

Health Economics.

A presentation by Dr Kevin Kamata

Identify an Infectious disease:

- * AIDS- refers to Acquired Immunodeficiency Syndrome
- * A dx in which there is a severe loss of the body's cellular immunity, greatly lowering the resistance to infection and malignancy.

Aetiology of AIDS

- * AIDS is caused by Human Immunodeficiency Virus (HIV)
- * HIV interferes with the body's ability to fight infections
- * Therefore, the body is in a state of immunosuppression.
- * The virus can be transmitted through contact with infected blood, semen or vaginal fluids, breastmilk
- * Hence spreads by unprotected sexual contact (pekejeng)
- * It is a chronic condition with no cure

Control system

- * Mainly through prevention methods and the treatment of infected persons
- * Treatment is however not curative
- * Use of condoms is a preventive measure
- * Post exposure prophylaxis protocols and infection control issues
- * Immune system monitoring
- * Management of opportunistic infections and diseases
- * Patient education

Impact of HIV/AIDS

- * The 2 major economic effects are a reduction in the labor supply and increased costs
- * Labor supply:
 1. the loss of young adults in their most productive years will affect overall economic output
 2. If AIDS is more prevalent among the economic elite, then the impact may be much larger than the absolute number of AIDS deaths indicated

Cost structure and methodology; Household level(micro-economic level):

Direct cost:

1. Cost of medication due to morbidity:treatment , monitoring tests, tests for opportunistic dxs
 - * Families/individuals spend money on HAART, on buying meds for the Rx of opportunistic dxs
 - * Hospitalization fees due to AIDS related illnesses.
 - * Consultation fees incurred.
2. Transportation to health care facilities requires money e.g. when attending clinics at the CCC
3. In the case of deaths (mortality), funeral costs represent another direct cost

Indirect cost; Morbidity

- * Loss of income to people living with HIV/AIDS- days missed at work, loss of productive time from work or deterioration of human capital.
- * Loss of income for persons caring for the sick- missed work days while taking care of the sick or accompanying them to hospital
- * Utilization and selling of assets, borrowing(loans), withdrawing children from schools (coping strategies to mitigate the AIDS impact)

Mortality-

- * Income loss to the household resulting from death-bread winner
- * Orphans depend on relative hence an inc in dependency ratio

Macro-economic impact:

- * HIV/AIDS affects macro-economic performance
- * E.g. AIDS related mortality leads directly to a reduction in the no of workers available
- * A shortage of workers leads to higher wages which lead to higher domestic production costs. Higher production cost leads to loss of international competitiveness which cause foreign exchange shortages which is reflected in falling rates of exports etc.

- * Govt expenditure on health incs due to HIV/AIDS. Like in Kenya, HAART is free in public facilities or at a subsidized price (for availability to the common mwananchi) yet this funds could have been directed elsewhere.
- * Budget allocations inc due to an inc in dependency ratio in order to deal with increasing no of orphans and an intensification of poverty
- * In prevention, the issuing of free condoms (SURE) to prevent transmission of HIV/AIDS and also conducting health education and raising awareness causes use of funds which could have been directed elsewhere.

* In general, the impact of AIDS can be divided into 3 broad categories:

1. Demographic impact of the dx
2. Impact on govt finance and public services
3. Macro-economic impact

- * The impact is through:
- * Increased dependency ratio
- * Rising health expenditures
- * Lower income generating potential & savings among households, private firms and businesses
- * Lower productivity
- * Increased costs due to AIDS-related absenteeism, sickness, death & recruitment costs

-They limit expansion of domestic investment and foreign direct investment

-The combined impact of AIDS through household impact and all sectors translate into poor macroeconomic performance

Methodology

* To Know the monetary value of inputs directed to mitigate Hiv/Aids and its effects and add them up.

* Direct cost:

Morbidity

1. Cost of medications(HAART and for opportunistic diseases)
2. Costs of transport
3. Tests (monitoring and diagnostic)
4. Consultation fees incurred
5. Any hospitalization due to AIDS related illnesses

Mortality

1. Funeral costs

Indirect cost:

Morbidity:

People living with HIV/AIDS- days missed at work

- * $\text{Salary per month} / 30 \text{ days} = \text{payment/wage per day} \times \text{days missed}$
- * =money lost during sick-days

People taking care of the sick

- * $\text{Salary per month} / 30 \text{ days} = \text{wage per day} \times \text{days missed at work}$

Mortality:

- * Indicating how much the deceased received prior to their death
- * Dependency- how much more do relatives spend on the orphans
- * For skilled workforce: how much was spent on training (education, trainings etc.)

Macro-economics

- * Budgets allocated for various HIV/AIDS programs on:
 - * Prevention e.g. issuing free condoms
 - * Health education
 - * Subsidization of HAART
- * When dealing with dependency ratio(for orphans due to AIDS)
- * Training and workshops in health facilities on dealing with HIV/AIDS

Development implications of the costs of HIV/AIDS

- * Economic effects
 1. Reduced labor supply
 2. Reduced labor productivity
 3. Reduced exports and increased imports- lower domestic productivity reduces exports while imports of expensive healthcare goods may increase.
- * Quantifying the impact:
- * To simplify the measurement of 'economic performance,' economists have tended to focus on one measure: average income, or gross domestic product(GDP) per capita.