

**Chapter 1 : Economically Disadvantaged | HIV by Group | HIV/AIDS | CDC**

*The population rates (per , people) of people who received an HIV diagnosis were highest in the South (), followed by the Northeast (), the West (), and the Midwest (). g New HIV Diagnoses in the United States by Age,*

Historical prevalence of HIV-1 subtypes The earliest known cases of human HIV infection have been linked to western equatorial Africa, probably in southeast Cameroon where groups of the central common chimpanzee live. The hunters then became infected with HIV and passed on the disease to other humans through bodily fluid contamination. This theory is known as the "Bushmeat theory". One of the most formative explanations is the poverty that dramatically impacts the daily lives of Africans. A Challenge to Our Thinking, describes how "Poverty has accompanying side-effects, such as prostitution i. Trade along the rivers could have spread the virus, which built up slowly in the human population. By the s, about 2, people in Africa may have had HIV, [15] including people in Kinshasa whose tissue samples from and have been preserved and studied retrospectively. The virus multiplies in the body until it causes immune system damage, leading to diseases of the AIDS syndrome. In the s it spread silently across the globe until it became a pandemic, or widespread. Some areas of the world were already significantly impacted by AIDS, while in others the epidemic was just beginning. The virus is transmitted by bodily fluid contact including the exchange of sexual fluids, by blood, from mother to child in the womb, and during delivery or breastfeeding. Then in and , heterosexual Africans also were diagnosed. Because public health authorities perceived AIDS to be an urban phenomenon associated with prostitution, they believed that the majority of Africans who lived in "traditional" rural areas would be spared. They believed that the heterosexual epidemic could be contained by focusing prevention efforts on persuading the so-called core transmittersâ€”people such as sex workers and truck drivers, known to have multiple sex partnersâ€”to use condoms. These factors retarded prevention campaigns in many countries for more than a decade. AIDS was at first considered a disease of gay men and drug addicts, but in Africa it took off among the general population. As a result, those involved in the fight against HIV began to emphasize aspects such as preventing transmission from mother to child, or the relationship between HIV and poverty, inequality of the sexes, and so on, rather than emphasizing the need to prevent transmission by unsafe sexual practices or drug injection. This change in emphasis resulted in more funding, but was not effective in preventing a drastic rise in HIV prevalence. Almost 1 million of those patients were treated in Public education initiatives[ edit ] Numerous public education initiatives have been launched to curb the spread of HIV in Africa. This is due to many factors such as a lack of understanding of the disease, lack of access to treatment, the media, knowing that AIDS is incurable, and prejudices brought on by a cultures beliefs. The belief that only homosexuals could contract the diseases was later debunked as the number of heterosexual couples living with HIV increased. Unfortunately there were other rumors being spread by elders in Cameroon. They also claimed if a man was infected as a result of having sexual contact with a Fulani woman, only a Fulani healer could treat him". Because of this belief that men can only get HIV from women many "women are not free to speak of their HIV status to their partners for fear of violence". Unfortunately This stigma makes it very challenging for Sub-Saharan Africans to share that they have HIV because they are afraid of being an outcast from their friends and family. The common belief is that once you have HIV you are destined to die. People seclude themselves based on these beliefs. This group of individuals under fear of suspicion may avoid being mistakenly identified as stigmatized by simply avoiding HARHS utilization. Using different prevention strategies in combination is not a new idea. Combination prevention reflects common sense, yet it is striking how seldom the approach has been put into practice. Prevention efforts to date have overwhelmingly focused on reducing individual risk, with fewer efforts made to address societal factors that increase vulnerability to HIV. Most new infections were coming from people in long-term relationships who had multiple sexual partners. The implementation of ABC differs among those who use it. People who had talked to the counselors were twice as likely to mention abstinence and three times as likely to mention condom use when asked to describe ways to avoid infection. However, they were no more likely than the uncounseled to mention being faithful as a good strategy. The people who had been counseled were also twice

as likely to have been tested for HIV in the previous year, and to have discussed that possibility with a sex partner. However, they were just as likely to have a partner outside marriage as the people who had not gotten a visit from a counselor, and they were no more likely to be using a condom in those liaisons. People in specific neighborhoods were counseled with an ABC message as part of a seven-year project funded by the U. Agency for International Development and its British counterpart. The uncounseled group showed no increase in condom use—it stayed about 55 percent. In the counseled group, however, condom use by women in their last nonmarital sexual encounter rose from 54 percent to 69 percent. For men, it rose from 64 percent to 75 percent. Stigmatizing attitudes appeared to be less common among the counseled group. Half of the teenagers could correctly define abstinence and explain why it was important. Only 23 percent could explain what being faithful meant and why it was important. Only 13 percent could correctly explain the importance of a condom in preventing HIV infection. About half spontaneously offered negative opinions about condoms, saying they were unreliable, immoral and, in some cases, were designed to let HIV be transmitted. Kaiser Family Foundation and the Bill and Melinda Gates Foundation provided major funding for the loveLife website, an online sexual health and relationship resource for teenagers. The TeachAIDS prevention software, developed at Stanford University, was distributed to every primary, secondary, and tertiary educational institution in the country, reaching all learners from 6 to 24 years of age nationwide. The solutions are organized around three strategic pillars: The Roadmap defines goals, results and roles and responsibilities to hold stakeholders accountable for the realization of these solutions between and Chief among these are the traditionally liberal attitudes espoused by many communities inhabiting the subcontinent toward multiple sexual partners and pre-marital and outside marriage sexual activity. In most of the developed world outside Africa, this means HIV transmission is high among prostitutes and other people who may have more than one sexual partner concurrently. Within the cultures of sub-Saharan Africa, it is relatively common for both men and women to be carrying on sexual relations with more than one person, which promotes HIV transmission. Africa, the West, and the Fight against AIDS, in which her research into the sexual mores of Uganda revealed the high frequency with which men and women engage in concurrent sexual relationships. When infected, most children die within one year because of the lack of treatment. Rather than having more of a specific group infected, male or female, the ratio of men and women infected with HIV are quite similar. For African countries with advanced medical facilities, patents on many drugs have hindered the ability to make low cost alternatives. In Mozambique, an influx of humanitarian workers and transporters, such as truck drivers, attracted sex workers from outside the area. Unfortunately, "health services in many countries are swamped by the need to care for increasing numbers of infected and sick people. Ameliorative drugs are too expensive for most victims, except for a very small number who are affluent". When family members get sick with HIV or other sicknesses, family members often end up selling most of their belongings in order to provide health care for the individual. Medical facilities in many African countries are lacking. Many health care workers are also not available, in part due to lack of training by governments and in part due to the wooing of these workers by foreign medical organisations where there is a need for medical professionals. Currently antiretroviral therapy is the closest to a cure. However, many hospitals lack enough antiretroviral drugs to treat everyone. This may be because most Sub-Saharan African countries invest "as little as dollars per capita, [so] overseas aid is a major source of funding for healthcare". Relying on other countries for help in general requires more paperwork and faith in another country very far away. Also, delivery of drugs and other aid takes many month and years to arrive in the hands of those that need help. Circumcision[ edit ] According to a report, male and female circumcision were statistically associated with an increased incidence of HIV infection among the females in Kenya and the males in Kenya, Lesotho, and Tanzania who self-reported that they both underwent the procedure and were virgins. There are high levels of medical suspicion throughout Africa, and there is evidence that such distrust may have a significant impact on the use of medical services. Patents on medications have prevented access to medications as well as the growth in research for more affordable alternatives. These pharmaceuticals insist that drugs should be purchased through them. Despite its lack of scientific acceptance, AIDS denialism has had a significant political impact, especially in South Africa under the former presidency of Thabo Mbeki. Religious factors[ edit ] Pressure from some religious leaders has

resulted in the banning of a number of safe-sex campaigns, including condom promoting advertisements being banned in Kenya. This is often because of the time and cost required to travel to health centres as well as an inadequate number of trained staff such as medical doctors and specialists to provide treatment. A systematic review found that when antiretroviral treatment was initiated at the hospital but followed up at a health centre closer to home, fewer patients died or were lost to follow up. The research also did not detect a difference in the numbers of patients who died or were lost to follow up when they received maintenance treatment in the community rather than in a health centre or hospital. Incidence, in contrast, measures the number of new infections, usually over the previous year. There is no practical, reliable way to assess incidence in Sub-Saharan Africa. Prevalence in 15 to 19-year-old pregnant women attending antenatal clinics is sometimes used as an approximation. The test done to measure prevalence is a serosurvey in which blood is tested for the presence of HIV. Health units that conduct serosurveys rarely operate in remote rural communities, and the data collected also does not measure people who seek alternate healthcare. Extrapolating national data from antenatal surveys relies on assumptions which may not hold across all regions and at different stages in an epidemic. Recent national population or household-based surveys collecting data from both sexes, pregnant and non-pregnant women, and rural and urban areas, have adjusted the recorded national prevalence levels for several countries in Africa and elsewhere [ citation needed ]. These, too, are not perfect: Household surveys also exclude migrant labourers, who are a high risk group. Thus, there may be significant disparities between official figures and actual HIV prevalence in some countries. A minority of scientists claim that as many as 40 percent of HIV infections in African adults may be caused by unsafe medical practices rather than by sexual activity. The latter includes practices such as multiple sexual partners and unprotected sex, high-risk cultural patterns that have been implicated in the much greater spread of HIV in the subcontinent.

## Chapter 2 : HIV and AIDS in the United States of America (USA) | AVERT

*Undisputable fact is that 14 people in Sub-Saharan Africa are being infected daily with HIV and 11 are dying every day due to HIV/AIDS related illnesses. In this region more than 60% of the people live below UN poverty line of US\$ 1 per day.*

The Southern Africa sub-region, in particular, experiences the most severe HIV epidemics in the world. At an estimated In the past 10 years, efforts to halt the spread of the epidemic by national governments and development partners have borne fruits: Among children, the number of new infections has dropped from , in , to , in Despite the progress, there are still Moreover, most people on ART start treatment late, limiting the overall impact of antiretroviral medicines. For many pregnant women living with HIV, such treatment remains out of reach, especially for those living in rural areas, and those fearful of stigma and discrimination if they are tested positive. Compared to adults, the progress in providing treatment to children is much slower. Out of the 2. The number of orphans due to AIDS continues to increase [2]. The region now has In most countries in the region, only around 20 per cent or less of these children receive some sort of external support. Girls and young women are disproportionately affected by HIV. In the countries most affected by the epidemic, such as Swaziland, Lesotho and Botswana, more than 1 in 10 females in that age group are living with HIV. Many of those young women appear to have been infected by men who are several years older and therefore more likely to be living with HIV. While challenges remain, scientific advances and their implementation have brought the world to a tipping point in the fight against AIDS. An AIDS-free generation is finally within our grasp. To optimize our contribution to achieving an AIDS-free generation, UNICEF has adopted an integrated programme approach, focusing on strengthening the delivery of high impact interventions; while working across sectors to integrate HIV responses into a broader development context. Today, UNICEF supports pregnant women, mothers, children and adolescents affected by or at risk of HIV at two critical stages - the First Decade and the Second Decade of life, and across both decades in key areas such as child protection, social protection, education, health and nutrition. Special attention will be given to adolescent girls in generalized epidemics, adolescents living with HIV, and key adolescent populations. Trends, contexts and implications for policies and programmes. Vulnerable Children and Youth Studies, 6:

Chapter 3 : HIV/AIDS in Africa - Wikipedia

*Chapter 1 AIDS, Poverty, and Hunger: An Overview* Stuart Gillespie *The AIDS epidemic is a global crisis with impacts that will be felt for decades.*

Open in a separate window Source: Own calculations using estimates from [ 6 ]. The survey reveals considerable heterogeneity across workers. Prevalence rates are typically highest for labourers i. They are lowest for managers and professionals, with the exception of agriculture, where prevalence rates are similar for all three occupational groups. Prevalence is significantly higher for the middle-age cohort, which is consistent with observed national trends. The survey clearly indicates that it is inappropriate to make broad generalizations about the sectoral and occupational trends of HIV prevalence. The next section describes how these demographic projections are incorporated within the economic modelling. At the household level, a wide range of factors influence poverty, including: These household-level effects need to be aggregated in order to estimate the overall impact of the pandemic. In our macro-microeconomic assessment, we account for not only households, but also other actors or institutions, such as firms, markets and government. However, broadening our analysis necessarily excludes some difficult-to-measure household-level impacts. Therefore, given our focus on economic growth, we concentrate on the income dimensions of poverty. The model is recursive dynamic and so can be separated into a static "within-period" component, where producers and consumers maximize profits and utility, and a dynamic "between-period" component, where the model is updated based on the demographic model and previous period results to reflect changes in population, labour supply, and capital and technology accumulation. In the static component of the model, producers in each sector  $s$  and region  $r$  i. Profit maximization implies that factor payments  $W$  are equal to average production revenues eq. Labour supply  $L$  and capital supply  $K$  are fixed within a given time period, implying full employment of factor resources. Labour market equilibrium is defined at the regional level so that labour is mobile across sectors, but wages vary by region eq. National capital market equilibrium implies that capital is mobile across both sectors and regions and earns a national rental rate  $i$ . Savings are collected in a national savings pool and used to finance investment demand  $I$  i. Nell empirically tests the causality between national savings and investment in South Africa, and confirms the appropriateness of a savings-driven investment closure [ 7 ]. Finally, a single price  $P$  equilibrates national product markets, thus avoiding having to model inter-regional trade flows eq. A social accounting matrix is a consistent database capturing all monetary flows in an economy in a given year. It contains information on the production technologies and demand structures of detailed sectors, regions and households, as well as government revenues and expenditures and foreign receipts and payments. Various datasets were used to build the provincial social accounting matrix for South Africa, including: The income and expenditure data was reconciled using cross-entropy estimation [ 9 ]. Parameters are then adjusted over time to reflect demographic and economic changes and the model is re-solved or a series of new equilibriums for the period of to For more information on the social accounting matrix, see [ 10 ]. Individual-level population projections  $DH$  are estimated for each region  $r$ , population group  $p$ , gender  $g$  and age cohort  $a$ , and then compared to predicted population levels  $dh$  in the base year This ratio is multiplied by the observed demographic composition  $sh$  of each household group  $h$  in the CGE model to arrive at household-level population time series for to Demographic compositions are drawn from the re-weighted Income and Expenditure Survey [ 11 ]. Similarly, labour supplies are based on demographic projections for occupation-based skill groups eq. By increasing mortality, the pandemic reduces consumer demand and the productive capacity of the economy, both of which are likely to have adverse impacts on economic growth. This is captured in eq. This is caused by lower on-the-job productivity and more days absent from work. The fourth impact channel is the reduction in total factor productivity TFP caused by systemic shocks to the economy eq. For example, AIDS morbidity and mortality reduces the productivity of uninfected workers by disrupting the production process. Moreover, the death of education and health professionals has long-term detrimental effects on the entire economic system. Unfortunately, this impact channel cannot be calibrated using the firm survey or demographic model. The final impact channel is the

adverse effect on savings and investment see [ 14 ]. As a coping strategy, households draw on assets or savings. This lowers the overall level of savings and investment eq. New capital is allocated to regions and sectors endogenously in order to equalize capital returns. The model therefore endogenously determines the national rate of capital accumulation and supply of capital  $K$ . However, the full model drops certain assumptions. The full DCGE model is an extended version of the national model described in [ 10 ]. Constant elasticity of substitution CES production functions allow factor substitution based on relative factor prices  $i$ . The 25 sectors are mapped onto the four sectors in the firm survey. Most of the sectors in the DCGE model are in manufacturing, but we assume similar prevalence rates for mining. Similarly, we assign the tourism sector prevalence rates to the retail trade sector, and the transport sector prevalence rates to the remaining service sectors in the DCGE model. Intermediate demand in each sector excluded in the simple model is determined by fixed technology coefficients. Regional labour markets are further segmented across race, gender and three occupation-based skill categories. A nested demand system places skill levels above gender and age groups. All factors are assumed fully employed, and capital is immobile across sectors. The full model still assumes national product markets for most commodities. However, international trade is captured by allowing production and consumption to shift imperfectly between domestic and foreign markets depending on the relative prices of imports, exports and domestic goods. South Africa is a small country and so world prices are fixed and the current account balance is maintained by a flexible real exchange rate  $i$ . Production and trade elasticities are econometrically estimated. Households maximise a Stone-Geary utility function such that a linear expenditure system determines consumption and permits non-unitary income elasticities. The latter are drawn from [ 16 ]. These household groups pay taxes to government, based on fixed direct and indirect tax rates. Tax revenues finance exogenous recurrent spending resulting in an endogenous fiscal deficit. Finally, the model includes a micro-simulation module in which each household in the Income and Expenditure Survey [ 11 ] is linked to its corresponding representative household in the DCGE model. Moreover, the results from the firm survey and demographic model are explicitly integrated within the economic analysis. Demographic projections provide time-series estimates for  $DH$  eq. Together these parameters define the exogenous dynamic component of the DCGE model. Static component parameters and behavioural elasticities are either econometrically estimated or drawn from the social accounting matrix. In this section, we compare the results from these two simulations. Similarly, declines in the African population are substantially larger than for other races due to higher prevalence among Africans.

**Chapter 4 : UNICEF Eastern and Southern Africa - HIV and AIDS - Overview**

*This policy brief gives an overview of the effects of HIV and AIDS on population size, characteristics, and well-being. It also highlights the major efforts needed to control the epidemic. The pandemic continues to spread worldwide despite prevention efforts and successes in a few countries.*

In Lesotho the highest prevalence among women was in the second and fifth wealth quintiles, whereas among men prevalence was highest in the third and fourth quintiles. Comparisons of country data showed that the trend for prevalence to increase together with wealth was more pronounced in lower-income countries. Men in Cameroon came the closest to reflecting this increase, with an equal prevalence in the two wealthiest groups. In Zimbabwe and Swaziland, prevalence was in fact lowest in the highest wealth quintile for women. This contrasted with the findings for lower-income countries. The exception to this trend was Zambia, where prevalence was highest in the fourth quintile and second highest for the wealthiest subgroup. The only countries in which the highest prevalence among men was in the highest wealth quintile were the four lowest-income countries: Between the two surveys the national HIV prevalence in adults decreased from 7. Among women the prevalence of HIV infection decreased in the highest three wealth quintiles between 2004 and 2008 but increased in the two poorest wealth groups. Among men the prevalence remained the same in the poorest subgroup but decreased for all other wealth quintiles, with the largest decreases in the highest-income subgroups. Trends in the prevalence across time, stratified by sex, are presented graphically in Fig. Change between 2004 and 2008 in prevalence of infection with human immunodeficiency virus HIV by wealth quintile the United Republic of Tanzania Discussion Increases in the prevalence of HIV infection by wealth quintile as identified in Kenya by Chin 5 and in the United Republic of Tanzania by Shelton et al. An analysis of data from the 2004 United Republic of Tanzania AIS 32 showed a consistent increase in prevalence by wealth quintile in women, although in the more recent 2008 AIS this association was not seen. I found that among women the prevalence of HIV infection was higher and more strongly associated with wealth quintile than among men. Women are biologically more susceptible to HIV infection, 38 which would explain higher overall prevalences among women, although it would not explain why trends for men and women sometimes differed within individual countries. As per capita GDP increased, the trend for the prevalence of HIV infection to follow wealth quintile became less clear. Moreover, data from the United Republic of Tanzania showed that the relationship between relative wealth and disease prevalence can change with time. Because HIV infection can lead to a loss of household income or assets, some HIV-positive individuals may have moved into lower wealth groups, but evidence for this is lacking in the data for men. Variability between genders within countries underlines the importance of recognizing that different lifestyles with different associated risk behaviours can arise from combinations of underlying factors, which can include gender as well as wealth. Underlying structural factors can affect HIV risk in several ways in different contexts. It is also important to recognize possible ecological fallacies in assuming that the correlation with wealth must appear within countries simply because it may be seen across them. Although it has been observed that national HIV prevalence appears to increase with national income in Africa, 5 the association between household wealth and individual prevalence appeared weakest in the higher-income, higher-prevalence countries, with Swaziland providing the best example of this. Poor people in some settings undertake particular risky practices 4 e. The Tanzanian data indicate that relative wealth may be associated with higher risk initially but may become a protective factor as the epidemic matures, a possibility highlighted in two previous literature reviews on wealth and socioeconomic status and HIV. In one systematic review, the correlation between HIV infection prevalence and educational level reversed as the HIV epidemic matured, and education became more protective with time. Effective action requires unpacking the black box of behaviour by recognizing that HIV infection in poorer groups may arise from certain lifestyles and risky behaviours related to poverty, whereas HIV infection in wealthy groups may be due to different lifestyles and risky behaviours related to their wealth. It is also important to understand that any of these lifestyle factors and behaviours can vary with time and place. This may explain the results seen in Africa, where higher national

income or evolution of the epidemic over time may change the dynamics between relative household wealth and risk of HIV infection. Insights into the dynamic relationship between wealth and HIV infection can help guide prevention efforts in two ways. First, they can help us move beyond assumptions that either poverty or wealth is exclusively correlated with HIV infection, since these assumptions can lead to oversimplified and ineffective prevention strategies. Second, they provide guidance on how interventions can affect structural drivers of risk. As Gupta et al. To address underlying structures we need first to identify the causal mechanisms that lead specific factors to translate into the risk of HIV infection in different social contexts, and then develop interventions that target specific mechanisms. Many actors will not be accustomed to designing and implementing interventions in this way. However, some efforts are already using a bottom-up approach to plan interventions based on specific lifestyles and risk environments of the target community. The Sonagachi project in Kolkata, India, is one such programme. This project has been widely praised for creating an environment that allowed sex workers to manage the underlying determinants of their own risk environment and empowered them to insist on safer sex work practices. They are not meant to be a list of effective or best practices, but instead provide proof of concept of alternative ways to approach structural interventions for the prevention of HIV infection. Neither poverty nor wealth per se drives the HIV epidemic. Being poor or being wealthy may be associated with sets of behaviours that are either protective or risky for HIV infection. The data reported here from 12 sub-Saharan African countries helps illustrate the complexities and non-deterministic nature of the relationship between structural factors such as poverty or wealth and the risk of HIV infection. My analysis further shows that any trend in the association between relative wealth and risk of infection can vary among different countries and may change with time. A bottom-up focus is necessary to identify factors that drive the risk of HIV infection in both wealthy and poorer groups in a given setting. Once these factors have been identified, appropriate behavioural change interventions can be selected and implemented. Although it may sound difficult, addressing these challenging issues will be necessary to make progress in efforts to prevent HIV infection.

### Chapter 5 : How HIV and AIDS Affect Populations – Population Reference Bureau

*East and Southern Africa is the region hardest hit by HIV. It is home to % of the world's population but over half of the total number of people living with HIV in the world ( million people).*

### Chapter 6 : HIV and AIDS in East and Southern Africa regional overview | AVERT

*With only 5 per cent of the world's population, Eastern and Southern Africa is home to half the world's population living with HIV. Today the region continues to be the epicentre of the HIV/AIDS epidemic, with 48 per cent of the world's new HIV infections among adults, 55 per cent among children, and 48 per cent of AIDS-related deaths [1].*

### Chapter 7 : HIV/AIDS in India: An Overview – Population Reference Bureau

*HIV is the virus that causes HIV infection. AIDS is the most advanced stage of HIV infection. HIV is spread through contact with the blood, semen, pre-seminal fluid, rectal fluids, vaginal fluids, or breast milk of a person with HIV.*

### Chapter 8 : HIV in the United States | Statistics Overview | Statistics Center | HIV/AIDS | CDC

*Around million people are living with HIV in the United States of America (USA). Nearly one in seven of these people are unaware they have HIV.1 The size of the epidemic is relatively small compared to the country's population, but is heavily concentrated among several key affected populations.*