need to be 43.000. In 2005 the WHO/UNAIDS estimated that the total treatment need was 62.000 people.

An estimated 400 people in North Sudan were receiving ARV treatment in 2004. This includes 100 people receiving ARV treatment from military hospitals (70 Khartoum and 30 Juba). Access to ARV treatment in S. Sudan is serious limited.

In three cities Juba, Wau and Malakal efforts are underway (Dec.2005) to rehabilitate treatment and testing/counselling services. Under Global Fund round 4 for South Sudan an additional four other cities will also be rehabilitate.

Thanks to Global Fund round 4 it is expected to provide 518 people at end of June 2006 with ARV treatment (WHO country information 2005).

The number of people accessing VCT centres for voluntary counselling and testing increased from 900 people in September 2004 to 2.478 people in June 2005.

Services for prevention of mother to child transmission are available at 5 sites (pilot project) and 1523 women had accessed these services as of October 2005. Coverage of prevention of mother to child transmission services remains low [WHO /UNAIDS fact sheet Dec. 2005]

8.2 Community based care and support and Palliative Care

In general home based care activities are minimal. In 2005 292 homes received home based care in Juba. In cooperation with WFP they support families living with a person with HIV/AIDS by food distribution, counselling and limited income generation. Malnutrition is a serious problem in Sudan and a threat for people with HIV/AIDS. Malnutrition weakens their already weak immune system.

8.3 Prevention and Treatment of Opportunistic Infections

PLWHA who are diagnosed with Opportunistic Infections are provided available treatment but they do face cost barriers even in government health services, due to cost sharing policy. Most of people however can not afford treatment.

In response to refresher training, clinicians in Khartoum are able to recognize opportunistic infections. However such training was not done at a large scale. This is a point of attention in programmes of treatment AIDS patients. There is an urgent need for improving diagnosis and treatment of other Opportunistic infections for people living with HIV/AIDS.

8.4 Financing Treatment

October 2003, the Government started with ART triple treatment in selected facilities in Khartoum. At the beginning of 2005 only 400 patients in North Sudan were on ART. The cost for treating these patients has been from internally mobilized funds. These funds include:

- Out of pocket money for purchase of ARV from private sector
- Subsidies of 75% of Zakat Fund
- Provision of free drug by Ministry of Defence
- Ad hoc contribution from SNAP budget

Cost of treatment per capita:

Original the price for treatment per capita was US\$ 1.000 (2004). However due to drug price reduction cost of treatment per capita per year is now expected to lower. So with the funding for ARV from Global Fund of US\$ 400.000 per year, 1300 patients (including 50 children) could be treated for coming years onwards from 2005.

Financiers of treatment services:

- Ministry of Defense is paying treatment for government employees.
- Global Fund has approved round 3/4 of HIV/AIDS proposal of Sudan. A grant agreement was assigned January 2005. The agreement includes; supporting of establishment of 12 ART service delivery points and yearly 400.000 US\$ for ARV treatment. However this provision falls short of the national target to treat 20.000 patients by 2005. This means that a lot of advocacy has to be done, to ensure that allocation of government funds of ART will be increased and expand to general public and the South. Bearing in mind the oil production in Sudan, this must be an opening opportunity to expand more money for health services and HIV /AIDS treatment and prevention.
- International Donors
- International NGO's like Ockenden and MSF Holland financed HIV/AIDS projects, including treatment and PEP in some areas (East Sudan, Darfur).
- patient + Zakat Fund
- National health Insurance Fund covers only 8% of population of who 3/4 are government employees.

9. Other important issues regarding HIV/AIDS in Sudan

9.1 Vulnerable groups and HIV/AIDS situation

The theme of the XVI International AIDS Conference in Toronto “*Time to Deliver*” shows that there is recognition that new strategies are needed to reach the poorest and most vulnerable – the collection of data on who the most vulnerable people are is crucial here- in the country. To avert the substantial risk of an HIV/AIDS crisis, awareness-building campaigns need to be implemented through whole Sudan, including remote areas and vulnerable groups. Vulnerable groups mentioned in this report have to be prioritized, including research about their behaviour, live patterns, living standards and their moving patterns.

Two groups are highlighted here and one group “elderly people” is especially highlighted here, because this group tends to be forgotten in HIV/AIDS programmes.

Street children: Street children form a high vulnerable risk group in Sudan. Available data suggests that the number of street children in Northern Sudan was around 70,000 by the end of 2002, with 73% of these living in Khartoum and Gezira state. Boys make up around 86% of those on the streets, and girls 14%.

Numbers of children on the streets of Khartoum have started to increase rapidly ever since the early 1980s, when many families moved there to escape the war in southern Sudan and the drought afflicting the west. No data could be found for the numbers of street children in S. Sudan, Darfur and East Sudan.

Street children lack access to Essential Public Services. The privatisation of public services, together with limited public awareness of children’s rights, has deprived street children of access to health, education, shelter and other social services. They are forced instead to rely on leftovers as a source of food, and to washing themselves and their clothes on the streets. This renders them vulnerable to a wide range of illnesses and infections such as cholera, gonorrhoea, STDs and HIV/AIDS [18].

When arrested, Sudanese criminal law dictates that street children are sent to either reformatory institutions or to detention centres. Here they are detained for indefinite periods. In general Health care and schooling at the camps are poor, and basic living conditions often are primitive. In both types of institution, the children are frequently subject to physical and sexual abuse [31.32].

In 2005-2006 a research was conducted among street children in Khartoum about their knowledge and attitude, behaviour regarding HIV/AIDS and STI’s.

Disabled persons: Sudan has a high percentage of persons with a disability; for them and to be able to reach milleniumgoal” reducing Poverty”, it is beyond doubt that necessity is there to mainstream disability in HIV/AIDS programmes. The universal overall aim is that all people have access to HIV/AIDS interventions, including people with a disability.

Tea sellers are a risk factor in spreading HIV infection due to their migration. It is known that Tea sellers are a group of whom some are believed to engage in casual/ commercial sex. In the light of prevention it would be worthwhile to have more insight in the sexual behaviour of tea sellers and their migration patterns.

Elderly people: There is a shortage of information about the consequences of HIV/ AIDS for old people in Sudan. For many years analysis informing international responses has focused on people aged between 15-49 years. This ignores the fact that people over this age are both affected and infected. This also counts for the situation in Sudan. Older people are carers of people living with HIV and AIDS and of orphaned grandchildren often without any economic or social support. At this moment programmes have not taken up the change to involve older people in playing a key role in HIV prevention education. Also a lack of knowledge exist about how elderly people cope with the double burden of HIV/AIDS.HelpAge International strongly emphasises the need to include older people in Hiv/AIDS data collection. This NGO launched a new report, *Counting carers*, at the XVI International AIDS

conference. The report identifies how to improve data collection and information on households affected by AIDS and how to include older women and men. It recommends:

- further analysis of existing data to show household composition by age, sex and socio-economic status
- surveys to measure qualitative data: caring roles and support received by households; income and expenditure; and use, access and satisfaction with HIV services
- ongoing data collection to understand how AIDS-affected families are changing and the impact of caregiving on older persons, people living with HIV and vulnerable children.

9.2 Gender

Gender disparities are marked in the North and South, with differences within regions by ethnic group. Recent GOS data suggest that women on average earn 68 percent less than men, placing Sudan 141st out of 177 countries. The female labour force participation rate is relatively low in the formal sector, with women concentrated in the informal sector where returns to work tend to be low. Across Sudan, early marriage is common and although the practice is illegal, female genital mutilation is particularly common in several areas. Despite this, gender equity is better in some respects in the North, where females represent 47 percent of total primary enrolment, relative to 26 percent in the South.

Poverty and lack of security are the most pervasive problems affecting women in Southern Sudan, factors that have been exacerbated by the militarization of the society. Poverty and lack of access to education and health services have had major repercussions on women's health, reflected in an extremely high maternal mortality rate (1,700 per 100,000 live births). A woman in Southern Sudan is many times more likely to die in childbirth than to finish eight years of school. Southern Sudan has the lowest ratio of female to male primary school enrolment in the world, with three times as many boys as girls attending school, and a youth female illiteracy rate (ages 15-24) of 84 percent. Field interviews and analysis undertaken for confirmed that women's disempowerment in the South is deepened by economic factors, the long running conflict and the associated absence of rule of law in parts of the country. Although the 1998 constitution gives equal status to men and women, the protection gap between customary and formal law has led to abuse of women's human rights. An estimated 60 percent of IDPs are female; many of whose problems are compounded by loss of traditional support systems [25].

9.3 Research

The Population Council's ME Awards program commissioned a multidisciplinary working group of Sudanese researchers, including key policy planners, to prepare two reports—one describing the structure and dynamics of the camps and the other focusing on poverty in Sudan. Results of the two studies will be disseminated widely in meetings to relevant stakeholders.

Training programme to improve social science research in Sudan continued in 2005-2006 the ME Awards training program under a project entitled "Building Capacity in Reproductive Health Research," funded by the David and Lucile Packard Foundation. Nine junior researchers continued their training through seminars and workshops on conducting research, analyzing data, and writing reports. They were awarded grants to conduct studies of groups at high risk for HIV/AIDS and the use of maternal health services. A report

containing the findings of these studies is in preparation, and will be possible released mid 2007 and includes the following topics:

“Knowledge and practice related to HIV/AIDS among street children in rehabilitation centres—Khartoum state” by Abdalla A. El-Sheikh, Academy of Medical Sciences and Technology Statistics and Information Centre, Khartoum

“Knowledge, attitudes, and practices related to HIV/AIDS among secondary school students in Khartoum State” by Abdelgadir Ali Bashir, Faculty of Medicine, University of Khartoum

“University students in Khartoum State: Are they capable of meeting the HIV/AIDS threat?” by Abubakr A. Al Karouri, United Nations Mission in Sudan, Khartoum

“Socioeconomic and demographic determinants of demand for delivery services in Shurg-alnil rural areas” by Huda Mohammed Mukhtar Ahmed, Department of Mathematics, Statistics and Demography, University of Juba, Khartoum

“Care seeking for acute illnesses in infants: What are the barriers? Umbadda Area” by Lamia Eltigani Elfadil, Federal Ministry of Health, Sudan

“Understanding child labor in Sudan: The case of domestic workers in Khartoum State,” by May Ali Babiker, United Nations Development Programme—Sudan

“An assessment of quality of antenatal care provided at governmental primary health care centers in Khartoum State” by Mohammed Ahmed Mohammed Sidahmed, Community Physician, Reproductive Health Directorate, Federal Ministry of Health, Sudan

“Are women tea sellers a group vulnerable to HIV/AIDS? A study in Khartoum State” by Omer Ali Ibrahim, University of Khartoum

The outcome of these research papers may obtain important information for implementing projects concerning HIV/AIDS, reproductive health and family planning in Sudan.

10. Conclusion

Sudan is one of the poorest countries in the world and suffering from the effects of a long lasting period of war.

The health status of Sudanese people is poor. Life expectancy is low (56 y.) and infant and under five mortality are high (100 and 164). Sudan has an extreme high maternal mortality rate (509 N. Sudan and 1.700 S. Sudan), indicator of poor health status and poor health care systems.

Health systems are weak and insufficient. The Sudan's health system suffers from a lack and quality of human resources, infrastructure and funds, resulting in very limited access to health services in general and specific for HIV prevention and AIDS care and treatment services. There are large regional differences in health status and access to health care (North/South differences) but also rural and urban differences.

Nowadays Sudan is experiencing the stages of a generalized HIV epidemic. Until very recently the belief was that Sudan, as a conservative country with strong religious belief and cultural norms, was naturally protected from the epidemic. However this argument was far from correct as the number of aids patients has grown since late 1980s (N. Sudan).

Adult prevalence rate of its 36 million people is 2.3 (0.7–7.2 %) and HIV prevalence among pregnant women is 1%, indicating a generalized epidemic. Strong religious belief and social cultural norms are rooted in stigma and fear for PLWHA. People infected with HIV fear to be rejected by their family and or community. Because of the strong influence of religious leaders on the population, involvement of those leaders at onset of HIV/AIDS projects is an important factor in achieving results "reaching all people with adequate information about HIV/AIDS and ensure that people have access to treatment and that discrimination against PLWHA disappears."

The government endorsed a decree in 2004 which declared HIV/AIDS a priority disease and recommended that, under approved HIV/AIDS grants from the Global Fund, services for voluntary testing and counselling and ART be provided free of charge in the public sector. However at this moment access to treatment is very limited; 408 people were treated.

Despite the high degree of commitment by Government and the different policies in the field of HIV/AIDS, there is a gap between what is written on paper and what is happening in the field. Funding by Government is at a low level and there is a lack of transparency between different ministries and coordination of stakeholders and monitoring and evaluation of the results of all the programmes, which fall under responsibility of The National HIV/AIDS Prevention and Control Council + implementing arm National HIV/AIDS Executive Council, are insufficient.

HIV/AIDS is not only a health problem, but also a development problem and closely linked with poverty and illiteracy. Combating HIV/AIDS asks for a holistic multi-sectoral response. Collaboration, cooperation and transparency between all different stakeholders working in the field of HIV/AIDS is essential in order to avoid concentration of aid in particular areas, while other areas are left out and to avoid duplicating aid.

For the health sector in general and specific for the combat against HIV/AIDS, Sudan is facing different constraints which area all mentioned in this report:

- Stigmatization
- Gender inequalities
- Illiteracy
- Poverty
- Poor health status
- Lack of infrastructure

- Inequalities in distribution of funding, health services, human resources, ART distribution
- Lack of knowledge among health staff about HIV/AIDS prevention and treatment and discrimination of PLWHA by health staff
- Lack of reliable data about HIV/AIDS prevalence among general population and risk groups and vulnerable groups in whole Sudan
- Lack of HIV/AIDS surveillance and biological and behaviour surveillance; there are gaps in knowledge about distribution of risks and trends over time. This information is required in order to effectively tailor interventions
- Lack of need assessment under general population and risk and vulnerable groups
- Lack in transparency and collaboration between different stakeholders and in transparency of funding
- Capacity of human resources at different levels in health system
- Violation of Human Rights
- Disability is not mainstreamed in HIV/AIDS programmes
- Conflicts
- Disruption of social family structure due to war
- IDP's

Recognizing these constraints and trying to find solutions, will in the end improve the results of HIV/AIDS programs.

In order to turn small localized projects into nation-wide population projects, with access to life-saving services for everyone, including marginalized and or hard to reach population following areas can be vital:

- 1) Investing in prevention “ key to sustainable treatment, care and support:
“Government of Sudan and international/ national NGOs have to invest more in HIV/AIDS prevention and decentralize their response beyond Khartoum and state capitals. Also more sectors should be included.
- 2) AIDS responses must be exceptional but not isolated.
HIV prevention needs to be integrated with broader health and social services. A holistic approach is needed; mainstreaming HIV/AIDS intervention in all the programmes within health sector like Maternal and Child Health care, programmes preventing malnutrition, programmes combating waterborne, vector-borne, communicable diseases, TB and reproductive health and family planning but also in school education programmes, at the work place, universities, high schools and in programmes focussing on vulnerable groups.
- 3) Translation of political commitment in more actions:
There is remarkable political commitment in Sudan. However to support states with scaling up of the response, increased financial investment from Government, in HIV/AIDS interventions is needed. Capacity building of states is needed in order to assist states to determine local HIV/AIDS priorities and to assist them in obtaining necessary resources for HIV/AIDS prevention and treatment. Also development partners have to align their efforts accordingly.
- 4) Combining long term commitment and sense of urgency is critical.
It takes a while to turn HIV/AIDS epidemic around in any country. It is therefore important to ensure that Government, States, Civil Society and International support the long term vision of turn the epidemic around in Sudan.(Donors are necessary)
- 5) Strengthening human resources and systems:
Sudan must adopt large-scale measures to strengthen human resources especially in the national AIDS program (SNAP). Currently, SNAP bears a large burden in coordinating and supporting HIV/AIDS work across various sectors. Mechanisms for strengthening cross sectoral coordination need to be found, along with the further strengthening of HIV/AIDS capacity in individual sectors, in order for the response to be more effective.

6) Stigma, discrimination, gender, human rights:

More needs to be done in protecting and promoting the Human Rights of people living with HIV/AIDS. Women, young people, and other vulnerable groups such as displaced persons and returnees need to be reached more effectively. They need to participate in planning aspects of the response.

These are the remarks of Mr. Manuel Aranda DaSilva, Deputy Special Representative of the Secretary General, at the launching of the Acceleration of HIV prevention for the North African Region.(Friendship Hall, Khartoum, Sudan, 11th April 2006. They also represent areas to focus on in nearby future to prevent acceleration of HIV infection in Sudan.

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Appendix

Figure 1: Matrix Stakeholder analysis [12]

level	Stakeholder	Involvement/interest in HIV/AIDS Topics Sudan	beneficiaries	Power/influence/capacity stake holders	Provides education	Relation ship with Other stakeholders
national	SNAP	High technically orientated; formulation of framework and policies	Vulnerable and high risk groups, PLWHA	Works on decentralization of duties to states level; overloaded with work; depends on financial resource allocation from government	yes	On technical base with all stakeholders(international/ national)8 line ministries and CCM
	WHO	High involvement also among other health related issues	PLWHA and vulnerable groups	High give input on policies, financial support by 3 by5	yes	With other UN agencies and NGO's
	SAN	High; coordination and networking among civil society working with HIV	Civil society in general, PLWHA	?	?	Member of CCM
	Ministry Welfare and Social Affairs	Assumed to be medial; social support	Vulnerable groups, PLWHA, civil society	?	?	FMOH. Member CCM
	NSNAC	High, technically orientated, formulation of policies and frameworks	Vulnerable and high risk groups PLWHA	At regional level high; although constrained to lack of resources	yes	Collaborates with SNAP, other stakeholders and UN agencies
Regional	Ockenden International	High, preventive education, capacity building, facilitating research, management training at all levels	Displaced people and their host, vulnerable people, civil society	High, well known and very respected. Allocates funds. Supports policy development	yes	Advocates for more stakeholders in East Sudan, networking, member CCM
	PLWHA S. Sudan	High. Advocates Human rights; orphans and aids counselling, care and treatment	PLWHA and orphans	Low due mainly to financial constraints	yes	Supported by UNAIDS and WFP, networking with other NGO's
	UNICEF	Medium. HIV is one of other topics	Vulnerable people; children	High due to political pressure	yes	Collaborates with UN agencies ;member of CCM
	Women association for Aids prevention	VTC, women and aids	Vulnerable people, women in particular	?	?	Member of CCM

Figure 2: Knowledge on HIV/ AIDS source [13]:

No	Knowledge	Frequency	Percent		
			Overall	Male	Female
1.	General knowledge				
	Heard of HIV/AIDS	2269	94.1	93.5%	94.8%
	Healthy looking individuals can transmit HIV	910	37.9	40.1%	35.2%
2.	Knowledge on transmission				
	Unprotected sex	562	23.4	26.2%	19.9%
	Unsafe blood transfusion	107	4.5	3.0%	6.3%
	Sharing Sharp instruments	49	2.0	1.4%	2.8%
	Mother to child transmission	1838	76.55	74.2%	79.5%
3.	Knowledge on prevention				
	Abstinence	0	0	0	0
	Faithfulness	0	0	0	0
	Use of condom				
	Used condom during last sexual intercourse	42	1.7	2.2%	1.2%
	Regular use during last year	14	0.6	0.2%	0.5%
	Irregular use during last year	23	9.5	1.0%	0.9%

Figure 3: Sexual Behaviour by gender

Sexual Behavior	Gender	Percent
Never had sex	Male	83.4
	Female	86.2
Yes (Extramarital sex) at present (At the time of the study)	Male	14.9
	Female	10.7
Yes (Extramarital sex) in the past	Male	1.6
	Female	3.1

Figure 4: Stigmatizing & Discriminative Attitudes by Gender[13]

Attitude towards PLHIV	Percent of Male	Percent of Female
Can't eat from one dish with them	49.8%	57.5%
Can't buy food from them	64.1%	65.2%
Forbidding students PLHIV from attending school	56.2%	49.9%
Forbidding teachers PLHIV from teaching	56.2%	48.4%
Reason for forbidding teachers (of total respondents) N=2401		
Infection (not to infect others)	48.4%	
Don't Know	2.6%	

Figure 5: Knowledge about condoms among youth[13]

Condom	Total Percent	(M) Out of total percent	(F) Out of total percent
Heard of condom	31.6%	55.1%	44.9%
Heard and saw condom	19.9%	57.9%	42.1%
Know about it as preventive method	4.0%	61.9%	38.1%
Know where to get it	28.8%	57.15	42.9%