Mother-to-Child Transmission of HIV/AIDS in Low-Resource States

Introduction

The pandemic of HIV/AIDS is one that has shocked and affected millions of individuals since its inception and although the global community has taken steps to minimize the spread of the HIV mother-to child transmission (MTCT) is still a large issue. Even though HIV/AIDS is indiscriminate to who it infects, the disease is felt far more by the poorest and most disenfranchised. This great divide in who contracts HIV/AIDS and who is able to access treatment suggests deeply rooted structural violence and the inability of millions to recieve aid. A tragic component of this illness is continual MTCT of HIV since studies have shown that bottle-feeding, antiretroviral drug treatments, and prevention of HIV in mothers all greatly reduce the spread of HIV (De Cock et. al, 2000: 1176, Fowler et. al, 1999: 782, Stephenson 1999: 625). Although programs have been promoted by WHO and UNICEF in hopes of recreating such studies the rates of MTCT continue to be astronomical (Christian Aid 2001: 2). In order make a substantial change in MTCT rates not only must policy and practice become more aligned but the reasons for such disparity in who is affected by HIV/AIDs and who accesses care must be understood. Women's health must not only become more valued but initiatives to lower infection rates must be culturally understood and structural violence minimized.

Literature Review and Background

Magnitude of HIV/AIDS and Mother-to-Child Transmission of HIV/AIDS

HIV/AIDS is currently an epidemic sweeping through the African continent that carries with it dramatic social, economic, and political repercussions that will sound for

decades if the international community fails to commit to change. Although this pandemic has struck the global community the backlash and force of the virus has not been evenly spread across all states. It is stated, that in 2001, of the 36.1 million people living with HIV/AIDS over 95% of these individuals live in the developing world (Christian Aid 2001: 2). Even though Sub-Sahara Africa contains only about one tenth of the world's populations it already holds approximately 25.3 million people with this disease and numbers are only growing (Christian Aid 2001: 2). Currently Africa sees nine out of ten cases of new HIV infections and more than 80% of AIDS death (Christian Aid 2001: 2). These staggering figures represent not only the devastation of a continent but the immense structural violence that is associated with the disease. The danger associated with HIV/AIDS lies not only in the fact that 90% of those who have the disease are unaware but also the reality that the virus unevenly assaults those living in low-resource states and who do not have the means to access care (Waxman et. al., 2007: 43). This disparity in who becomes infected and who is able to attain treatment is less hinged on medical conditions but rather on more uncontrollable issues: the type of society in which an individual resides, the availability of treatment and his or her socioeconomic class. The greatest tragedy of HIV/AIDS is not just the number of individuals dying in mass but the fact that the global community has the means to prevent the spread and alleviate some of the symptoms of illness and is failing to do so.

Mother-to child transmission (MTCT) of HIV/AIDS is one such devastating component of the pandemic that has been allowed to spread through structural violence. Each year, approximately 590,000 infants contract HIV through MTCT even though recent laboratory studies have shown that short-course antiretroviral regimens have the

capacity to significantly reduce perinatal HIV transmission (De Cock et. al, 2000: 1175). Currently, there are numerous urban cities in eastern and southern Africa in which over 25% of the expecting-female population is infected with HIV/AIDS (De Cock et. al, 2000: 1176). Women in developing countries are not becoming infected with HIV/AIDS in greater number due to biological differences but because their health and risk of transmission is mattered less. The magnitude of such transmission is devastating and significantly detracts from the United Nations (UN) millennium goals for reduced infant and maternal morality as well as initiatives to lower contraction and transmission rates HIV/AIDS. The astounding numbers of transmission also suggests that there exists a discrepancy between policy and practice even though policymakers and international aid organizations have created objectives and outlines to make notable steps in decreasing MTCT.

Limitations Surrounding Implementation and Further Research

One factor that severely limits initiatives which hope to decrease MTCT is complexity of transmission. Diverse approaches are needed to stifle the spread of HIV to infants since the communication of the HIV virus can occur both in the intrauterine or intrapartum period, or postnatally through breast milk (De Cock et. al, 2001: 1776). Researchers have found that, not including breastfeeding, 70% of infant HIV contraction occurs during labor and delivery while the remaining 30% occurs in utero (De Cock et. al 2001: 1776). Although scientists argue about role of breastfeeding and HIV transfer rates there exists a general sentiment this contributes to about a third to one half of all infant transmission (De Cock et. al 2001: 1776). What this means in practice is that MTCT must be combated on multiple stages of pregnancy and birth. Public health officials and

HIV/AIDS interventions but be multifaceted since transmission can occur during pregnancy, during labor, and post delivery.

Researchers have been combating MTCT by using alternate forms of breast milk, cesarean sections, and by prescribing short-courses of zidovudine from 36 weeks' gestation through labor in many more-developed countries with relative success (Mansergh et.al, 1998: 30). For example, results from trials conducted in Thailand and the Center for Disease Control (CDC) in the United States suggest that such short-courses often decrease chances of HIV transmission by half; while cesarean sections are also thought to significantly lower transference of the epidemic (Mansergh et.al, 1998: 30). The CDC estimates that the implementation of short-course drugs would cost a mere $8.50 US per birth and in return would spare a generation of individuals from a possibly terminal condition (Mansergh et al, 1998: 30). However, due to the often discriminating nature of HIV/AIDS, in which individuals and states of lower economic status are infected disproportionately, without the support of international aid organizations many lesser developed states simply do not have the funds of support such costly endeavors. Thus, because of the population that HIV is infecting there is a pressing need to find effective and inexpensive methods to intercept the spread of the illness. Other studies have shown promising results from the antiretroviral drug nevirapine which is given to both HIV-infected mother and newborn to stop transmission (Stephenson 1999: 625). Many health officials in the field consider nevirapine, at a cost of $4 US a regimen, the most economical method of intercepting perinatal infection. Breastfeeding, the final avenue of infant infection, was shown to be more conducive to the spreading of HIV than bottle-feeding in three studies conducted in Abidjan, Côte d'Ivoire, and Burkina Faso

(Fowler et. al, 1999: 782). These studies, conducted by Fowler et. al (1999) argue that exclusive breastfeeding yields a higher risk of transferring HIV from mother to child than simply breastfeeding.

International Response

Due to these scientific findings, many international policymakers are advocating for the improvement of medical centers in order to promote interceptive actions to deter the vertical communication of the HIV. For example in 1998, the Joint United Nations Programme on HIV/AIDS

> recommend[ed] that HIV-infected voluntary counseling and testing should be offered to all pregnant women… HIV infected women should be made aware of the transmission risks of breastfeeding [in order] to make informed decisions, and that they should be supported in their choice (WHO/UNICEF 1998: 178).

In highlighting the importance of women, children and the issue of MTCT the UN is shifting away from its largely male-oriented HIV agendas and demanding that female-only topic be addressed. This program remains a formidable international statement that frames HIV transmission to newborns as a subject matter that demands attention.

Discussion

However, despite international policy recommendations, countless studies that have shown the positive effects of lowing HIV transmission through caesarian sections, antiretroviral drugs and bottle-feeding the persistence of such elevated MTCT rates of HIV suggest a disparity between policy and practice in low-resource settings. This inconsistency in HIV/AIDS and MTCT rates between developed and developing nations can be attributed to both structural violence on both a societal level and failure of tailoring solutions to the cultural norms of various states.

MTCT on a Structural Scale

Although MTCT of HIV has been on the international radar for at least a decade the progress in decreasing transmission rates between mother and infant has been slow. Reasons for such failures have been issues such as cost, social stigma, and minimal medical resources (Brewer and Heymann 2004: 269). Yet, regardless of the long litany of potential reasons why the decrease in HIV vertical transfer has been sluggish in its descent one of the larges reasons for the possible failure is due to the interlocking societal constrains that negatively impact a woman even before MTCT. While prevention of HIV/AIDS in women is by far the easiest method of reducing rates of MTCT the unrelenting increase of HIV rates among the poorest and most disenfranchised women of developing nations suggest that multiple confounding factors around prevention and contraction. Many healthcare professionals agree that HIV contraction is not simply about poor contraception but rather about a host of issues such as: a lack of education for girls, early marriage, a lack of access to contraception, poverty, poor nutrition, and women's low social, economic and legal status (Starrs 2006: 1132). In many developing societies it is women who are being ravaged by this illness and it is to no surprise that these high rates are correlated with low social status and inequality with men. If women's lives are not deemed worth saving then of course rates of HIV/AIDS and MTCT continue to escalate. Women are not only dying from the AIDS but also the conditions that have allowed them to contract the epidemic, hindered them from accessing medical care, and have now allowed them to transfer to their young. All these listed factors compound into an issue that is larger than HIV/AIDS and are contributors to why disease affects the poor at such alarmingly high rates.

What is more worrisome than the above mentioned intertwining constraints is fact that the global community is not in upheaval. Currently we are living in a world of exceptional wealth despite the fact that millions are infected with HIV/AIDS, dying of preventable conditions and do not have the means to educate and feed their children. As of 1995, the total wealth of the world's top 358 "global billionaires" equaled the combined income of the 2.3 billion of the poorest individuals (Farmer 2003: 222). Yet, in spite of out technological advances and global resources the socioeconomic gap between the extremely affluent and those just above substantive living increases yearly. This growing phenomenon occurs not only within states but between them at as well; thus, leaving large regions such as most of continental Africa with gapping income inequalities. What this means for rising HIV/AIDS and MTCT rates is that not only does the world have the power to prevent the spread of the disease and aid those living with it but the global community has failed to do so. The economic, social, and political inequalities is continued to be perpetuated by the policies and the agendas of the world's most powerful nations leading to the institutionalization of structural violence. This in turn has limited the access of live-saving medical treatments from those who need them the most – the poor the oppressed and individuals at the most risk for HIV/AIDS and other preventable disease (Farmer 2003: 40). The international community has allowed for free markets to dictate availability of new drugs which therefore dictates who shall receive them and possibly who shall be saved. Although antiviral drugs that help treat HIV/AIDS and MTCT have been reduced to less than $600 US a year in many developing nations, treatment in lesser developed countries is more than twice that much (Farmer 2003: 219). The astounding cost is well beyond the daily means of most

individuals yet it is juxtaposed with the reality that there are at minimum 34 million HIV infected individuals in the world and at least 30 million of them are poor (Farmer 2003: 167).

MTCT on an Individual Scale

However, despite the influence of structural violence the incessant rise of HIV and MTCT rates is also due to the failure of intercepting initiatives to tackle transmission, prevention and the lack of tailoring of these programs to the cultural norms of the targeted community. Prevention of HIV/AIDS in women would drastically reduced the transfer rates of this pandemic between mother and child; however, if one analyzes the available methods of HIV prevention many of them are not feasible in certain societies. The male condom, the main method of interference in horizontal HIV transmission, is often the responsibility and choice of the man. If condom negotiation is an issue in certain societies women are not guaranteed the protection that this from of contraception offers. In many communities, condom use is synonymous with the assumption of extra-marital relationships; thus, suggesting the use of one is not simply implying protection against HIV and STIs but also the suspicion of unfaithfulness (Video: In Class 4/2). However, many states are beginning to gain migration populations who often travel between the cities and their homes searching for employment opportunities (Video: In Class 4/2). Although this does not automatically signify adultery the risk of HIV and unknowingly transferring the disease to a spouse definitely exists. Without risking the knowledge of other affairs to one's partner and therefore denying the use of a condom absolutely leads to increased transmission and contraction of the disease. Other forms of

HIV prevention which do not necessitate male cooperation - like microbicides – are still in development (Video: In Class 4/2).

Other such methods that are promoted by the UN and other international aid organizations, in the prevention of MTCT, include voluntary HIV testing and treatment for all women and mothers (WHO/UNICEF 1998: 178). However, testing in low-resource areas is far more difficult than in areas such as the United States. Since HIV screening is often necessary for the poorest and most disenfranchised individuals of our global community access to the hospitals and testing centers is not guaranteed. Once tested positive not only is there stigmatization of those who have HIV/AIDS but treatment and antiviral drugs are often out of the price range for large portions of those infected. In nations that are fraught with civil war, poor medical infrastructures and possibly corrupt governments there is no promise of medical aid for those struggling with HIV/AIDS. Thus, due to poverty and fear of stigmatization, prevention and treatment of HIV/AIDS is that much more difficult and the risk of mother to infant transmission that much higher. Since many individuals and their respective governments cannot afford the necessary medications for care it is very possible that even if an expecting woman was aware of her illness she would not have the means to access short-course antiretroviral regimens that would decrease the chances of perinatal infection.

Bottle-feeding, an alternate suggestion to decrease rates of MTCT of HIV, is also more difficult in the field than in the lab. Although many researchers have noted a lowering of MTCT rates when infants were exclusively bottle-feed, as opposed to exclusive breastfeeding, there are various prerequisites to this type of initiative. First of all, this technique requires access to clean and drinkable water. Also with bottle-feeding

the infant is not exposed to healthy antibodies and nutrients which associated with breast milk thereby increasing his or her risk of contracting illness later in life. Despite the issues of nutrients and resources, another sizable obstacle is price. In many developing countries battling the HIV/AIDS pandemic citizens must cope with poverty, lack of opportunity and various other troubles that may or may not detract from financial ability to secure bottle formula. As stated by one Haitian:

> in addition to our health problems we have other tribulations. Although less preoccupied without illness, we will have problems paying for housing. We have trouble finding housing. We have trouble finding employment. We remain concerned about sending out children to school. Each day we face the distressing reality that we cannot find the means to support them (Farmer 2003: 218).

Finally, among other issues, individuals must be aware and have the ability to access different choices and interventions that hinder MTCT. All or some of these assumptions must be corrected in order to create an enabling environment in which techniques proven in the lab can be manifested in the field

Relevance and Conclusions

HIV/AID is a pandemic that has swept and impacted our global community and although MTCT of the virus is only one piece of a much larger issue it is important because is an avenue in which the illness touches future generations. Intercepting the transmission of HIV across generational lines is paramount due to the ferocity in which HIV struck the adult population. Millions of children have become orphaned and many have inherited the disease. Not only does this substantial loss of a working population affect home states but the continuation of this disease when transfer is largely preventable is inexcusable.

This pandemic, which hits hardest in the poorest countries and communities, is a manifestation of not only the institutionalization of structural violence but the inability of individual to access care. Transition of HIV to newborns is tragic because it can be stopped with the right amount of money, knowledge and resources. Due to the multi-faceted nature of the disease and transmission the techniques to cope with vary as well; however, WHO and UNICEF's program for the reduction of MTCT is not enough. Not only does this focus purely on transmission of HIV but does not look at the broad picture of why such transfer exists and propose culturally sensitive and feasible solutions. In order to make a significant change in HIV and MTCT rates there must be a fundament change in how individuals, states and the global community look at women. Women and their health must be viewed as crucial to their societies; only then with communities take steps to minimize structural violence and create enabling conditions to prevent mother-to-child transmission of HIV/AIDS.

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