

# **Summary Session 2**

Socio-Economic Burden of HIV/AIDS in Developing Countries

# **Keynote Address**

**1.Addressing HIV Infection Risks and Consequences among Elderly** 

(>50 years) Sub-Saharan Africans

Prof. Niyi Awofeso

Professor of population Health, University of Western Australia Conjoint Professor, School of Public Health and Community Medicine, University of New South Wales, Australia

### HIV/AIDS among Elderly SSAs

- Elderly SSAs constitute ~ 4.7% of the general population & 5% of the total adult population infected with HIV.
- Based on limited data on elderly SSA males obtained from DHS 2003-2007 surveys, HIV prevalence among SSA's elderly ranged from 1% in Ethiopia to 19% in Zimbabwe.
- A 2001-2 sero-survey of 133 male Ethiopian cataract patients aged 50-59 found HIV prevalence of 9.1%, higher than the 1% prevalence reported in the DHS, as well as a 6.3% HIV prevalence in Ethiopians aged 15-49 years (?? HIV associated cataract, Rasmussen et al. 2011)
- Kenya's DHS 2003 data documented male HIV prevalence as 4.6% for the 15-49 year age-group, and 5.7% for the 50-54 year age-group.



- The prevalence of HIV notification in men aged 50-54 years rose sharply between 2003 and 2008 (from 5.7% to 9.1%). While younger cohorts were generally static or declining in prevalence.
- HIV prevalence was highest in the wealthiest quintile and increased in both cohorts for the two survey periods. Further, over 60% of men aged 50-54 years who tested positive lived in rural areas. – Mills, Rammohan, Awofeso, *Lancet*, 2010.

#### No.HIV **HIV-positive** P-value N=4204 N=209 No. education 0.45 0.24 0.00 Richest wealth quintile 0.18 0.24 0.05 Knowledge that condoms 0.67 0.72 0.11 can reduce likelihood of contracting AIDS Believe that traditional 0.08 0.12 0.19 healers can provide protection from AIDS Non-Muslim 0.91 0.00 0.66 Sex with women other 0.09 0.15 0.00 than wife

### "Risk factors" for HIV infection among SSA's elderly

Source: Rammohan & Awofeso, TD, 2010

#### **Other risk factors:**

- Food insecurity
- Rural location
- Poverty
- Injecting drug use
- Lack of circumcision in males & vaginal thinning in females.
- Healthy ageing
- Senescence



## Physical burden of HIV among SSA's elderly

- Wasting syndrome
- Increased vulnerability to infections:

Tuberculosis, Malaria, Giardia, Salmonella, Cytomegalovirus, Candida, Cryptococcus meningitis, Toxoplasmosis, Cryptosporidiosis.

- Increased vulnerability to cancers: Kaposis sarcoma, Lymphomas.
- Neurological complications: AIDS dementia complex, Vascular myelopathy, Peripheral neuropathies.



#### Physical burden of HIV among SSA's elderly – Wasting Syndrome

- Wasting syndrome is defined as weight loss in excess of 10% from baseline that is associated with chronic diarrhea, fewer, or weakness.
- Second most common AIDS-associated condition in SSA.

#### Mental Health Burden of HIV/AIDS (WHO, 2008)

- In United States, prevalence of mental illness among HIV+ ve patients range from 5% and 23%, compared with 0.3% to 0.4% in the general population.
- Mental health problems & substance abuse double behavioral risk factors for HIV spread.
- Studies in both low-and high-income countries have reported higher rates of depression & psychological distress in HIV-positive people compared with HIVnegative control groups.
- Mental health problems impair care seeking & treatment adherence among those diagnosed with HIV/AIDS.
- Direct effects of HIV on the brain include: HIV encephalopathy, depression, mania, cognitive disorder, and frank dementia, often in combination.
- Mental illness like depression and drug addiction can themselves be risk factors for HIV. Conversely, people with HIV are more likely to develop mental illness than the general population.
- There are no specific mental health services for people living with HIV in SSA
- Training of African healthcare workers on mental health problems associated with HIV is inadequate.
- A 2008 study by South Africa's Human Sciences Research Council found that 44% of a sample of 900 HIV-positive individuals were suffering from a mental disorder (Freeman, 2008)

#### Mental Health Burden of HIV/AIDS: AIDS-related cognitive disorder & dementia

• A-RCD may be prelude to frank dementia.

Symptoms include:

- Motor dysfunction, such as muscle weakness
- Poor performance on regular tasks



- Increased concentration and attention required
- Reversing of numbers or words
- Slower responses and frequently dropping objects
- General feelings of indifference or apathy

#### Economic Burden of HIV/AIDS among SSA's Elderly

Among SSA's elderly, economic status has a bimodal influence on HIV transmission. Thus, burden varies widely. Nevertheless, HIV infection is associated with socio-economic disadvantage in all wealth quintiles.

#### Economic Burden of HIV/AIDS among SSA's Elderly Caregivers

- In a recent study in Kenya, about 11% of older people reported to have provided care to someone with a chronic illness, out of whom 41% were classified as having cared for someone with a HIV/AIDS. Health care costs were significantly higher among HIV/AIDS caregivers (Chepngeno-Langat et al, 2010).
- Caregiving is associated with depressed economic status among SSA's elderly, expert in societies with strong extended family ties, free HIV treatment or wealthypatients.

#### Social Burden of HIV/AIDS among Elderly

- Average decline in GDP in Africa due to HIV/AIDS has so far oscillated around 1% per annum, due, in part, to low labor cost and inadequate consideration of the non-informal sector, and unpaid carers work by the elderly in such modeling.
- The presence of HIV/AIDS in a household may result in depletion of household income earning capacity and of household savings and assets.
- The economic costs of HIV/AIDS, the stigma surrounding the disease that leads to discrimination and social exclusion widen socio-economic inequalities.
- SSA's elderly population is experiencing less care and support from their children and communities as the impact of HIV/AIDS and a weakening economy change family support structures.
- Sex education is regarded as a taboo topic among the elderly in many African societies, thus limiting opportunities for providing factual information on HIV transmission to this cohort.



• About 51% of all people living with HIV globally and 61% of all HIV cases in SSA, being women. Poverty, gender inequality, powerlessness, weak public services, violence and political instability place SSA women at greater risk of HIV infection.



Policies to address HIV/AIDS among Africa's Elderly – Research on the extent the problem

• A recent study from rural Kenya found that HIV caused 17% of deaths among those aged 50 years or older, and that 19% of all deaths attributed to HIV/AIDS occurred among individuals aged 50 years or over (Negin et al. 2010)

Policies to address HIV/AIDS among Africa's elderly – Improve HIV/AIDS care

- HIV policies in the elderly need to address encumbrances to early diagnosis via voluntary testing in culturally appropriate contexts (ABC-D).
- More clinical trials among elderly patients, to determine optimal dosage and response profile for anti-retroviral drugs with minimal side effects.
- Address multiple chronic health needs of elderly SSAs living with HIV.

Policies to address HIV/AIDS among Africa's elderly – Reduce HIV infection risk

- Reduce poverty
- Improve educational attainment
- Address gender inequality
- Reduce perinatal spread
- Improve access to health education on HIV/AIDS
- Address HIV/AIDS misconceptions
- Encourage circumcision
- Address intravenous drug use
- Promote condom use

#### Policies to address HIV/AIDS among Africa's elderly – Healthy Ageing Programs

- Healthy ageing is the process of optimizing opportunities for health, participation, and security in order to enhance quality of life as people age. Currently, very few healthy ageing initiatives exist in Africa.
- Healthy ageing by itself may increase risky sexual activity if it is not complemented by tailored health education programs. Mass health education messages targeted at elderly cohorts discouraging concurrent sexual partners- "zero grazing" – and advocating for protected casual sex are important behavioral change strategies to complement healthy ageing initiatives.





Policies to address HIV/AIDS among SSA's elderly–Stigma Reduction Surveys and Policies

	Perceived Stigma		Internalize Stigma
1.	I am accused by others for being the	1.	I am punished by evil
	spreader of AIDS in the community	2.	My life is tainted
2.	People gossip about my HIV status	3.	I am angry with myself for getting HIV
3.	People look down on me	4.	I am a disgrace to society
4.	The society isolate me	5.	My life is filled with shame
5.	I feel discriminated by health worker	6.	I feel guilty for being the source of
6.	I feel my life in this society is lonely		disruption in the family
7.	I worry about how other kids treat my	7.	I feel my life is worthless
	children in school as a result of my HIV	8.	I feel my reputation is lost
8.	I worry about how others will treat my	9.	If possible I want to conceal my HIV
	family members as result of my HIV		status for life

Policies to address HIV/AIDS among Africa's elderly-End-of-Life Care

- Depending on the prevalence of HIV infection, the number of people who required end-of-life care every year in SSA varies from 0.3%-1%.
- Over a third of all HIV+ve patients studied in five SSA nations were dissatisfied with the quality of palliative care provided. Most elderly people studied and experienced stigma and severe financial stress in relation to payment for palliative treatments (Sepulveda et al. 2003).
- Policies for improved provision of pain management services are urgently required.

Addressing HIV Infection risks and Consequences among elderly (>50years) Sub-Saharan Africans

#### Extend of HIV/AIDS among SSA's elderly

- About 3 million elderly individuals in Africa are living with HIV infection, approximately 10% of all HIV infections (Negin & Cumming, 2009)
- The estimated prevalence of HIV infection among SSA's elderly and those aged 15-49 are similar at about 5%.



 The proportion of elderly people in Africa infected with HIV/AIDS is increasing: good news because increased access to treatments means that patients are living with longer life expectancy: bad news because meeting the complexities of geriatric care for HIVinfected adults will further challenge overwhelmed health systems.