Hiv aids south africa

The HIV/AIDS Epidemic In South Africa Acquired Immune Deficiency Syndrome (AIDS) caused by the Human Immunodeficiency Virus (HIV) is one of many infectious diseases that plague the world today. According to the 2007 AIDS epidemic update put out by The United Nations Joint Program on HIV/AIDS (UNIADS) there were approximately 2. 1 million AIDS related deaths and 33. 2 million people infected with HIV world wide (UNAIDS/WHO Working Group, 2007).

Despite its abundant resources and its well-developed financial sectors, South Africa has the largest HIV infected population in the world with approximately 5. million of its 44 million citizens living with HIV/AIDS (Global Health Facts, 2007). These 5. 7 million cases alone account for over 28% of the worlds HIV cases (UNAIDS/WHO Working Group, June 2008) This epidemic has gradually escalated to such an extent that it is now causing approximately 350, 000 deaths a year (UNAIDS/WHO Working Group, July 2008) which is nearly 1, 000 people, including children, in South Africa dying every day due to AIDS. As can be expected, there are numerous amount of factors that have contributed to the ever-increasing severity of South Africa’s AIDS epidemic.

This paper will venture to explain and rationalize these overwhelming statistics that have unfortunately begun to characterize South Africa by examining: The etiology of HIV/AIDS The breakdown of statistical data surrounding the AIDS epidemic in South Africa The historical context of AIDS in South Africa The stigma and discrimination associated with HIV/AIDS in South Africa The health care systems represented in South Africa The testing, treatment and prevention of HIV/AIDS in South Africa The future for

AIDS in South Africa. The Etiology of HIV/AIDSBefore one can dive into how HIV and AIDS affect a population, one must first begin to understand the disease itself. Even among educated groups the terms HIV and AIDS are often misused interchangeably. The fact is that HIV and AIDS are closely related to one another, yet two separate entities.

HIV is the virus that acts as the primary etiologic agent of AIDS, while AIDS itself is the medical condition of an acquired immune deficiency. Infection by HIV does not mean that one has acquired AIDS; it means that the risk of developing it is higher. There are many people in the world today who are HIV positive and do not have AIDS simply because they have access to treatment and health care, those who do not eventually become carriers of the disease. There are also many misunderstandings surrounding how HIV is contracted. A few of which are: being around or sharing a meal with someone who has HIV, sitting on a toilet seat that has been infected with AIDS, and being bit or stung by an insect that has been infected with AIDS. All of these are falsehoods that do nothing but fuel discrimination and segregation.

The Center for Disease Control and Prevention (CDC) says that the only way one is likely to contract HIV is through unprotected sex with someone who has HIV, sharing needles with someone who has HIV, being birthed by an HIV positive woman, or having an infected blood transfusion which is highly unlikely in most developed countries (CDC, 2007). In-order to grasp a better understanding of how HIV can be contracted and develop into AIDS, one must take a closer look into the actual pathophysiology of HIV and AIDS. HIV is a retrovirus, meaning instead of carrying genetic material via double

stranded DNA it is carried by enveloped single stranded RNA that in-turn uses the method of reverse transcriptase to turn its viral RNA into virally infected DNA. HIV is also very limited to what types of cells in the body it can attack. A type of cell that plays a key roll in how HIV infects the body and causes AIDS is the CD4+ Helper T cells or CD4+ for short. CD4+ cells are cells in the immune system whose job is to recognize foreign antigens in the body and activate antibody-producing B-lymphocytes to help fight the infection.

When HIV enters the body though the blood stream, it begins what is referred to as the attachment phase. During the attachment phase, HIV binds itself to a CD4 receptor sites on a CD4 + cell. Once this initial binding takes place, the virus then beings to bind with near by chemokine coreceptors which then bind with glycoproteins. These chemokine coreceptors and glycoproteins bound to the virus make up what is called a viral enveloped peptide. The viral enveloped peptide then fuses itself to the CD4+ cell releasing the virus inside the cell. Once the virus is inside the cell, it then releases two strands of viral RNA that then begins the process of reverse transcriptase within the cell.

During reverse transcriptase, a mirror image of the single stranded viral RNA is produced and then fused together with its counterpart to make up double stranded viral DNA that can now infiltrate the nucleus of the infected CD4+ cell. Once the virus is inside the nucleus, it inserts itself into the infected CD4+ cells' DNA so that it can begin the replication process. Transcription then takes place, transforming the double stranded virally infected DNA into single stranded messenger RNA (mRNA), that now contain the blueprint for

the new viruses. The single stranded viral mRNA then pairs up with ribosomal RNA (rRNA) to create what is called a polyprotein chain. The polyprotein chain is then cut and separated into several single proteins that make up new viruses.

These newly formed viruses are then distributed throughout the bloodstream to attack other CD4+ cells by exiting its host CD4+ cell and killing it (Porth, 2007, p. 09-310). Often times, health care workers will see a small spike in the CD4+ count of someone who has recently been infected with HIV because the immune system automatically responds to the unknown infection by producing more CD4+ cells to help fight off the infection. However this automatic response by the immune system ironically helps the virus suppress the immune system quicker by creating more breeding grounds for the virus. Persons with a healthy immune system have a CD4+ count within the range of 500 to 1, 800 per cubic millimeter of blood. According to the CDC, AIDS is only diagnosed when someone has a CD4+ count that declines to less than 200 per cubic millimeter of blood or has contracted two or more opportunistic infections that only pose a threat to those with a compromised immune system.

(CDC, 2007). Interestingly enough, there are two different strands of HIV known today, HIV-1 and HIV-2. Both these genetically different forms of HIV share the same modes of transmission and are both associated with the same opportunistic infections. Where these strands begin to differ is in there developmental and geographical patterns of infection.

In persons infected with HIV-2, immunodeficiency has the tendency to develop at a slower and milder rate when compared with persons infected with HIV-1. Geographically, HIV-1 knows no boundaries and affects people world wide, whereas HIV-2 is predominantly only found within Western Africa or in persons who have been in West Africa . (CDC, 1998,) The Breakdown of Statistical Data Surrounding The HIV/AIDS Epidemic In 2007 there were approximately 4. 7 million adults living with HIV, 1. million of which were men. Though this demographic represents a substantial amount of the HIV cases in South Africa, HIV positive women make up more than double that number (UNAIDS/WHO Working Group, 2008,) due to physiological, educational, and cultural factors.

Physiologically, because women have a greater amount of mucosal surface area exposed during sexual activity they are more susceptible to picking up a sexual transmitted infection (STI) than men are. Young girls run the highest risk of acquiring an STI such as HIV because they have not fully matured yet (Holtz 2008, p. 6). Culturally, because women in South Africa are seen as socially subservient to men, they are often sexually abused.

According to the U. S. Department of State (2008), South Africa has the highest incidence of reported rape cases in the world. In 2005 there were a little over 55, 000 cases of reported in South Africa. (South African Police Service, 2005).

This number again only accounts for reported cases, it is estimated that for every case of rape reported in South Africa there are 36 more that go unreported (Meel, 2008). Despite cultural advancements, children in South

Africa are still victimized by rape due to the myth that having sex with a young virgin will cure AIDS. Children are not only being effected physically by rape in South Africa today, but are now beginning to show signs of psychological trauma. An article published in March of 2008 by The Guardian, a nationally and internally recognized news source from the United Kingdom, reported that South African schoolchildren are now playing games of " rape me rape me" and mimic robbers on the playgrounds. McGreal, 2008). This is just the tip of the iceberg According to the South Africa Human Rights Commission (SAHRC).

This psychological trauma has affected children in such a degree that school aged boys have started committing what they deem as " corrective rape" on lesbians with the mind set that it will make their victims heterosexual (South African Human Rights Commission 2008, p. 9). Though South Africa has struggled with an uncanny crime rate for many years, sexual abuse is not only limited to the streets, It often times manifests itself in the home. Because women are socially perceived as subordinate to men, they often times are unable to negotiate safe sex with their partners. It is not uncommon for husbands and boyfriends to force, sometimes beat, their wives and girlfriends if they refuse to comply with their wishes sexually. Due to financial reasons, many of these women stay in these abusive relationships and become infected though their mate who may have several other partners.

Those who decide to abandon their abusive relationships still have trouble escaping the clutches of HIV. Often times these women must resort to selling sex as a means of survival because their place in society does not allow

them many opportunities to gain much a prominent economic position (Holtz, 2008 p. 66). From an educational stand point, women in South Africa tend to be less educated in the subject of HIV prevention than men are.

In 2003, the South Africa Demographic and Health Survey (SADHS) administered by the Department of Health in South Africa indicated that when asked " what can a person do to avoid getting AIDS", only 71% of the women surveyed were said that using a condom during sex would reduce the risk of contracting HIV, as opposed the the 86% of men who were surveyed. Similarly, 82% of men and 75% of women said that limiting their sexual activity to one faithful uninfected partner would reduce their risk of becoming HIV positive. Only 76% of men and 68% of women in this survey communicated that practicing both these methods of safer sex would significantly reduce their risks. These percentages among men and women continue to drop among adolescents ages 15 to 19. Also, when comparing the responses of South Africans living in urban areas to those who live rural areas, the level of HIV prevention and awareness was lower among rural populations (Natioanl Department of Health, 2003). HIV among children is astoundingly common in South Africa.

This is directly related to the overwhelming numbers of HIV positive women within the country. The national prevalence of HIV in pregnant women was 29. 1% in 2006 (Natioanl Department of Health, 2008). Unfortunately many of these women did not and still do not have accesses to drugs that can prevent them from passing HIV onto their babies though birth.

HIV is also transmitted to infants though breast milk if a mother who is HIV positive. These two facts alone account for the highest risks of HIV among children (Holtz, 2008 p. 66). UNAIDS, estimated that in 2007 there were approximately 280, 000 children living with HIV in South Africa, only 32, 060 of which received antiretroviral therapy after being diagnosed (2008).

That leaves a little over 88% of the children under the age of 15 suffering from AIDS in South Africa untreated and left to die simply because they do not have accesses to care. Though there are thousands of children in South Africa infected with HIV, there are millions of children that have been orphaned due to AIDS. There was an estimated 1. 4 million children in South Africa who had lost one or both their parents to AIDS in 2007.

(UNAIDS/WHO Working Group, 2008). These Orphans are often forced to drop out of school so that they can find some means of work to provide for their younger brothers and sisters. Many of these orphans have no place to live and are forced to become part of a subculture that is referred to as the “ lost generation of street children” (Holtz, 2008 p. 67). With no means support or protection, these orphans often times have no other option but to begin selling themselves for sex in order to survive. Many of these children are at a very high risk of not only acquiring HIV, but spreading it to others as well.

These children are also at higher risk of becoming involved with drugs and crime as a means of survival, which in turn also shares a close relationship to HIV. Though some orphans may have the option of living with other family members or other adults this douse not make them any less vulnerable.

They may also be exploited or abused by those who are supposed to be caring for them. There are many cases in which grandparents take care of 10 to 20 grandchildren with no means of income (Holtz, 2008 p.

67) who may too be forced into selling one or two children for sex in-order to take care of the rest of the family. To say the least, the situation in which many of theses South Africans are forced to live is in no way conducive to healthy living. Not until these conditions begin to improve will there be any headway made in the fight against HIV in South Africa. The Historical Context of AIDS in South Africa There are many other reasons why South Africa is in the predicament they are in.

One major reason is the government’s response to HIV and AIDS, or the lack there of, over the years. Though South Africa gained its independence from Britain in 1934, it was still strictly segregated and ruled by the white minority until 1994 (South Africa. info. n. d.

a). Under this discriminatory rule, the white minority in power set up what is well know as the apartheid. The Apartheid was a system of racial segregation that prohibited marriages between different ethnic groups, and forced blacks and non-whites into poor overcrowded living conditions for more than 40 years. In 1982 the first case of AIDS was recoded and diagnosed in South Africa.

By 1985 HIV infections began to spread past boundaries of gay men and the poor so the government began to take action by setting up the AIDS Advisory Group. By 1990 the Apartheid had been abolished and future president of South Africa Nelson Mandela was freed from his life time

sentence of imprisonment for being apart of the anit-apartheid movement. During this time there was a lot of attention given to the quickly progressing diseases and the first annual national antenatal survey was conducted and found that . 7% of the pregnant women in South Africa were HIV positive. (National Department of Health, 2008). From 1991 to 1993 the number of heterosexually HIV infections raised to higher the number of homosexual HIV infections.

This in-turn fueled in the development of several AIDS information and counseling centers in South Africa. The National AIDS Convention of South Africa (NACOSA) and the National AIDS Helpline was established around this time. In 1993, right when the AIDS crisis was tuning into an epidemic, the government began to refocus its attention back onto political issues surrounding the final transition way from the apartheid. This distraction caused South Africa to loose a significant amount of ground in the fight against HIV and AIDS.

That year the number of AIDS cases doubled along with the HIV prevalence rate among pregnant women (UNAIDS/WHO Working Group, 2004). From 1994 to 2001, the government kept the ever growing HIV epidemic on the back burner while it focused on its political issues. In 2002 the HIV prevalence rate among pregnant women had reached an epic high of 26. 5%.

That same year the South African High Court ordered the government to make nevirapine available for pregnant women in-order to help prevent the transmission of HIV during child birth. At this time antiretoviral treatment for

those infected with HIV was not publicly available though many international drug companies offered South Africa cheep accesses to them (Ruters News Media, 2001). Eventually in 2003 the government approved to make antiretroviral treatment available to the public. Though this was the first step in the right direction, unfortunately it was too little way too late. At that time the Minister of Health, Manto Tshabalala-Msimang, and President Thabo Mbeki both denied the link between the HIV and AIDS and supported unconventional treatments like eating african potatoes and beet-roots instead of taking antiretroviral medication. Because of their proclaimed denial, antiretrovirals were given out very sparingly only upon the request of those who had accesses to a facility that supplied them.

By 2005 there was at least one AIDS care and treatment facility that had antiretrovirals in all 53 of districts of South Africa (Miles, 2005). 2006 marked a turning point in the government's response to HIV and AIDS. That year the South African government came to realized their negligence toward what the considered to be" alternative treatment" and pledged to continue to improve access to antiretroviral drugs to all those who wanted it. The Stigma and Discrimination Associated with HIV/AIDS in South Africa Another factor that plays into the AIDS crisis in South Africa is that of stigma and discrimination.

In the early 80's HIV was thought worldwide to be a homosexual, white male's disease, but by the early 90's the number of HIV infections among heterosexuals well surpassed the number of homosexual infections. From that time forward many people, including government officials, deemed the disease as one that only affected the poor. These two early generalizations of HIV and AIDS have cost South Africa tremendously in the long run.

Because the disease was thought to be spread only amongst “ undesirable” groups in society it created an overshadowing stigma of shame and disgrace that still is attached to HIV and AIDS today. In 2005, a case study done in South Africa concerning the sociological factors surrounding HIV and AIDS found that there were many people who were not open about their HIV infection with their family for fear of being labeled as a disappointment.

For example: one man in the study shared that his brother, two weeks before his death, had wrote his family a letter telling them he had AIDS rather than telling them in person. At the funeral when the man began to tell mourners that his brother had died of AIDS his family began to reprehend him for “ spoiling his brother’s name”. The same study goes on to revile that many South African youths would not attend HIV prevention meetings in there own cites for fear of being seen by their parents and punished accordingly. In a similar fashion, ministers threatened to demote the position of any person in the church who attended any type of HIV related workshop.

(Campbell, Foulis, Maimane, & Sibiya, 2005. 809-810). It is these types of social barriers that significantly prevent South Africa from making any type of progress in the fight against HIV and AIDS. If education and awareness concerning the prevention of HIV is continually suppressed though social stigmas and discrimination, there will be another upward trend in the AIDS epidemic because infections will continue to multiply while AIDS related deaths decrease even with the help of antiretroviral therapy. The Health Care Systems Represented in South Africa An access to health care is a complex problem for most South African citizens. The vast majority of people

in South Africa are not receiving adequate healthcare due to geographical, financial, and sociological barriers as discussed earlier.

Again, most of this struggle can be traced back to its deep roots in South African history. At this present point in time there are two separate sectors that make made up South Africa’s health care system— The public sector and the private sector. Right now public healthcare is free only to pregnant women and children under the age of six; others pay on a means-tested, fee-for-service basis (Basset, 2004). For the most part, this health care accounts for only the most basic primary health care needs while more specialized services are only offered though the private sector for those who can afford it. According to the National Department Of Health, in 2007 a little over 8% of South Africa’s gross national product (GNP) is spent on the national health each year.

This includes both the public and private sectors. On average 60% of these funds are spent in the private sector, which in turn only provides health care to approximately 20% of South Africa’s population. The public sector on the other hand is only receiving 40% of the total expenditure and is providing health care of 80% of the population (National Department of Health, 2007). In correlation with theses numbers, as the quality of health care provided by the public sector decreases the number of privet clinics and hospitals increases. There are now over 200 high quality private hospitals within South Africa today (South Africa. info n.

d. b). Many foreigners take advantage of the country’s weak currency and visit South Africa to receive high quality health care for a cheaper price.

While the quality of health care in the private hospitals is upheld by high medical standards, standards mong the public sector vary by location.

Larger teaching hospitals in urban areas often offer decent services depending on the illness, but many rural area public hospitals are run-down, way understaffed, with sub-par equipment and increased shortage of basic medications. As can be expected, due to lack of resources and personal incentives the doctor to patent ratio around the rule areas of the Eastern Cape of South Africa is around 1: 30, 000 as compared to the significantly lower ratio of 1: 650 in more populated areas of the Western Cape. Bassett, 2004). Though government officials are now beginning to understand the scope of these problems, there are many people who are suffering now simply because they do not have accesses to care. Yes, they may have access to low end second hand medical resources, but " access" to a health service that is of insufficient quality is not true access.

The Testing, Treatment and Prevention of HIV/AIDS in South Africa HIV prevention campaigns in South Africa are undoubtedly abundant, but very difficult to measure in terms of effectiveness. Projects like " Soul City", a very popular television soap opera that uses its platform to educate the public about HIV and AIDS, and the Khomanani campaign that encourages young adults in their 20's to know their own and their partners HIV status are just a few examples of South Africa's attempt at educating its citizens. These programs and campaigns tend to focus more on the primes of knowledge of HIV and not prevention. Despite these nobel efforts, when looking at the data over the years these programs have been in place, not much has changed statistically. Again prevention of HIV must be properly advocated along with

adequate treatment if there is any head way to be made. Due to the of the governments efforts, HIV testing in South Africa is become a priority.

Over the past few years South Africa has significantly increased the number of free voluntary counseling and testing centers (VCT). As of December of 2006, there are 4, 172 VCT’s up and operating across the country in all nine provinces. Between April 2005 and March 2006, approximately 1. 7 million people visited these VCT’s to receive pre-HIV testing counseling.

Out of these 1. 7 million nearly 80% went through with the actual blood test (National Department of Health, 2006). These test facilities have most assuredly allowed many South Africans the ability to find out their HIV status, but then what? Undoubtedly, South Africa’s biggest obstacles in their battle against HIV and AIDS is that of treatment. Despite the significant increase in AIDS treatment facilities, In 2008 UNAIDS and WHO estimated that there were 1, 700, 000 people in South Africa that were in need of antiretroviral treatment (June 2008).

The reasoning behind this completely avoidable statistic is that antiretrovirals have only been allowed in the country since 2003 due solely to the pressure from activist world wide. Although these drugs have been easily assessable to the in country for years the government has been very slow to distribute them to their citizens. This slow distribution is linked the governments past unconventional views about HIV and AIDS as discussed earlier. For years the government promoted proper nutrition as a means of treatment rather than antiretroviral therapy.

As of October 14, 2008, newly appointed Minister of Health, Barbara Hogan, finally put an end to this irresponsible nonsense by declaring that they now " know that HIV causes AIDS" and that South Africa needs to do much more to improve access to anti-AIDS medication (Nullis, 2008). The Future for AIDS in South Africa As for the future of South Africa, time will only tell. There have been many " National Strategic Plans" (NSP) put into place over the past 10 years that have not done much but talk about healthcare reform. The most recent NSP published in march of 2007 hopes to reduce the rate of HIV infections by 50% by 2011, by focusing on overcoming healthcare inequalities and the restoration of human rights which were denied under the apartheid.

(NSP 2007-2011). Whether or not this plan will work depends solely upon the governments ability to follow through with its plans. Now that the government has admitted its past mistakes and has truly become adamant about stopping the progression of HIV and AIDS within their country, South Africa's future may be a brighter one with healthier citizens. References Bassett, H. September 2004), Healthcare in South Africa, Retrieved October 9, 2008 from http://www. medhunters.

com/articles/healthcareInSouthAfrica. html Campbell, C. , Foulis, C. A. , Maimane, S. , Sibiya Z.

(2005). " I Have an Evil Child at My House": Stigma and HIV/AIDS Management in a South African Community. American Journal of Public Health 95 (5). Retrieved October 8, 2008 from ProQuest Nursing and Allied

Health Source database. Centers for Disease Control and Prevention, (October 1998) Human Immunodeficiency Virus Type 2.

Retrieved September 28, 2008, from http://www. cdc. gov/hiv/resources/Factsheets/hiv2. tm Centers for Disease Control and Prevention (June 21, 2007) Living with HIV/AIDS.

Retrieved September 28, 2008 from http://www. cdc. gov/hiv/resources/brochures/livingwithhiv. htm#q1 Global Health Facts Customized Data Sheet[Data File]. Retrieved from http://www.

globalhealthfacts. org/factsheets_custom3. jsp? c= 1+197= 0= 1= 7= 8= 59= 69= 79= 80= 81= 8= 87= 88= 89= 90= 91 Holtz, Carol. (ed.

). (2008). Global Health Care: Issues and Policies. Subdury, Massachusetts: Jones and Bartlett Publishers.

p. 66-68 McGreal, Chris. (March 13, 2008). Traumatized South African children play ‘ rape me’ games.

The Guardian. Retrieved on October 2, 2008 from http://www. guardian. co. uk/world/2008/mar/13/southafrica. internationalcrime Meel, BL.

(2008). Trends of Rape in Mthatha Area, Eastern Cape, South Africa. Journal of the South African Academy of Family Practice/Primary Care, 50 (1), 69-69c, Retrieved) October 11, 2008 from http://www. safpj. co. za/index.

php/safpj/article/view/795/991 Miles, Nick. (April 26, 2005). South Africa’s broken HIV promises. BBC News, Cape Town. Retrieved October 14, 2008 from http://news.

bbc. co. uk/2/hi/africa/4482007. stm National Department of Health, (2003).

The South African Demographic and Health Survey (SADHS) 2003, Retrieved October 1, 2008 from http://www. doh. gov. za/facts/sadhs2003/part2.

pdf National Department of Health, (2006). More people test for HIV: Issued by National Ministry of Health. Retrieved October 12, 2008 from www. doh. gov.

za/docs/pr/2006/pr1128. html National Department of Health (March 14, 2007) HIV and AIDS and STI Strategic Plan for South Africa, 2007-2011. Retrieved on October 17 from http://www. doh. gov.

za/docs/misc/stratplan-f. html National Department of Health, (April 2007), A Policy on Quality in Health Care For South Africa,