Epidemiological Perspectives on Marriage and Family

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Multiple and Concurrent Partnerships Drive HIV Transmission in Africa

Most HIV transmission in Africa occurs through heterosexual sex, and Africa's high prevalence HIV epidemics are sustained by multiple and concurrent sexual partnerships. In the words of a 2004 article in the British Medical Journal, "It seems obvious, but there would be no global AIDS pandemic were it not for multiple sexual partnerships."[1] Concurrent partnerships (partnerships which overlap in time) are particularly dangerous because they create sexual networks or webs of relationships through which HIV can spread very quickly. Concurrent partnerships may be particularly common in the highest prevalence epidemics of southern Africa.[2]

Many people do not understand the risks of multiple and concurrent partnerships. For example, a 2005 national survey in South Africa found that only 7.7% of respondents thought they would get infected through multiple partnerships, while 45.3% thought they would get HIV through accidents or cuts, and 29.0% thought they would get HIV through blood transfusions.[3]

Faithful Marriages Decrease Risk of HIV Transmission

Marriage is often portrayed as a risk factor for HIV infection in Africa. Increasingly, it is claimed that infections within marriage are a major driver of HIV infections within Africa, or that most HIV infections occur within marriage. In fact, it is impossible for most HIV infections to occur *within* marriage, as each infection passed on within marriage requires that one of the partners first become infected *outside* of marriage. Thus, the real problem is not marriage, but relationships outside of marriage (including before marriage) through which infections are brought into the union. Furthermore, a number of studies have shown that married people have lower HIV risk than people who are sexually active but not married. For instance, a study of data from 33 countries in Africa concluded that "marriage is protective," and found that the countries with the longest gap between first sex and first marriage and the lowest rates of marriage (which are countries in the SADC region) also had the highest HIV prevalence.[4]

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[1] Shelton, J.D., Halperin, D.T., Nantulya, V., et al. (2004). Partner reduction is crucial for balanced "ABC" approach to HIV prevention. *British Medical Journal, 328*: 891-893.

[2] Halperin, D.T., Epstein, H. (2004). Concurrent sexual partnerships help to explain Africa's high HIV prevalence: Implications for prevention. *The Lancet 364*:4-6.

[3] Shisana, O., Rehle, T., Simbayi, L., et al. (2005). *South African national HIV prevalence, HIV incidence, behavior and communication survey.* Human Science Research Council Press.

[4] Bongaarts, J**.** (2007). "Late marriage and the HIV epidemic in sub-Saharan Africa." *Population Studies, 61(1)*: 73-83.

Concern about HIV transmission within marriage usually focuses on women's risk of infection from husbands. Women are assumed to be particularly vulnerable to being infected within marriage because they lack power to refuse sex or insist on condom use. Many women do become infected by their husbands, but it is also true that many men are infected by their wives. In fact, when data from discordant couples is analyzed, we find that in a surprising number of couples, the woman is infected and not the man. (A discordant couple is a couple in which one partner is HIV-infected while the other is not.) In other words, it is not only women who are at risk of HIV infection in their marriages, but also men. One analysis of data from 11 African countries found that in 4 countries, the woman (and not the man) was infected in a *majority* of discordant couples. The researcher concluded that the only explanation was that many women were getting infected with HIV outside their marriages.[5] Another study of 5 African countries found that in 30 to 40 percent of HIV-infected couples, the woman alone was infected.[6]

Men are often blamed as being the ones who spread AIDS. Men often report greater numbers of partners than women (including multiple and concurrent partners), although women also report MCP. For example, a study in Botswana found that 30% of men and 30% of women admitted to starting an additional partnership during a current partnership.[7] Furthermore, we know that in heterosexual transmission, men are always infected by women and women are always infected by men. Men and women are in this together, both men and women reflect the image of God, and blaming one gender or the other as being the problem will not help us to end AIDS.

Testing, While Important, Cannot Prevent the Spread of AIDS

HIV testing has many important functions, including allowing couples to find out if they are infected as well as allowing them to make decisions such as taking steps so that the uninfected partner does not become infected. However, it is likely that even in a "best case" scenario of frequent testing, only about half of onward infections could be prevented. The reason is that a large percentage of infections—it is believed about half—are transmitted while the index case (the initially infected person) is in the period of acute infection. Acute infection is the period of several weeks to several months right after infection, in which the viral load is high, the risk of passing the infection on is very high, and the infected person will not yet test positive with the standard HIV tests that are used (because he or she has not yet produced antibodies). In other words, if HIV is brought into a marriage, it is quite likely that the infection will be passed on before the infected partner would even test positive in a standard HIV test. This reality means that while testing for couples is important, it can never end HIV transmission within marriage. It is even more important to promote mutual faithfulness so that HIV is not brought into marriages in the first place.

There is a misconception that HIV is always passed on quickly within a marriage or other sexual partnership. The fact is that it may take many years for the infection to be passed on. Once the

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[5] Mishra, V. (2007, June). *Why do so many HIV discordant couples in sub-Saharan Africa have female partners infected, not male partners?* Presentation at HIV/AIDS Implementers' Meeting, Kigali, Rwanda.

[6] de Walque, D. (2007). Sero-discordant couples in five African countries: Implications for prevention strategies. *Population & Development Review, 33(3),* 501-523.

[7] Gourvenec, D., Taruberekera, N., Mochaka, O., & Kasper, T. (2007, December). *Multiple concurrent partnerships among men and women aged 15-34 in Botswana: Baseline Study.* PSI Botswana.

infected partner is no longer in the period of acute infection, the risk of passing on that infection are actually quite low. An uninfected partner may actually be at greater risk of infection outside the marriage, if he or she has extramarital partners, than from his or her spouse who is infected but in the "latent" (relatively non-infectious) stage. Thus, a "be faithful" message is still highly relevant for discordant couples.

In most settings in Africa, discordant couples, couples in which the HIV infection has not yet been passed on to the other partner, outnumber concordant couples, or couples who are both HIV-infected. High rates of discordancy mean that when couples are tested, many will test discordant, and among discordant couples, it is likely that 30 to 40 percent will find that the woman and not the man is infected. Women may be vulnerable to abuse in these situations. The Church should be prepared to help counsel couples which are dealing with such difficult news.

Family Breakdown is Occurring, Especially in Southern Africa

Finally, we consider data that show that there are profound changes taking place in family structure in southern Africa, changes which may be both cause and effect of the HIV epidemic. In countries such as Botswana, South Africa, and Swaziland, a minority of adults are now married or cohabiting. For example, in South Africa only 40% of adults are currently married or cohabiting[8], and in Botswana and Swaziland even fewer adults are in stable relationships. Equally sobering are data which show that most children do not live with both parents, even though most of these children have one or two living parents. For instance, in Swaziland only 23% of children live with both parents, and of the 45% of children who live with only one parent, most (81%) do have another living parent.[9]

All of these realities provide a great challenge to the Church. How can the Church address the critical issue of multiple and concurrent sexual partnerships, assist couples who discover that they are HIV infected, and uphold marriage and the family in the face of family breakdown?

[8] Shisana, O., Rehle, T., Simbayi, L., et al. (2005). *South African national HIV prevalence, HIV incidence, behavior and communication survey.* Human Science Research Council Press.

[9] Swaziland Demographic and Health Survey, 2006.