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## Orphans of the Disease: AIDS Orphans and Their HIV Risk

Early in the morning, Maggie wakes up to start her day of tending her neighbor's field in exchange for a meal. On some occasions, this meal never comes and she remains hungry. At the end of each day, Maggie, worn out, returns to her hut for the night, but with no bed to sleep on. In the event that rain showers her environment, the holes in her hut render her dwelling unsuitable for sleep, so she sits huddled under a tarp until dawn breaks once again. The days drag on like this, and what makes her future more dismal is that Maggie has a 17% chance of acquiring HIV by the time she turns 18 (Birdthistle et al. "From Affected" 761). Maggie is only nine years old and she has spent the majority of her life coping with the loss of both of her parents to AIDS. AIDS kills 1.4 million people per year in sub-Saharan Africa and a great deal of those individuals leave their children alone in a harsh environment (UNAIDS). Over 14 million children in sub-Saharan Africa are forced to adjust to the hardships of losing their parents and face a similar future to Maggie's (UNAIDS). The daily reality that these children face is saddening, but even more so since they have a highly increased risk of contracting the same disease that claimed their parents' lives.

Leading research shows that orphaned children are at a much higher risk for becoming infected with HIV than their non-orphaned peers. Isolde Birdthistle, a professor at the University of London currently researching this orphan crisis has found that orphans are at a 5% greater chance of contracting HIV than children who are lucky enough to have both parents (Birdthistle

et al., "From Affected" 761). Although an extra 5% risk may seem insignificant, out of 14 million children, that extra 5% equates to 700,000 additional youth infected with HIV annually. Sub-Saharan Africa is of particular importance in the crisis because it contains 72% of all AIDS related deaths and thus is home to the majority of AIDS orphans (UNAIDS). With the number of AIDS orphans tripling in the years from 1995 to 2005, the crisis is exponentially growing and UNAIDS expects there to be over 25 million AIDS orphans by the end of 2010. This rise in AIDS orphans is not only significant because of the pain and suffering that these children experience, but because they will contribute a rising number of HIV and AIDS cases to the already growing epidemic. Through my research, I have concluded that female orphans in sub-Saharan Africa experience their sexual debut at a younger age than non-orphans do, which after biological and behavioral consequences, leads to their higher risk for HIV. I have also determined that this early onset of sexual activity is a direct result of the economic, social, and psychological effects that spawn from the loss of a parent to AIDS.

# HIV and AIDS, Fundamental Information

Some background information on HIV and AIDS is necessary in order to understand its relationship to the orphan and AIDS cycle. According to UNAIDS, HIV is transmitted through: unprotected penetrative (vaginal, oral, or anal) sex with an infected person, blood transfusion with contaminated blood, by using contaminated sharp instruments such as needles, and from an infected mother to her child during pregnancy, childbirth, and breastfeeding. Although it is not the riskiest means of infection, sex with an infected person contributes to most new infections because it is a highly common act. After being infected with HIV, a person is almost immediately contagious, even without the visible symptoms which usually emerge five to10 years later (UNAIDS). With this long latency period, an individual can contract and transmit the

virus to other individuals without even knowing they carry the infection. When treatment is unavailable, as is the case for most orphans, in 10-15 years the HIV infection will progress to the debilitating AIDS disease, and claim a life six to 19 months later (UNAIDS). Additionally, females are biologically more susceptible to being infected with the virus than males because they are more exposed to their partner's bodily fluids (Pettifor 1435). These details regarding the HIV virus are important because female orphans mainly become infected and spread the virus through sexual means then pass away and leave their children to face that same future and therefore create a cycle between orphans and the disease.

The nature of HIV/AIDS directly contributes to the cycle between orphans and the disease. The long latency period increases the likelihood that orphans will be alive long enough to bear children while they unknowingly carry the virus. These orphans, many of which become young mothers, will later develop AIDS and soon die from the disease. They will then leave behind a new generation of orphans who must face their same bleak future. With the number of AIDS orphans tripling in a period of ten years, the cycle will continue and intensify in time (UNAIDS). Research surrounding this growing crisis has attempted to explain connection between orphans and the disease to explain why orphans are at such a greater risk for infection. The main link between orphans and the disease is their early age of sexual debut and how it contributes to their HIV risk.

One notable increased risk factor among orphans to contract HIV is through vertical transmission, the infection path from mother to child during childbirth and breast-feeding (Birdthistle et al., "Is Education" 1817). I will not discuss this method of infection though, because it does not account for a significant percentage of HIV cases in orphans. Additionally, it

does not contribute to the cycle between orphans and HIV because most orphans infected at birth do not live long enough to bear and later orphan children who will continue the cycle.

Although all orphans' HIV knowledge, economic status, and living situations vary greatly throughout sub-Saharan Africa, one finding remains constant: female orphans engage in their first sexual experience at a younger age than non-orphans. Numerous studies over the past two decades have captured this statistic among orphans of different backgrounds. As far back as 1992, Kapinga, Hunter, and Nachtigal saw patterns of a relatively low age of sexual debut among orphaned children in Africa (376). More recently, in her 2006 study, Tonya Thurman et al. found that "orphans reported younger age of sexual intercourse with 23% of orphans having sex by age 13 or younger compared to 15% of non-orphans" (627). Through her analysis of female orphans in South Africa, Thurman also discovered that "orphans were nearly one and a half times more likely to have engaged in sex" (627). These findings are significant when paired with the fact that, "females who [begin] to have sex when they [are] 12 to 16 [are] more likely to be infected with HIV" than those who initiate their sexual activity at a later age (Hallett et al. 5). This indicates that the growing population of female orphans in sub-Saharan Africa's tendency to engage in sexual relations at a relatively young age is the main contributor to their increased risk for HIV infection.

### Why Does Early Debut Lead to Increased HIV Risk?

The first reason that females who engage in sexual activity at a young age are very susceptible to HIV contraction is because their reproductive organs have underdeveloped defense mechanisms against infections. In a study by Kaestle et al., researchers discovered that "a young age at first sexual intercourse was consistently associated with higher STI levels" than a later age of debut (774). These researchers also found that the prevalence of STI infection decreased as

age of first sexual encounter increased (775). They assert that these results confirm that risk for infection is due to a biological deficiency in the protective mechanisms in young females' genital tracts (774). Thus, the risk factors associating early age of sexual debut are with HIV susceptibility are both biological, and behavioral.

One behavioral pattern seen amongst female orphans related to an early onset of sexual activity that increases HIV risk, is a higher number of sexual partners than non-orphaned females. In Hallett et al.'s research, he concludes that orphans who initiate sex at a young age have a "greater lifetime number of sexual partners than those whose first sexual experience occurs later" (1). This finding is also mimicked in the 2001 study by O'Donnell, O'Donnell, and Stueve, in which researchers assert that an early age of sexual onset is related to "a greater number of sexual partners, as well as more frequent recent intercourse" (273). As the most common means of HIV transmission is through sexual relations, any individual who is exposed to numerous sexual partners is more likely to come into contact with an individual who carries the virus. Therefore, since the female orphans in sub-Saharan Africa are exposed to a greater number of sexual partners, they are also at a higher risk of getting HIV than non-orphan females in the same region.

Because these female orphans begin their sexually active life at an early age, they tend to share a large age difference between themselves and their male partners, which also contributes to their increased risk of HIV. Through her research, Thurman et al. discovered that those orphans who initiated their sexual activity at an early age were likely to have much older partners (631). Many of her study respondents report having their first "sexual intercourse with a partner who was four or more years older than themselves, most commonly a male age 18 and older" (631). This age difference is significant because those older partners are more likely to have had

more sexual partners in their years and thus have had an increased exposure to possible HIV carriers. They are then more likely to carry HIV and pass the disease on to their younger partners. Therefore, because they tend to have sex with older individuals, these young female orphans expose themselves to more potential HIV carriers. The noted age difference also creates a power hierarchy between the older male and the younger female. Guma and Maro assert that because of this power stratification, "the likelihood of the woman being able to suggest condom use is lower" (139). Thus, orphaned girls in sub-Saharan Africa have a greater chance of being exposed to HIV carriers, often with no protection, and are at a greater risk of contracting the virus than non-orphans.

Why Are Orphans at Risk for Early Sexual Debut?

While it is obvious that statistics from many studies show that female orphans in sub-Saharan Africa do indeed engage in sexual activity earlier than their non-orphaned peers, the reasons for this pattern have required much more research, analysis, and understanding of the effects of orphanhood. Although every orphan has a different story, the economic, social, and psychological effects of losing a parent are relatively constant and can help understand the reasons why female orphans are so likely to engage in early sexual behavior. These direct effects of losing one or both parents can be traced as the direct cause of the orphans' likelihood of early sexual debut, and therefore are at the root of their increased risk for HIV and for continuing the cycle of orphanhood and the AIDS epidemic.

Once a family has experienced an AIDS death, their monetary resources are often depleted, and in most cases the orphaned child must compensate by acquiring their own source of income. According to research by Arnab et al, only "0.6 of the orphans receive monetary help" and since they lack professional training, they must drop out of school and resort to

laborious work to make ends meet (227). These young orphans are removed from the company of their peers in the school environment and tossed into the adult world where sexual activity is more common. In Maro et al.'s research, she found that "in-school children reported stronger subjective norms and more positive attitudes to having an exclusive sexual relationship than the ... out-of-school children" (32). She suggests that this is because peer groups strongly influence a child's perspectives on sexual normalcy and since orphans are socialized with an older peer group in the working force, they are influenced to view sex as a more casual occurrence and treat it as such. Therefore, because many orphans drop out of school in order to work, their views on sex may change and they will initiate their sexual activity at a young age.

Another reason that female orphans' increased economic disparity after their parents' death leads to their earlier sexual initiation and higher HIV risk, is that they may look for economic help through what researchers call "transactional sex". Transactional sex is the exchange of sex for money, food, or some other gift (Thurman et al. 631). In the quest to help support their siblings and family, 8% of orphaned females (compared to 3% of non-orphans) turn to transactional sex as their form of income (Thurman et al. 631). Although 8% may seem like a small percentage, there are so many female orphans that this percentage amounts to over 500,000 children who rely on selling their bodies for survival. Researchers Guma and Henda reassert that this transactional sex, or sex with "sugar daddies" as they call them, is not due to excessive greediness, but is a technique to cushion the effects of poverty (135). By making up for lost income after the loss of a parent through paid sex, young orphans have their sexual debut at an early age and increase their chances of getting HIV.

Orphans also resort to another form of transactional sex in order to cope with the lack of protection and affection that their parents previously gifted them. These sexual relations are the

orphans' attempts to receive emotional, not monetary, value from their partners. UNAIDS asserts that orphans engage in these sexual partnerships as compensation for their loss of parental love. Researcher Michael Resnick explains that after losing their parental love, orphans have little feelings of "family connectedness" (830) and attempt to regain that sense of belonging through sexually attaching themselves to older men. All children need some sense of belonging, and orphans must search for this feeling in order to defer loneliness and depression. The loss in parental affection after their parents' death can cause a female to have an early sexual debut and a coinciding higher HIV risk.

Another reason that researchers claim orphans engage in sexual relations at such an early age, and thus have an increased risk for HIV infection, is their lack of physical supervision from their parents. This lower level of monitoring allows orphans to engage in behaviors that their parents would have disapproved of. Thurman et al. adds, "the lack of adult control over their behavior... the lack of a parental role model and loss of love and affection from parents may also influence sexual behavior" (633). While rebellion plays a part in orphans' risky sexual behavior, sometimes pure vulnerability and lack of physical protection molds their sexual encounters. Older men may seduce the young orphans because since they don't have parents to protect them, they are "easy targets for sexual exploitation" (Guma and Henda 144). This lack of parental connection undoubtedly plays a role in orphans' early age of first sexual encounter.

### Does HIV Education Play A Part?

While the fact that female orphans in sub-Saharan Africa have a greater risk of contracting HIV is indisputable, the role of education in that risk has been an area of question. Most prominent research provides conclusive evidence that the effects of parental death leads to an early sexual debut, and consequently a higher risk for HIV, but some researchers disagree. A

number of organizations and researchers claim that an insufficient amount of HIV education in schools is the main reason that AIDS orphans face a higher probability of contracting AIDS. They argue that by teaching accurate and thorough HIV education in schools, the orphans will have the knowledge to make safer sexual decisions and lessen their risk of getting the virus.

One organization in particular, the World Bank, has based its loan policy off the notion that funding more HIV education will efficiently lessen orphans' HIV risk. One study they conducted concluded that "once the ways to avoid infection became better known, educated people were more likely to adopt safer behavior" (5). They then assert that this was a causal relationship and can be extended to the orphan population as well and education will "ensure the future of affected children...after their parents die" (40). Through their research, the World Bank claims that the incorporation of HIV education in primary schools in Africa has reduced HIV risk across the country and therefore should be increased to fight the orphan crisis (40). Based off this theory, the World Bank has decided to spend \$10 million dollars to fund in-school HIV/AIDS education even though this solution will not target the proven causes for the orphans' increased HIV risk (40).

Blaming insufficient HIV education as the cause for orphans' increased HIV vulnerability is inaccurate because orphans and non-orphans know the same amount about HIV, yet their unequal risk levels still exist. The World Bank's claim that "education itself protects against HIV" (4) is erroneous because "orphans' odds of sexual risk [remain] high even when controlled for schooling" (Birdthistle et al. "Is Education" 1817). Maro et al. states that "there [are] no significant differences on HIV knowledge" between orphans and non-orphans, yet orphans still have a higher risk of engaging in sexually risky behaviors (30). Therefore, education plays little part in female orphans' heightened susceptibility for HIV. Thus, as Maro et

al. states, that the World Bank's "policy of basing HIV/acquired immunodeficiency syndrome (AIDS) education within the schools of Tanzania [a country in sub-Saharan Africa ] has not been as effective as desired" (23).

While spreading knowledge of HIV is necessary to end the AIDS epidemic as a whole, there are fundamental differences between orphans and non-orphans that make other solutions more effective. Orphaned children must deal with the consequences of losing their parents, and often times disregard risky sexual behavior because their economic and psychological well-being is more important. With funds focused purely on education programs, the main causes of female orphans' in sub-Saharan Africa will not be directly addressed and, therefore, their risk will not be directly reduced. Instead, organizations and policy makers must focus on the economic, social, and psychological effects of losing a parent in order to prevent orphans from having sex at an early age.

The most powerful solution for breaking the cycle between orphans and HIV is to ease the psychological and economic effects of losing a parent through pseudo-adoption. Researcher Constance Nyamukapa suggests that the most effective way of doing this would be to have extended family members or community members take on the parental role for these orphans (140). Because she found that higher levels of psychological distress was associated with an early onset of sexual intercourse, she suggests that lessening this distress should also increase orphans age of first sex (138). Once an orphan develops a relationship to a close adult family or community member, they will feel less distress, and regain their sense of belonging and protection (140). Also with an adult parent-like companion, the orphans will have a better economic status and not need to resort to sex to support themselves. She concludes that programs

to "reduce psychosocial distress among orphaned and vulnerable children could contribute to reducing the spread of HIV infection" (140).

Ending the cycle between orphans and HIV is of utmost importance for both humanitarian reasons and global motives. The alarming daily life that most orphans trudge through after the death of their parents is heart wrenching, and therefore must be helped. In addition, the severe consequences that this cycle places on the AIDS epidemic as a whole calls for worldwide concern. With any heart, we must end the suffering that these orphans live in and prevent the epidemic from causing increasing death tolls and rising numbers of orphans. Therefore, we must call on research to persuade policy-makers to solve the true reasons that female orphans in sub-Saharan Africa are at such a great risk for getting the same disease that killed their parents. Only with this acknowledgement of current research, can we hope to break the cycle between orphans and the disease.

#### Works Cited

- Arnab, Raghunath, and Phillip Serumaga-Zake. "Orphans and Vulnerable Children in Botswana: The Impact of HIV/AIDS." <u>Vulnerable Children and Youth Studies 1.3</u> (2006):221-29.
- Birdthistle, Isolde, Sian Floyd, Auxillia Machingura, Netsai Mudziwapasi, Simon Gregson and Judith Glynna. "Is Education the Link Between Orphanhood and HIV/HSV-2 Risk
  Among Female Adolescents in Urban Zimbabwe?" <u>Social science & medicine 68.10</u> (2009):1810-1818.
- Birdthistle, Isolde, Sian Floyd, Auxillia Machingura, Netsai Mudziwapasi, Simon Gregson and Judith Glynna. "From Affected to Infected? Orphanhood and HIV Risk among Female Adolescents in Urban Zimbabwe." <u>AIDS 22.6</u> (2008):759-66.
- Guma Mithobeli and Nomvo Henda. "The Sexual Abuse Of Young Children In Southern Africa .
  Cape Town." *The Socio-Cultural Context of Child Abuse: The Betrayal of Trust*. Ed. L.
  Richter, A. Dawes, and C. Higson-Smith. Cape Town, South Africa: Human Science
  Research Council Press, 2004. 95-109. Print.
- Hallett, Timothy, James Lewis, Ben Lopman, Constance Nyamukapa, Phyllis Mushati, Mainford
  Wambe, Geoff Garnett, and Simon Gregson. "Age at First Sex and HIV Infection in
  Rural Zimbabwe." <u>Studies in Family Planning 38.1</u> (2007):1-10.
- Kaestle, Christine, Carolyn Halpern, William Miller, and Carol Ford. "Young Age at First Sexual Intercourse and Sexually Transmitted Infections in Adolescents and Young Adults." <u>American Journal of Epidemiology 161.8</u> (2005): 774-80.
- Kapinga, S., D. Hunter, and G. Nachtigal. "Reproductive Knowledge and Contraceptives Awareness among Secondary School in Bagamoyo and Dar es Salaaam, Tanzania." <u>Central African Journal of Medicine 38 (1992)</u>: 375–80.

- Maro, Cyprian, Glyn Roberts, and Marit Sorensen. "HIV/AIDS Education in Tanzania: The Experience of at-Risk Children in Poorer Communities." <u>Vulnerable Children and Youth Studies 4.1 (2009)</u>:23-36.
- Nyamukapa, Constance, Simon Gregson, Ben Lopman, Suzue Saito, Helen Watts, Roeland Monasch, and Matthew Jukes. "HIV-Associated Orphanhood and Children's Psychological Distress: Theoretical Framework Tested with Data from Zimbabwe."
   <u>American Journal of Public Health 98.1 (2007)</u>:133-141.
- O'Donnell, Lydia, Carl O'Donnell, and Ann Stueve. "Early Sexual Initiation and Subsequent Sex-Related Risks among Urban Minority Youth: The Reach for Health Study." <u>Family</u> <u>Planning Perspectives 33.6</u> (2001): 268-75.
- Pettifor, Audrey, Ariane van der Straten, Megan Dunbar, Stephen Shiboski, and Nancy Padian.
   "Early Age of First Sex: A Risk Factor for HIV Infection among Women in Zimbabwe."
   <u>AIDS 18.10</u> (2004): 1435-42.
- Resnick, Michael, Peter Bearman, Robert Blum, Karl Bauman, Kathleen Harris, and Jo Jones. "Protecting Adolescents From Harm: Findings From the National Longitudinal Study on Adolescent Health" Journal of the American Medical Association 278.10 (1997): 823-32.
- Thurman, Tonya, Lisanne Brown, Linda Richter, Pranitha Maharaj, and Robert Magnani.
  "Sexual Risk Behavior among South African Adolescents: Is Orphan Status a Factor?"
  <u>AIDS and Behavior 10.6</u> (2006):627-35.

UNAIDS. Joint United Nations Programme on HIV/AIDS. Web. 20 January 2010.

World Bank. Education and HIV/AIDS: A Window of Hope. Washington DC: World Bank Publications, 2002. Print.