# RISK FACTORS FOR TRANSMISSION; MEASURES FOR PREVENTION AND CONTROL; TREATMENT, CARE AND SUPPORT FOR HIV/AIDS INDIVIDUALS IN SOUTH SUDAN USING SSHASF

ZACHARIA A. MODI, DVM
MPH Candidate
Kansas State University

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The red ribbon is a symbol for solidarity with HIV-positive people and those living with AIDS

# OUTLINE

- Overview of South Sudan
- Overview of HIV / AIDS
- Prevalence, Risk Factors, Transmission of HIV/AIDS
- Treatment, Care and Support of HIV/AIDS Individuals Using South Sudan HIV/AIDS Strategic Framework (SSHASF)
- Measures for Prevention and Control of HIV/AIDS Using South Sudan HIV/AIDS Strategic Framework (SSHASF)
- What I Did in South Sudan (Field Experience)
- What I Will Do! next step

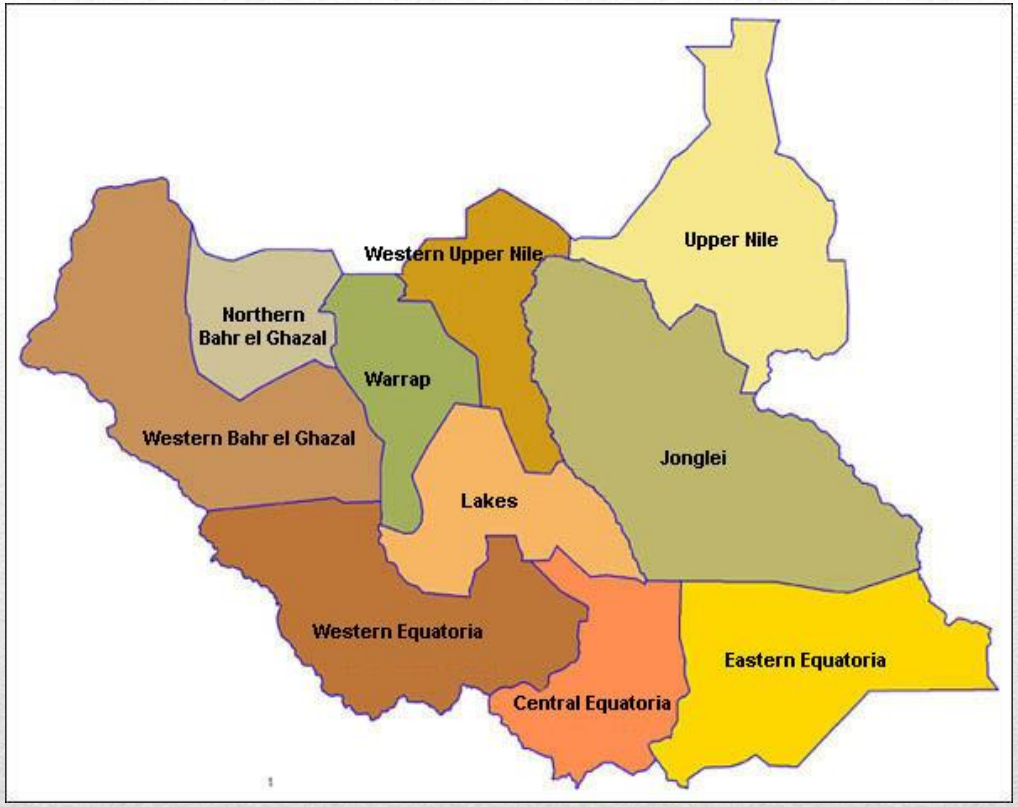
# Overview of South Sudan


# Overview of South Sudan



# Overview of South Sudan Cont.

Coat of Arms




South Sudan with its 10 States

Flag of S.Sudan

Late, Dr. John Garang De Mabior

The President H.E
Salva Kir Mayardit

# Overview of South Sudan Cont.

## Sudanese People

## South Sudanese People

# Overview of South Sudan Cont.

# ❖Geography:

Landlocked country in east-central Africa

- Ethiopia → East
- Kenya → South-east
- Uganda → South
- Democratic Republic of Congo → South-West
- Central African Republic → West
- Sudan → North


# Overview of South Sudan Cont.

# Overview of South Sudan Cont.

## ❖ Situation Analysis

- Political Context:

South Sudan has witnessed perhaps the longest liberation war in modern Africa. The war, which began just after independence in August 1955, ended with the signing of the Comprehensive Peace Agreement (CPA) in January 2005. The war destroyed physical infrastructure and social structures. Over 2.5 million people died while close to 4 million were displaced.

1956- Independence of Sudan
From Anglo-Egyptian Condominium.

1956- 1972 First Sudanese Civil War
Addis Ababa Agreement (AAA)
Autonomous Regions of South Sudan was formed

1983- 2005 Second Sudanese Civil War
Comprehensive Peace Agreement (CPA) (January 6, 2005)
Interim period of 6 years
Government of South Sudan was established (July 9, 2005)

January 9, 2011
Referendum on Self-determination was conducted and over 98% of Southern Sudanese voted in favor of seperation.

July 9, 2011 Independence of South Sudan
Transitional period led by 1st President of the Republic of South Sudan, Salva Kiir Mayardit

## Overview of South Sudan Cont.

# Overview of South Sudan Cont.

- Demographic and Socio-economic Situation:
  - **Geographical Area** approximately 640,000 square kilometres.
  - **Population** 8,260,490 million (Female 52% Male 48%)
  - **Density** 15 people per square kilometre
  - **Average annual population growth rate** is 2.2%.
  - **Total fertility rate** is estimated at 6.7
  - **Average life expectancy** at birth for both sexes is 42 years.

# Overview of South Sudan Cont.

- **Natural resources** Arable agricultural land, fresh water, minerals and **oil.**
- **Income per capita** Is extremely low, with about half of the population (50.6%) living on less than 1 US$ per day
- The vast majority of the population is engaged in rural subsistence farming and cattle herding.

# Overview of South Sudan Cont.

- **Living conditions** poor access to potable drinking water (less than 50%),
  poor access to proper sanitation (less than 7%)
  high illiteracy rates among the adult population
  88% among women
  63% among men

- Health Status and Disease Burden:

  Poor health care provision due to the protracted resources and politically motivated conflict that disrupted the health system. The worst key health indicators globally.

# Overview of HIV / AIDS

# General overview

HIV/AIDS → Is a disease of the human immune system, caused by infection with Human immuno-defficiency virus (HIV).

HIV → Human immuno-defficiency virus. It is a retrovirus. It kills or Damages the cells of the body immune system that eventually Leads to AIDS.

AIDS → Acquired immuno-defficiency syndrome. It is a collection of symptoms and signs of a disease. It is caused by HIV infection. It is the most advanced stage of HIV infection and occurs when The virus has destroyed so much of the body defense. It can takes 10-15 years for an HIV-infected person to develop AIDS.

# Overview of HIV / AIDS

# Overview of HIV / AIDS Cont.

Transmission → HIV is transmitted primary via :

- Unprotected sexual intercourse (vaginal, anal, or oral)
- Contaminated blood and blood products during blood transfusion, Sharing contaminated needles/syringes.
- Mother to child during pregnancy, child birth, and breast feeding.

Prevention → HIV is primarily prevented through:

- Safe sex
- Needle exchange programs
- Giving antiretrovirals to mother during pregnancy, child birth, And bottle feeding of infants.

# Overview of HIV / AIDS Cont.

Treatment → Currently, no cure or effective vaccine for HIV/AIDS, but Antiretroviral treatment (ARV drugs) ….

- Can slow the course of the disease and lead to near normal life Expectancy.
- Reduce the risk of death and complications from the disease.
- But, they are expensive and may be associated with side effects.

Discovery →

- AIDS was discovered in 1981 by the Centers for Disease Control And Prevention (CDC).
- Its cause, HIV virus was identified two years later, in 1983.
- Since its discovery:
  - AIDS has killed nearly 30 million people as of 2009
  - Approximately, 34 million people have contracted HIV globally as of 2010.

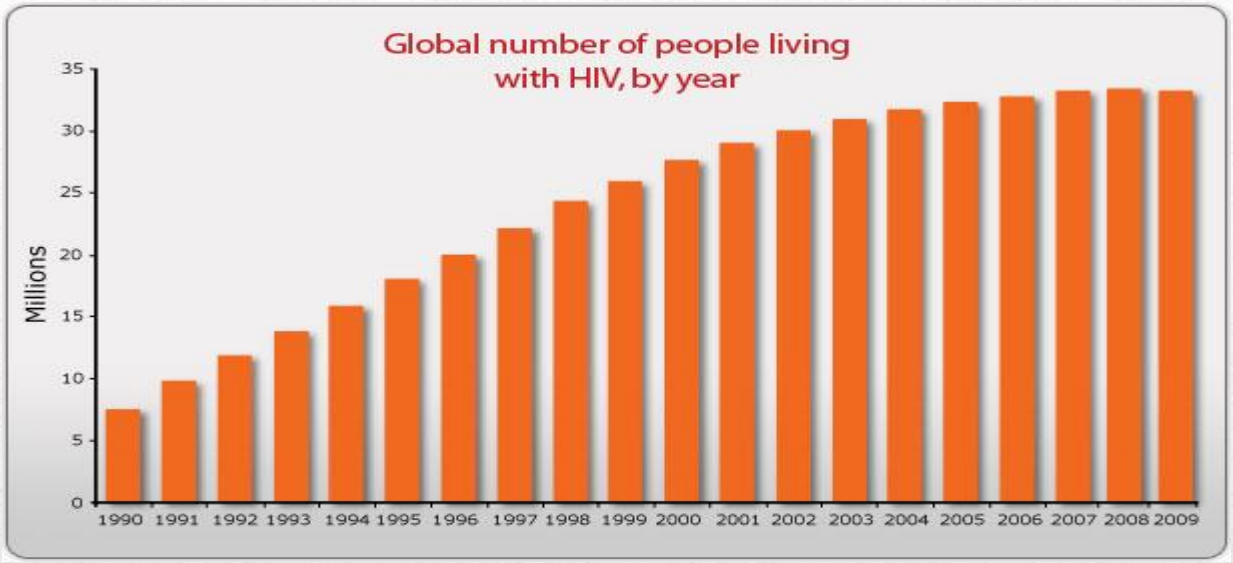
# Overview of HIV / AIDS Cont.

HIV/AIDS Estimates (Statistics)

Global HIV/AIDS Estimates, 2010

| | ESTIMATES | RANGE |
|---|---|---|
| People living with HIV/AIDS in 2010 | 34 million | 31.6-35.2 million |
| Proportion of adults living with HIV/AIDS in 2010 who were women (%) | 50 | 47-53 |
| Children living with HIV/AIDS in 2010 | 3.4 million | 3.0-3.8 million |
| People newly infected with HIV in 2010 | 2.7 million | 2.4-2.9 million |
| Children newly infected with HIV in 2010 | 390,000 | 340,000-450,000 |
| AIDS deaths in 2010 | 1.8 million | 1.6-1.9 million |

Statistics published by UNAIDS in November 2010, referring to the end of 2009.



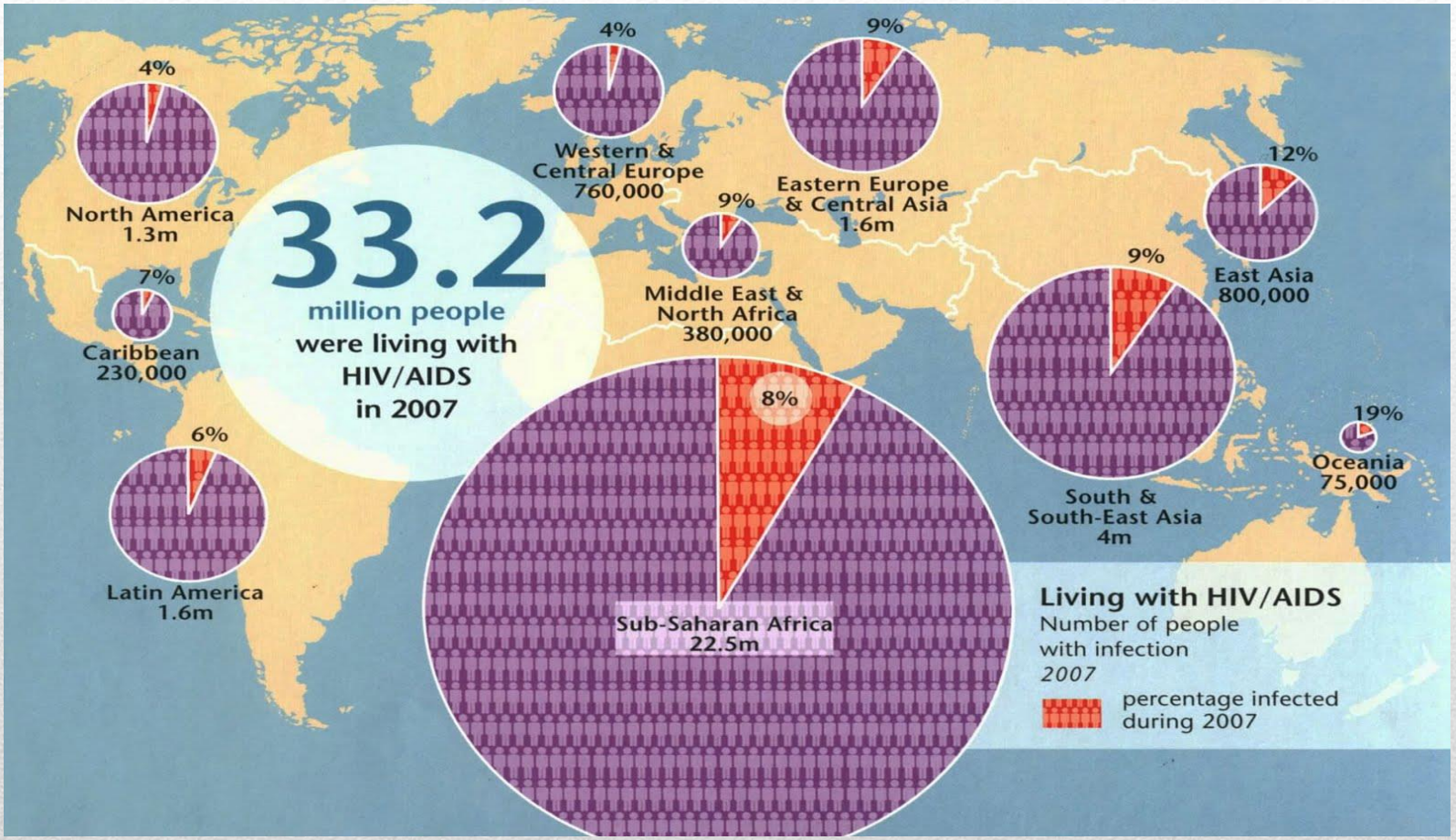

- The number of people living with HIV rose from around 8 million in 1990 to 34 million by the end of 2010.
- The overall growth of the epidemic has stabilized in recent years.
- The annual number of new HIV infections has steadily declined and due to the significant increase in people receiving antiretroviral therapy, the number of AIDS-related deaths has also declined.
- Since the beginning of the epidemic, nearly 30 million people have died from AIDS-related causes.

# Overview of HIV / AIDS Cont.

Regional statistics for HIV and AIDS, end of 2010

| Region | Adults & children living with HIV/AIDS | Adults & children newly infected | Adult prevalence* | AIDS-related deaths in adults & children |
|---|---|---|---|---|
| Sub-Saharan Africa | 22.9 million | 1.9 million | 5.0% | 1.2 million |
| North Africa & Middle East | 470,000 | 59,000 | 0.2% | 35,000 |
| South and South-East Asia | 4 million | 270,000 | 0.3% | 250,000 |
| East Asia | 790,000 | 88,000 | 0.1% | 56,000 |
| Oceania | 54,000 | 3,300 | 0.3% | 1,600 |
| Latin America | 1.5 million | 100,000 | 0.4% | 67,000 |
| Caribbean | 200,000 | 12,000 | 0.9% | 9,000 |
| Eastern Europe & Central Asia | 1.5 million | 160,000 | 0.9% | 90,000 |
| North America | 1.3 million | 58,000 | 0.6% | 20,000 |
| Western & Central Europe | 840,000 | 30,000 | 0.2% | 9,900 |
| Global Total | 34 million | 2.7 million | 0.8% | 1.8 million |

# Overview of HIV / AIDS Cont.

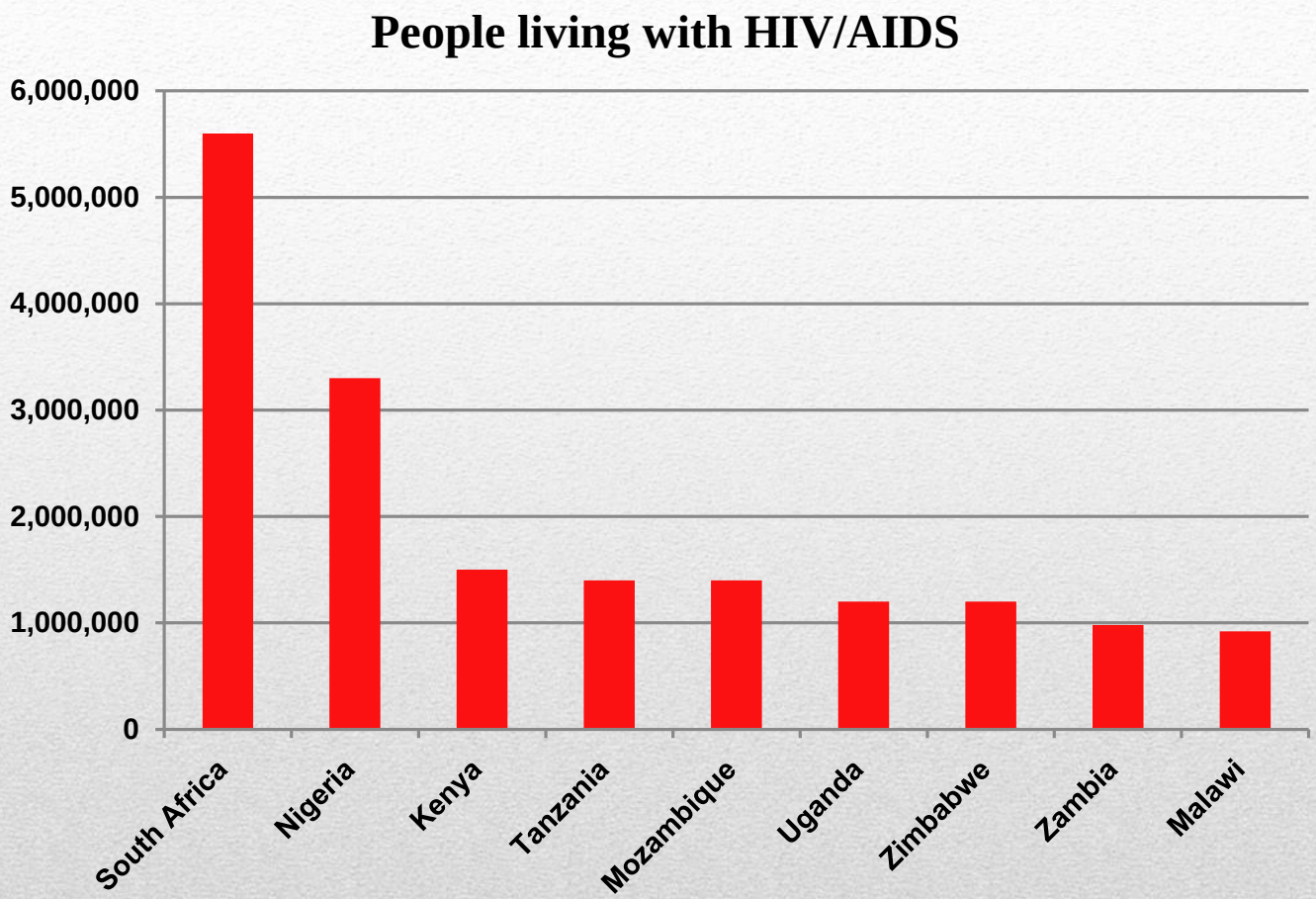



# Overview of HIV / AIDS Cont.

Sub-Saharan Africa HIV & AIDS Statistics

| Country | People living with HIV/AIDS | Adult (15-49) prevalence % | Women with HIV/AIDS | Children with HIV/AIDS | AIDS deaths | Orphans Due to AIDS |
|---|---|---|---|---|---|---|
| South Africa | 5,600,000 | 17.8 | 3,300,000 | 330,000 | 310,000 | 1,900,000 |
| Nigeria | 3,300,000 | 3.6 | 1,700,000 | 360,000 | 220,000 | 2,500,000 |
| Kenya | 1,500,000 | 6 | 760,000 | 180,000 | 80,000 | 1,200,000 |
| Tanzania | 1,400,000 | 5.6 | 730,000 | 160,000 | 86,000 | 1,100,000 |
| Mozambique | 1,400,000 | 12 | 760,000 | 130,000 | 74,000 | 670,000 |
| Uganda | 1,200,000 | 6.5 | 610,000 | 150,000 | 64,000 | 1,200,000 |
| Zimbabwe | 1,200,000 | 14 | 620,000 | 150,000 | 83,000 | 1,000,000 |
| Zambia | 980,000 | 13.5 | 490,000 | 120,000 | 45,000 | 690,000 |
| Malawi | 920,000 | 11 | 470,000 | 120,000 | 51,000 | 650,000 |

# Overview of HIV / AIDS Cont.




# Overview of HIV / AIDS Cont.

# Prevalence, Risk Factors, Transmission of HIV/AIDS

- **Based on available antenatal surveillance data (2009**), South Sudan has a generalized low HIV epidemic with a prevalence rate of 3% among the adult population.

- **UNAIDS South Sudan HIV /AIDS estimates** put the number of individuals living with HIV in 2012 at 151,996 adults and children.

# Prevalence, Risk Factors, Transmission of HIV/AIDS

- **Recent MOH behavioral and sero-prevalence studies** indicate high risk behaviors' among young people, the military and among PLWHA and low condom use suggesting that the epidemic could rapidly increase and reach as high as nearly 6% by 2015, unless current interventions are scaled-up and sustained.

- **The 2010 household survey data show that**

  Only 53 percent of women 15-49 years old have ever heard of HIV or AIDS, and

  Only 19.3 percent know of a place to get tested.

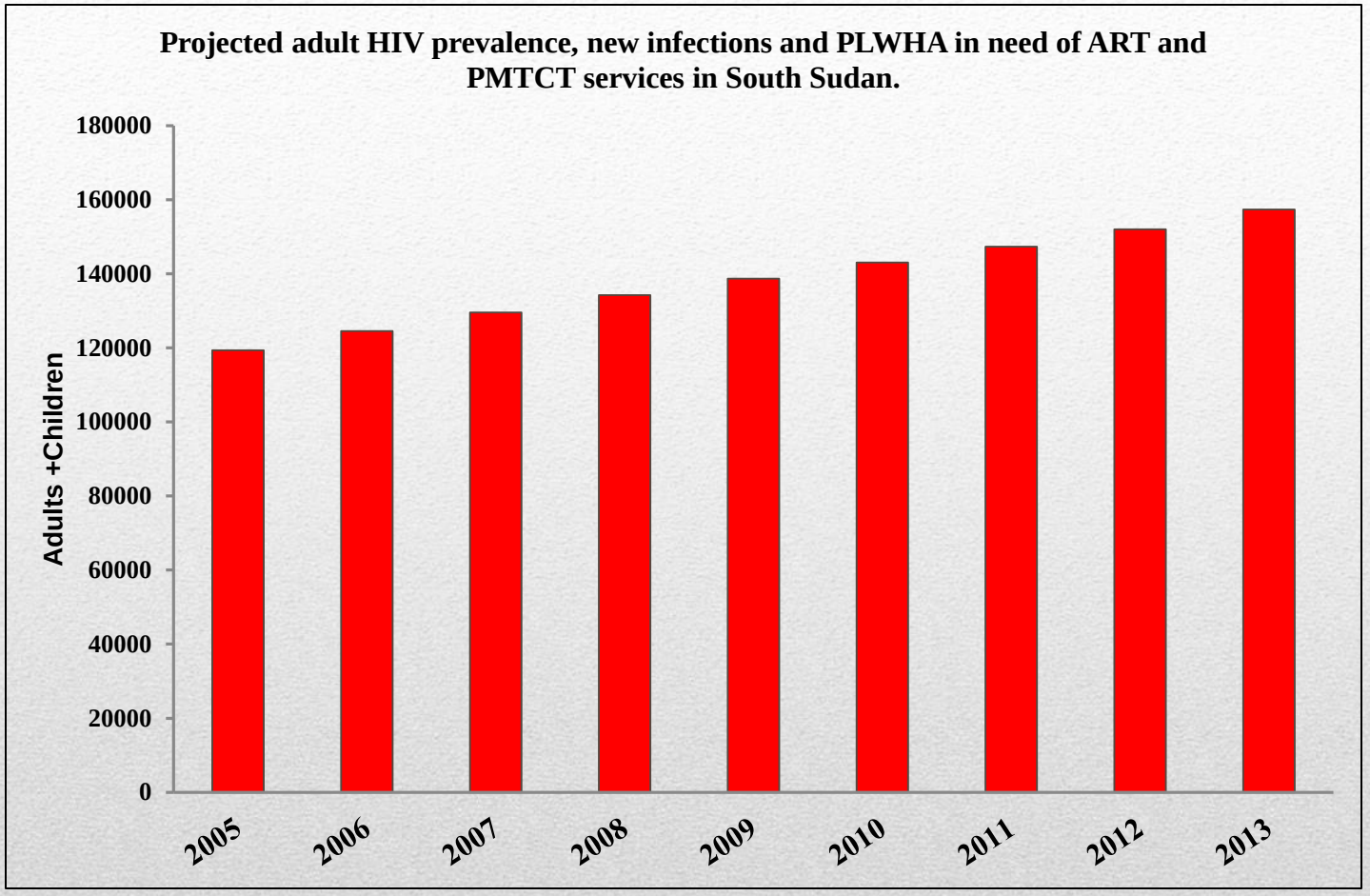
  Only 15 percent of women who gave birth two years prior to the study and had access to ANC services received HIV counseling and testing, while

  Only 9 percent of these women were tested for HIV while seeking antenatal care.

Prevalence, Risk Factors, Transmission of HIV/AIDS Cont.

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

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




Prevalence, Risk Factors, Transmission of HIV/AIDS Cont.

# Risk Factors:

The Household Health Survey (HHS), 2010
The Kajo Keji County Behavioral Survey (KKBSS), 2009

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

# Transmission:

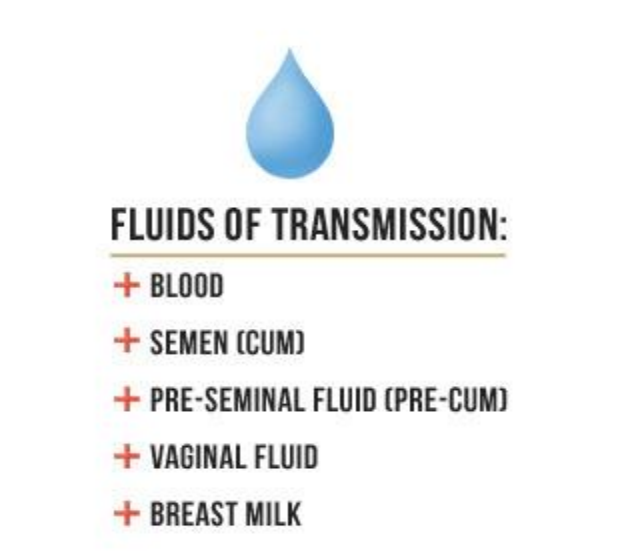

Semen
Vaginal Fluids
Blood

Blood
Milk
Amniotic Fluids

Blood

Amniotic Fluids
Synovial Fluids
Cerebrospinal Fluids
Blood and other fluids

Blood





Prevalence, Risk Factors, Transmission of HIV/AIDS Cont.

# Treatment, Care and Support General

# Treatment, Care and Support

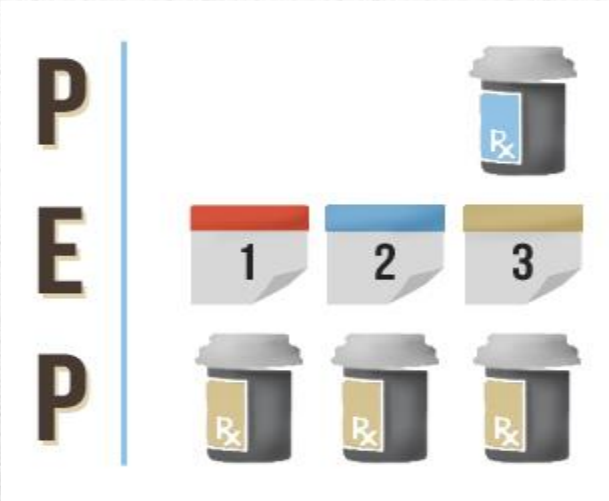
A) General management of HIV/AIDS:

Currently, no cure or effective HIV/AIDS vaccine, but treatment consists of:

- High Active Antiretroviral Therapy (HAART)
- Post-exposure Prophylaxis (PEP)
- Healthy lifestyle
- And management of opportunistic infections and other cancers

- Antiretroviral Therapy (ART):


- Post-exposure Prophylaxis (PEP):




PEP involves taking anti-HIV drugs as soon as possible after having been exposed.

To be effective, PEP must begin within 72 hours of exposure, before the virus has time to rapidly replicate in your body.

PEP consists of 2-3 antiretroviral medications taken for 28 days.

**Occupational Exposure (oPEP):**

- Needle sticks or cuts
- Getting blood or other body fluids in eyes or mouth, on skin when it is chapped, scraped, or affected by *dermatitis*


**Non-occupational Exposure (nPEP):**

- Condom breakage
- Sexual assault

Treatment, Care and Support cont.

- Healthy Lifestyle:

- Well-Balanced & Nutritious Diet
- Daily Exercise
- Avoid Alcohol, Tobacco, and Drug Use
- Plenty of Rest
- Regular Checkups

# Treatment, Care and Support In South Sudan

B) Strategies used for treatment, care & support for HIV/AIDS in South Sudan

Anti-retroviral Therapy (ART) for eligible persons living with HIV/AIDS was launched in 2004 in three hospitals. Since then, the program has been scaled up both in terms of facilities for treatment to 22 and number of beneficiaries seeking ART.

The Main services provided to PLWHA under care, support and treatment include:

Registration of PLWHA for ART and pre-ART services;

↓

Assessment of eligibility of ART based on clinical examination and CD4 count;

↓

# Treatment, Care and Support

# Treatment, Care and Support

Provision of first line ART to all eligible PLWHA and CLHA

↓

Follow-up of patients on ART by assessing drug adherence, regularity of visits and periodic examination and CD4 count (every 6 months)

↓

Care, support and home-based services

↓

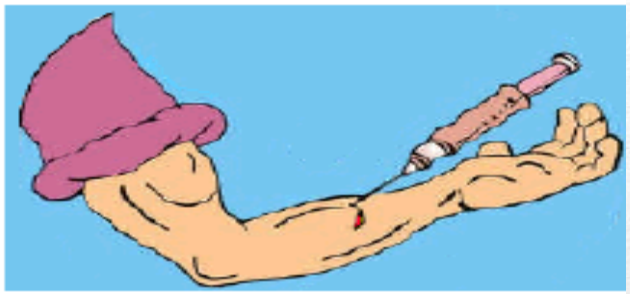
Treatment of opportunistic infections; and

↓

Provision of alternate first line and second-line ART to those experiencing drug toxicities and treatment failure, respectively

# Prevention and Control In General

A- General measures for prevention and control of HIV/AIDS:



Sexual contact

Pregnancy/childbirth

Avoid:

IDUs
Needle stick injury
Sharing needles/syringes

condom

ART

Elective Caesarian section

# Prevention and Control

After birth

↓

Bottle Feeding

# Prevention and Control Cont.

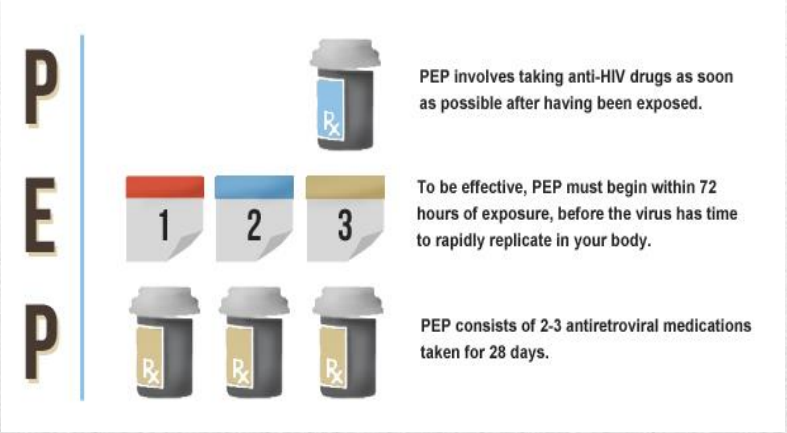
# Prevention and Control Cont.

Pre-exposure Prophylaxis (PrEP)

ART

IDUs
Sexually active adults

Post-exposure Prophylaxis (PEP)




Unsafe sexual activity
When condom breaks
After sexual assault
After needle sharing
Needle sticks

# Prevention and Control In South Sudan

B) Measures for control and prevention of HIV/AIDS in South Sudan

HIV Counseling & Testing (HCT):

HIV testing is done at both…

VCT sites (Client Initiated) where a person is counseled and tested for HIV on his/her own volition

PITC sites (Provider Initiated), where one is advised by a health service provider on the need to take an HIV test.

These sites are the entry points for reinforcing HIV prevention messages and linking the HIV positive people to HIV care, support and treatment services.

# Prevention and control Cont.

# Prevention and control Cont.

HCT SITE

VCT- client initiated
PITC- provider initiated

People access accurate information about HIV prevention and care
Undergo test in a supportive and confidential environment

HIV -ve

Supported with information and counseling
To reduce risks and remain HIV -ve

HIV +ve

Provided psycho-social support
And linked to treatment and care.

# What I Did (Field Experience)

# What I Did in South Sudan (Field Experience)

With a permission from South Sudan HIV/AIDS Commission (SSAC) chairperson, Honorable, Dr. Esterina Novello Nyilok, and Dr. Lul Riek, Director General for community and public health, Ministry of Health (M.O.H), Republic of South Sudan, I was allowed to participate with the team to do my field experience. Before I engaged in any field work, or practice I …..

- Reviewed the strategic framework for HIV/AIDS Prevention and control in South Sudan.
- Reviewed the strategic framework for HIV/AIDS Treatment, Management, Care and Support for infected/affected individuals in South Sudan.
- Reviewed and understood the Risk Factors that potentially contributed to the transmission and continuing of HIV/AIDS in South Sudan.

# Field Experience Cont.

- At community level (ART, HCT, PMTCT sites):
  - Anti-retroviral treatment site (ART site)
  - HIV Counseling & Testing site (HCT site)
  - Prevention of Mother to Child Transmission site (PMTCT site)
- At Health professionals level (M.O.H and SSAC):
  - South Sudan HIV/AIDS Commission (SSAC)
  - Ministry of Health, Republic of South Sudan (M.O.H, RSS)

# Field Experience Cont.

- At community level (ART, HCT, PMTCT sites):

Raised awareness among the South Sudanese communities at ART, HCT, and PMTCT sites on HIV/AIDS prevention and control measures, and risky behaviors and practices that lead to an individual infection and spread of HIV/AIDS, and importance of adherence to treatment.

  - Applied Social and Behavior Basis of Public Health theories/models I have learnt in KSU; THE HEALTH BELIEF MODEL to encourage them to engage in and practice safe behaviors.

  - SOCIO-ECOLOGICAL MODEL ---------  Next

- Applied Health Belief Model (HBM):

  The Concept is…

  Health behavior is determined by personal beliefs or perceptions about a disease and the strategies available to decrease its occurrence

  The main constructs of the model are …

  1) Perceived Susceptibility
  2) Perceived Seriousness
  3) Perceived Barriers
  4) Perceived Benefits

# Field Experience

# Field Experience Cont.

1) Perceived Susceptibility:

Personal risk or susceptibility is an individual's assessment of his or her chances of getting or contracting the disease.

The greater the perceived risk of contracting HIV and then AIDS, the greater the likelihood of engaging in behaviors to decrease the risk of getting HIV (John and Bartlett Publishers).

- Multiple partners →

- condom use →

2) Perceived Seriousness

An individual's belief as to the severity or seriousness of the disease.

For example…
seriousness of AIDS complications or fate

counseling and testing and then enrolled in treatment, care and support before HIV infection develop into AIDS, thus, avoiding potential serious effects and death.

# Field Experience Cont.

3) Perceived Barriers:

This is an individual's opinion as to what will stop him or her from adopting the new behavior.

In order for a new behavior to be adopted, a person needs to believe the benefits of the new behavior outweigh the consequences of continuing the old behavior (Centers for Disease Control and Prevention, 2004).This enables barriers to be overcome and the new behavior to be adopted.

Once HIV/AIDS treatment is begun it is recommended that it is continued without breaks or "holidays"
Some patients dropped from treatment as a result of…..

# Field Experience Cont.

**Barriers**

Adverse effects
Complexity of treatment regimens
- pill numbers
- dosing frequency

Preoccupied with consumption of alcohol

Consequences… death

**Benefits**

Adherence to medication..

Decreased risk of progression to AIDS
Decreased risk of death.

Consequences… Life

# Field Experience Cont.

HIV Counseling & Testing in Yei

HIV Counseling & Testing outreach for women in Wau


HIV & AIDS Prevention awareness Education Material in Wau


School pupils in Kajo keji raising slogan calling for fighting against HIV Stigma & Denial

ART site-2

Patients receiving ARVs at dispensary –ART site -1

# Field Experience Cont.

# Field Experience Cont.

- At Health professionals level (M.O.H and SSAC):

Developed /prepared lecture notes and educated health care professionals at Ministry of Health (M.O.H) and South Sudan HIV/AIDS Commission (SSAC) on knowledge about HIV/AIDS Risk Factors, ways of transmission, prevention and control measures, treatment, care and support for infected individuals.

Vice President of South Sudan opening Annual National HIV/AIDS & STIs Stakeholders forum in Juba-2011


Chairperson of South Sudan AIDS Commission delivering speech during HIV/AIDS stakeholders forum-2011

Part of Stakeholders forum in Juba -2011

# What I Will Do! Next Steps

❖ **Society, Culture & HIV/AIDS**

- Religion & HIV/AIDS
- Alcohol & HIV/AIDS
  - -Youths
  - - Military
  - - Sex Workers
- Education on HIV/AIDS
  - - Health Officials
  - - University Students, School Children
  - - Religious Leaders

# What I Will Do! Next Steps

Religious leaders campaigning for HIV and AIDS in Kajokeji


HIV/AIDS global theme in Juba


School children in Kajokeji participates in HIV campaign


School pupils in Kajokeji raising slogan calling for fighting against HIV Stigma & Denial

# What I Will Do! Next Steps

# Acknowledgements

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# Acknowledgements Cont.

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# Thank You