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Are HIV Prevention Programs Effective in Addressing

Rising HIV/AIDS Rates Among Central Asian Labor Migrants?

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Are HIV Prevention Programs Effective in Addressing Rising HIV/AIDS Rates Among Central Asian Labor Migrants?

by

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Abstract

Within the last ten years HIV rates in Central Asia have more than quadrupled amongst the general population. Labor migrants from the region who are working in Russia are considered at high risk of HIV infection due to risky sexual practices . Similar behavior has been documented among labor migrants in sub Saharan Africa. By reviewing medical data and literature written by international health professionals in both regions, I analyze the chain of sexual contact of labor migrants within female partners that contribute to the spread of HIV from Russia to the general population within Central Asia. I use Tajikistan as a case study. The findings of this study recommend that existing behavior modification strategies need to recognize existing gender structures when addressing at risk populations. They must also emphasize collaboration with community religious leaders and civil society organizations to promote effective and appropriate HIV/AIDS education efforts in order to curb the growing prevalence rates among male labor migrants in Central Asia.

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Introduction

Male labor migrants worldwide have been found to be primary contributors to the spread of HIV infection.[1] However, prevention efforts have held their female sexual partners accountable for enforcing safer sex measures. By comparing the HIV epidemic in different global regions during the 1990s with that of the former Soviet Union of present day, this study argues for the need for a re-evaluation of current HIV prevention efforts amongst labor migrants and their female sexual partners in the nations of the former USSR. The reason: while much of HIV/AIDS prevention literature addressing vulnerable global regions advocate that female sexual partners should be held responsible for promoting safer sex with male sex partners, the question arises whether women in traditional cultures are an appropriate population to implement effective change as opposed to their male sexual partners.

Studies have shown that male labor migrants from developing countries who are working in low-wage labor dependent industrialized nations are contributing to increases in HIV/AIDS rates. They are reported to practice risky sexual behavior while working away from home by patronizing sex workers and not using of condoms.[2] Upon returning to their home countries epidemiologists fear that infected labor migrants will expose their

[1] Quinn T., Population migration and the spread of types 1 and 2 human immunodeficiency virus. Proc National Academy of Sciences, 91:2407–2414, 1994; 2009 AIDS Epidemic Update; Joint United Nations Programme on HIV/AIDS (UNAIDS) and World Health Organization (WHO), Nov. 2009

[2] Weine, S., et al, Unprotected Tajik Male Labor migrants in Moscow at Risk for HIV/AIDS, Journal of Immigrant Minority Health, 10:461–468, Dec. 23, 2007

wives and girlfriends to the virus, thus spreading HIV amongst the general population of low prevalence countries. Much of the conventional wisdom espouses the need to educate women to take responsibility for promoting safer sex measures with male sexual partners. However, this study argues that due to structures of economy and gender in overtly patriarchal cultures, women lack the ability to implement such changes with their partners, and the more effective party to address would be the male partners.

This report uses the former Soviet republic of Tajikistan as a case study. The nations of the former Soviet Union (FSU) are currently experiencing the proportionately fastest growing rates of HIV infection in the world[3], and Tajikistan is the poorest of the former Soviet states, thus making it a country at increased vulnerability.[4] Tajikistan shares similarities with many of the states of sub Saharan Africa where HIV/AIDS flourished during the 1990s: adverse economic conditions which result in large populations of male labor migration; and the influence of traditional cultural and customs which promote gender inequality that lead to increased vulnerability among females.[5] To

[3] UNAIDS/WHO Epidemiological Fact Sheet on HIV and AIDS, Uzbekistan, UNAIDS/WHO Working Group on Global HIV/AIDS and STI Surveillance, Dec. 2008; UNAIDS/WHO Epidemiological Fact Sheet on HIV and AIDS Core data on epidemiology and response, Tajikistan, 2008 Update, Dec., 2008; WHO/UNAIDS Epidemiological Fact Sheet on HIV and AIDS Core data on epidemiology and response, Kyrgyzstan, 2008 Update, Dec., 2008; ЮНЭЙДС, Кыргызстан, [UNAIDS, Kyrgyzstan factsheet] http://www.unaids.org/ru/dataanalysis/monitoringcountryprogress/2010progressreportssubmittedbycountries/file,57982,ru..pdf, cited 5/6/10

[4] UNAIDS, 2008 report on the global aids epidemic. Geneva: Joint United Nations Programme on HIV/AIDS, 2008

5 Pison G, Le Guenno B, Lagarde E, Enel C, Seck G. Seasonal migration: a risk factor for HIV in rural Senegal. J AIDS, 6:196–200, 1993

inform my study I analyze trends of HIV/AIDS infection among at-risk groups of labor migrants and women of sub Saharan African nations.

This study is divided into two sections. In section one I question the effectiveness of current HIV/AIDS prevention efforts in developing countries. While many organizations target women to promote safer sex behaviors, I argue that men, and in particular, labor migrants, are the more logical and appropriate audience to address. In this section I analyze the chain of sexual contact between male labor migrants and the two groups of female sex partners – commercial sex workers in the receiving country, and wives and girlfriends in the sending country. I analyze how gender, economic, and cultural structures increase vulnerability of infection.

In the second section I examine effective means to deliver HIV prevention information to populations of at-risk labor migrants. These means are based on behavior modification concepts rooted in social theory. I argue that the various structures that increase HIV risk must be taken into consideration when designing and implementing HIV/AIDS prevention strategies.

To evaluate the vulnerability that male Tajik labor migrants, their wives, and commercial sex workers in Russia face my research is informed by reports and surveys performed by UNICEF and UNAIDS during the last ten years. These surveys measure attitudes and knowledge levels of Tajiks concerning HIV/AIDS. Data from Russia and the Central Asian nations neighboring Tajikistan are also used. In order to evaluate

attitudes of labor migrants in Russia as well as in other regions I rely on journal articles and reports. I rely on social theories of gender to understand issues of gender imbalance and how this influences HIV/AIDS vulnerability. In particular, I use Connell's *Theory of Gender and Power* and Wingood's and DiClemente's adaptation of the theory which addresses women's vulnerability of HIV/AIDS. By using Connell's theory and the adaptation, I evaluate the power differentials and gender roles that heighten women's HIV risk in order to determine whether male labor migrants or their female partners are a more appropriate population to target for HIV/AIDS prevention measures.

The study of the HIV/AIDS epidemic in the nations of the former USSR has been limited. When evaluating future global regions at increased vulnerability to the HIV/AIDS pandemic much can be learned from the similarities of the epidemic in sub Saharan Africa during the 1990s and the FSU nations of the present. It is my hope that this study will add to the conversation about Central Asia and the increased vulnerability the region faces.

Migration and HIV

Transnational migration has been found to be a social factor that contributes to the spread of HIV infection.[6] Studies have shown that people who are more mobile or who have recently lived in a number of different settings are at greater risk for HIV and other sexually transmitted diseases (STDs) than people who remain in one location.[7] This has been noted in global areas most affected by the HIV/AIDS pandemic. Patterns of HIV transmission among labor migrants have been noted in Africa where predominantly male unemployed adolescents and adults leave their rural homes and families in search of work in urban centers.[8] Those nations in sub Saharan Africa whose economies depend on migrant labor are those with the highest HIV prevalence rates. The mining industries of South Africa and Botswana rely heavily on migrant labor, and these nations' HIV prevalence rates in 2008 had reached seventeen percent and twenty-four percent respectively.[9] In contrast to this, other sub Saharan African states whose economies do

[6] Decosas, J., Adrien, A., Migration and HIV, AIDS 1997, 11(supplement A):S77–S84, 1997

[7] Mbizvo, M., et al., HIV seroincidence and correlates of seroconversion in a cohort of male factory workers in Harare, Zimbabwe. AIDS, 10:895–901, 1996

[8] Udoh, I., Mantell, J., Sandfort,T., Eighmy, M., Potential pathways to HIV/AIDS transmission in the Niger Delta of Nigeria: poverty , migration and commercial sex, AIDS Care, Vol. 21, No. 5, May, 2009

[9] UNAIDS, South Africa fact sheet, http://www.unaids.org/en/CountryResponses/Countries/south_africa.asp, cited 1/8/11; UNAIDS, Botswana fact sheet, http://www.unaids.org/en/CountryResponses/Countries/botswana.asp, cited 1/8/11

not rely on labor migrants have much lower rates, such as Senegal with a rate of one percent, [10] and Uganda with a rate of five percent. [11]

The primary route of infection for labor migrants stems from unsafe sexual behavior of labor migrants. Labor migrants worldwide are reported to routinely employ commercial sex workers. Studies suggest that men who are more spatially mobile are more likely than other men to purchase sex.[12] Studies from different regions have found that condom use among laborers having sex with sex workers is low.[2] The nature of migrant labor fosters an atmosphere that can encourage increased risky sexual behavior. Labor migration entails long periods of separation from families and wives, and this separation can encourage sexual behavior with other partners. Multiple concurrent partnerships have been found to be high amongst male labor migrants, and have also been found to increase chances of HIV infection.[13] Studies have suggested that the rapid spread of HIV in sub Saharan Africa during the 1990s is attributable in part to concurrent partnerships between male workers and female sex workers, wives and girlfriends.[14]

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[10] UNAIDS, Senegal fact sheet, http://www.unaids.org/en/CountryResponses/Countries/senegal.asp, cited 3/30/11

[11] UNAIDS, Uganda fact sheet, http://www.unaids.org/en/CountryResponses/Countries/uganda.asp, cited 3/18/11

[12] Lowndes, C., et al.,West Africa HIV/AIDS epidemiology and response synthesis: implications for prevention, Washington, DC, World Bank, 2008

[13] Khobotlo, M., et al., Lesotho: HIV prevention response and modes of transmission analysis, Maseru, Lesotho National AIDS Commission, 2009

[14] Smith, D., Modern Marriage, Men's Extramarital Sex, and HIV Risk in Southeastern Nigeria, American Journal of Public Health 997-1005, Vol. 97, No. 6, June, 2007

Epidemiologists have observed that circular migration provides opportunities for the transnational spread of HIV.[15] The nature of the trans-national labor migration experience contributes to the spread of HIV in two ways: geographically, and as a means of transmitting the virus beyond the confines of high-risk populations. The majority of labor migrants practice circular migration, in which they return to their sending countries repeatedly after a few weeks or months. In sub Saharan Africa the circular migration of laborers has provided a means for HIV to spread from the migrant receiving nations of South Africa and Botswana, to the migrant sending nations of neighboring Zimbabwe and Tanzania.

In summary, labor migrants are a "bridge" population that spread HIV beyond the confines of isolated at-risk groups to the general population. The term 'bridging' refers to a population who practices sex with both high-risk and low-risk partners, thus making it possible to transmit the virus across different risk behavior subpopulations.[16] The greatest risk involves the spread of infection beyond isolated groups where infection tends to remain contained, to the general population where rates remain low.[17] Infected wives may then also pass the virus on to infants through childbirth and breastfeeding. If

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[15] Godinho, J., Reversing the Tide: Priorities for HIV/AIDS Prevention in Central Asia, World Bank Working Papers, World Bank Publication, 2005

[16] De Jarlais, A., Padian, N., Strategies for universalistic and targeted HIV prevention, Journal of Acquired Immune Deficiency Syndromes and Human Retrovirology, 16, 127-136, 1997

[17] Mtika , M., Political economy, labor migration, and the AIDS epidemic in rural Malawi, Social Science & Medicine 64, 2454–2463, 2007

a wife or girlfriend is involved in concurrent relationship, she may infect her sexual partner, thus furthering the spread of HIV within the general population of the sending country.

Women at Increased Risk of HIV Exposure

The role of women in transmission of infection is key. While male labor migrants serve as the bridge group that transmits infection across geographical and social barriers, females complete the chain of sexual relations that provide channels in which HIV infection can spread. Female sex workers in guest countries are often the origin point of infection, and long term sexual partners – wives and girlfriends - in the sending countries are the receivers of infection.

Trends of the HIV/AIDS global pandemic show that women are becoming more vulnerable to HIV/AIDS infection than men. In South Africa the prevalence of HIV infection among women attending antenatal clinics increased from 0.76 percent in 1990 to 24.5 percent in 2000.[18] Social and cultural norms which allow for male dominance of females can be attributed to this increased risk. While men can make a conscious choice whether to engage in sex without a condom, women in traditional societies and cultures are often prevented from negotiating sexual encounters with male sexual partners. Cultural and social norms often preclude women from implementing safer sex practices.[19] These norms often prevent wives from openly discussing subjects of contraceptive use and sexual health with their husbands. Studies of wives in South Africa and India show

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[18] Department of Health, South Africa, National HIV and Syphilis Sero-Prevalence Survey of women attending Public Antenatal Clinics in South Africa, Pretoria, South Africa: Department of Health, 2000

[19] Jewkes, R., Abrahams, N., The epidemiology of rape and sexual coercion in South Africa: an overview, Social Science and Medicine, Vol. 55, Issue 7, Pp. 1231-1244, Oct., 2002

that they possess little agency when it comes to negotiating condom use.[20] As a result, wives and girlfriends of labor migrants have few options in protecting themselves from HIV infection.

Because of this gender imbalance, the risk of HIV can be as great within marriage as it is outside of marriage. Data from global sources suggest that married women's greatest risk of contracting HIV is through sexual intercourse with their husbands.[21] Other studies propose that long term relationship increases a wife's risk of infection.[22]

When comparing the two female groups, Russian female sex workers have a greater degree of agency than the Tajik wives of labor migrants in negotiating whether a condom will be used during sex. Until an arrangement is agreed upon a sex worker maintains this agency; after an arrangement is negotiated, the female sex worker usually forfeits this control. At this point sex workers may have as little agency as Tajik housewives.

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[20] Boer, H., Mashamba, M., Gender power imbalance and differential psychosocial correlates of intended condom use among male and female adolescents from Venda, South Africa. British Journal of Health Psychology, 12, 51–63, 2007; Sri Krishnan, A., Hendriksen, E., Vallabhaneni, S., Johnson, S., Raminani, S., Kumarasamy, N., Safren, S. , Sexual behaviors of individuals with HIV living in South India: A qualitative study, AIDS Education and Prevention, 19, 334–345, 2007

[21] Glynn, J., et al., HIV Risk in Relation to Marriage in Areas With High Prevalence of HIV Infection, Journal of Acquired Immune Deficiency Syndromes 33: 526–535, 2003

[22] Carpenter, L., Kamali, A., Ruberantwari, A., Malamba, S., Whitworth, J., Rates of HIV-1 transmission within marriage in rural Uganda in relation to the HIV sero-status of the partners, AIDS, Vol. 13, Issue 9, 1083-1089, June 18, 1999

While the topic of gender inequality is generally accepted by global health care advocates as a barrier to promoting safer sex practices in developing nations, many studies still promote placing the responsibility of instigating these measures on the female sexual partner. Much of the literature addressing the reduction of HIV/AIDS in developing nations often proposes the need to curb HIV infection by encouraging women to be proactive in safer sex practices with their sexual partners. Essays and reports have emphasized the importance of educating women about the necessity for encouraging their male partners to use condoms during sexual partnering.[23] Much of this information is intended for female audiences in developing nations where cultures and societies are deeply rooted in male dominated gender norms. Literature reporting on countries where social norms grant females little agency for voicing condom use, such as Afghanistan where patriarchy is strictly adhered to, support this view.[24]

The need for educating women in developing countries about the risks of HIV infection is great. According to the 2010 UNAIDS Global Report, "The consequences of gender inequalities in terms of low socio-economic and political status, unequal access to education . . . add(s) to the greater biological vulnerability of women and girls being

[23] Pei, B., Jiang, X., Ye, X., Xu, G., Knowledge, attitude and behaviors among female sex workers in Shanghai China, BMC Public Health, Vol. 10, Article 377, 2010

[24] Todd, C., et al., HIV, hepatitis B, and hepatitis C prevalence and associated risk behaviors among female sex workers in three Afghan cities, AIDS, 24 (suppl 2):S69–S75, 2010

infected with HIV."[25] Education and awareness are the most important methods in curbing the spread of HIV which, for the most part, is preventable. Education and awareness of safer sex procedures can protect females from infection. However, studies relying on established models of health behavior modification purport that behavior can only be effective in environments where the targeted parties possess the self-efficacy to act upon such education. Worth points out in a 1989 article that the ability for women to implement safer sexual practices is dependent upon certain pre-existing conditions such as relative sexual equality.[26]

The argument that women are only as effective in promoting safer sex with their male sexual partners as the extent to which their cultures empower them can serve as further justification for the much agreed-upon necessity for increasing HIV education efforts not only among females but among their male sexual partners as well. In the case of developing nations which rely on migrant labor, male labor migrants would be a logical target population. Targeting male labor migrants would place the responsibility on men who are already predisposed to make decisions concerning sexual practices with female sexual partners.

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[25] UNAIDS Report on the Global AIDS Epidemic, 2010, Joint United Nations Programme on HIV/AIDS (UNAIDS), 2010

[26] Worth, D., Sexual Decision-Making and AIDS – Why Condom Promotion Among Vulnerable Women is Likely to Fail, Studies in Family Planning, Vol. 20, Issue: 6, Pp. 297-307, Nov. – Dec., 1989

First and Second Waves of the HIV Pandemic

During the late 1980s and through the 1990s many states within sub Saharan Africa were adversely affected by the HIV/AIDS epidemic. During the 2000s prevalence rates among sub Saharan African states appear to have stabilized. The epidemics in Zimbabwe and other sub-regions have either reached, or are approaching, a plateau.[27] According to the Mozambique Health Ministry, the HIV prevalence rate in that country has dropped from 16 to 15 per cent among the adult population in 2007.[28] One reason for this drop can be attributed to the success of anti-retroviral treatment slowing infection proliferation. While the number of infections being reported is equaling the number of deaths, this is a change from the exponential increases witnessed during the 1990s.

As the rate of infection appears to be stabilizing in Africa, numbers in other world regions continue to increase. One region where numbers are rising quickly is Eurasia. Epidemiologists have labeled the current increase of HIV rates in China, India, and the former Soviet Union as the second wave of the global pandemic. According to a National Intelligence Council report, "The next wave of the HIV/AIDS epidemic appears to be in India, China and the former Soviet Republics that are the areas of the world

[27] UNAIDS, WHO, AIDS epidemic update: December 2007, Geneva: UNAIDS, 2007

[28] AllAfrica.com, http://allafrica.com/stories/200912020772.html, cited 10/9/10

where the epidemic is most rapidly expanding."[29] Other reports confirm that the epidemic will shift from Africa to Eurasia over the coming generation.[30]

Of the regions in Eurasia, the nations of the Former Soviet Union (FSU) are experiencing the fastest growing rate of HIV infection. UNAIDS/WHO reports from the region confirm that the central Asian nations of the FSU have surpassed Africa in growing prevalence rates.[3] The most populous nation of the FSU, Russia, has experienced a doubling of infection cases between 2001 and 2007 and has achieved a generalized prevalence rate of 1.1 percent within the adult population.[31] The fourteen other nations of the FSU have seen rapid growth of infection rates among their populations since the collapse of the USSR in 1991. The sharing of contaminated needles through IV drug use has been a primary transmitter of HIV, and until recently the virus was contained within at-risk groups.

However, in recent years the nature of the epidemic in the FSU nations has evolved. The number of new HIV cases among IV drug users has decreased from 96 percent in 2000 to 64 percent in 2007[32], suggesting that other modes of transmission, such

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[29] National Intelligence Council, The Next Wave of HIV/AIDS: Nigeria, Ethiopia, Russia, India and China, ICA 2002–04D, Sept., 2002

[30] Eberstadt, N., The Future of AIDS, Foreign Affairs, 00157120, Vol. 81, Issue 6, Nov./Dec., 2002

[31] UNAIDS Report on the Global AIDS Epidemic, 2010, Joint United Nations Programme on HIV/AIDS (UNAIDS), 2010

[32] Национальный доклад Россию Федерации о ходе выполнения Декларации о приверженности делу борьбы с ВИЧ / СПИДом [Country Progress Report of the Russian Federation on the Implementation of the Declaration of Commitment on HIV/AIDS], Ministry of Health and Social Development of the Russian

as sex, are on the rise. The increase of females in the region becoming infected supports this assumption. In 2000, Russian women comprised 20.6 percent of new infections; in 2007, the proportion had grown to 44 percent.[32] This increase reflects trends witnessed in other global regions, such as sub Saharan Africa.

Similarities between First and Second Wave Regions

The pandemic spread of HIV globally has revealed that regional epidemics can take on distinct forms. In the former FSU nations widespread IV drug use was initially a primary channel of transmission, in contrast to Africa where heterosexual contact spread infection.

Despite initial differences, as well as geographic and cultural variations, there are also important structural similarities between the epidemics in these two regions. These similarities have been key to contributing to the spread of HIV infection in both areas: one is economic conditions; the other is gender relations. In both contexts the growth of migrant labor populations coupled with social and cultural norms which favor men have contributed to shaping environments where HIV infection can flourish.

Federation, 2008, http://data.unaids.org/pub/Report/2008/russia_2008_country_progress_report_ru.pdf, cited 9/14/10

Economic Similarities

The regions of sub Saharan Africa and the former Soviet Union have experienced long histories of economic, political, and social turmoil. Both areas have shared similar pasts in which foreign governments have colonized the regions, inflicting economic, political, and social constraints which have proved detrimental to regional development. The current poverty and turmoil of sub-Saharan African states can be partly attributed to the history of the colonizing Western European powers much in the same way the present troubles experienced in Central Asia is the result of twentieth century Soviet domination.

The sudden transition from inter-dependence to self-reliant sovereignty that African states and those of the FSU experienced led to adverse economic, social, and political conditions for most countries. However, in these same regions a few resource-rich countries were more fortunate, and they experienced a growth in their economies. As a result wide economic disparities can be found among neighboring nations of Africa and the FSU. South Africa and Namibia are considered the most developed countries in sub Saharan Africa with strong infrastructures similar to Russia which has experienced an economic boom in recent years, and these countries are within close geographic proximity to economically challenged nations. Industrialized South Africa is adjacent to the struggling nations of Mozambique and Zambia, while Russia is situated in close proximity to the poorest nations of the FSU in Central Asia. This disparity has resulted

in push-pull conditions which encourage large scale mobile population movement.[33] The South African mining industry depends on migrant labor from bordering developing nations much in the same way that Russia's recent building boom relies on the economically unstable nations of Central Asia for cheap manpower. The South African mining industry employs an estimated quarter million migrants. Likewise, in Russia the labor migrant population is huge, ranging from an estimated 4.5 million to 12 million.[34] According to Konstantin Romondanovsky, head of Russia's Federal Migration Service, 14.22 million foreigners entered Russian in 2007 with the intent of finding work.[35] An estimated eighty percent of those seeking work originate from FSU nations.[36]

The large migrant populations create an environment where HIV infection can spread quickly. Large numbers of under-skilled, poorly paid men contribute to environments where commercial sex work and alcoholism thrive. Labor migrants from economically depressed nations often come from rural regions where knowledge of HIV/AIDS is low. Living and working conditions for workers in both regions are reported to be stressful and often dangerous. The geographic proximity of relatively

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[33] UNAIDS Country Situation Analysis, 2008, Mozambique, http://data.unaids.org/pub/FactSheet/2008/sa08_moz_en.pdf, cited 11/5/10; UNAIDS Country Situation Analysis, 2008, Zambia, http://data.unaids.org/pub/FactSheet/2008/sa08_zam_en.pdf, cited 11/3/10

[34] Сейчас на территории России находится 4.5 миллиона, Русские газета, No. 151, August 14, 2009, [Presently on Russian territory are situated 4.5 million]; От редакции: Кризис и миграция, Vedomosti, No. 207, October 31, 2008 [From the editors: Crisis and migration]

[35] Petrov, D., 800 тысяч Поуехавших, Trud, No. 86, May 18, 2009, [800 thousand Visitors], cited 4/2/11

[36] Sergeev, M., Россия - магнит для мигрантов, nezavisimaia gazeta, p. 6, 3/21/08, [Russia – magnet for migrants]

richer nations provides opportunities for migrants to return to their homes on a regular basis, allowing for HIV to spread trans-nationally. While conventional wisdom purports that poverty is the root cause for the huge increase of HIV in developing nations, some health experts assert that a primary cause is the wide disparity of economies which promote large mobile population movement.[37]

The FSU and sub-Saharan Africa are not the only global regions where the close proximity of rich and poor nations creates conditions that support large scale mobile labor populations. In North America ten percent of the Mexican population migrates to the United States in search of employment. However, the conditions that encourage the spread of HIV infection in North America are much different than those of other global areas. In comparison to Russia and South Africa where HIV prevalence rates have reached 1 percent and 18 percent respectively, the prevalence rate in the United States remains relatively low at 0.6 percent. This low rate may be attributed to the fact that the U.S. was one of the first nations to experience the pandemic, and thus has had the time to implement successful prevention measures. In addition, the American public health structure is much more developed in comparison to those of South Africa and Russia, and is able to provide treatment, testing, and education for STDs.

[37] Gupta, G., Parkhurst, J., Ogden, J., Aggleton, P., Mahal, A., HIV prevention 4 - Structural approaches to HIV prevention, www.thelancet.com, Vol. 372, August 30, 2008

Gender Structure Similarities

Along with migrant populations, regions of the FSU and sub-Saharan Africa share similarities in the structures of gender relations. Former Soviet Central Asia and many states of sub-Saharan Africa are influenced heavily by social, religious, and cultural norms which favor male dominant roles. Studies reveal that women play subservient roles in much of sub Saharan Africa.[38] This is similar to the culture and society of Central Asia. According to a 2001 Human Rights Watch report, "Uzbek women report an increase in societal pressure to marry earlier, assume sole responsibility for household and childcare duties, and adhere to more traditional Islamic customs and dress."[39]

Rural areas of both regions tend to remain culturally and socially more traditional in comparison to urban areas. Rural areas also provide less educational and economic opportunities for girls and women, thus making them more dependent on males. Surveys reveal lower levels of awareness and knowledge of gender and health related information in comparison to urban centers.[40] A lack of communication networks in rural regions

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[38] MacPhail, C., Campbell, C., I think condoms are good but, aai, I hate those things': condom use among adolescents and young people in a Southern African township, Social Science & Medicine, Vol. 52, Issue: 11, pp: 1613-1627, 2001

[39] 2001 Human Rights Watch: Uzbekistan, http://www.hrw.org/en/news/2001/07/09/uzbekistan-turns-its-back-battered-women, cited 12/10/10

[40] Детский Фонд ООН, Мульти Индикаторное Кластерное Исследование, Тajікистан, 2005 [UNICEF MICS 3, Tajikistan,2005], http://www.childinfo.org/files/MICS3_Tajikistan_FinalReport_2005_Eng.pdf, cited 8/28/10; Детский Фонд ООН, Мульти Индикаторное Кластерное Исследование, Кыргызстан, 2006 [UNICEF MICS 3, Kyrgyzstan, 2006],http://www.childinfo.org/files/MICS3_ Kyrgyzstan _FinalReport_2006_Eng.pdf, cited 8/28/10; Детский Фонд ООН, Мульти Индикаторное Кластерное

contributes to the dearth of information for women about sexual health issues. Marriage is encouraged at an early age, and this puts young women at increased dependence on their husbands. These factors decrease opportunities where women can make informed decisions, let alone make any decisions, concerning sexual partnering to protect themselves from HIV infection.

Исследование, Узбекистан, 2006 [UNICEF MICS 3, Uzbekistan, 2006], http://www.childinfo.org/files/MICS3_ Uzbekistan _FinalReport_2006_Eng.pdf, cited 8/28/10

The Inability of Women to Take Control, and Why Men Need to be Addressed

With the progression of the global pandemic, rates of infection are increasing among women. Central Asia is experiencing these trends as well. In Uzbekistan, the most populous of the Central Asian nations, rates increased from under five hundred infections among women in 2001 to an estimated 4,600 six years later.[3] In some regions numbers of infected women are surpassing those of men. According to the AIDS organization Avert, "as the infection rate has increased over the years, the number of women living with HIV and AIDS (in sub Saharan Africa) has overtaken and remained higher than the number of infected men."[41] While many international health specialists concede the fact that women are at increasing risk, many studies and reports place an expectation on women to be the decision makers in encouraging safer sex practices with their male sexual partners. A 2002 Uzbek Ministry of Health report states that, "Health education campaigns and materials should include messages designed to encourage women to be proactive in negotiating condom use with their sexual partners in order to protect their own health."[42] Much of the literature advocating safer sex measures amongst commercial sex workers often makes the assumption that sex workers are able to maintain control and power with male clients during sexual transactions. Studies

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[41] AVERT, http://www.avert.org/women-hiv-aids.htm, cited 1/22/11

[42] Узбекистан Обследование состояния здоровья, 2002, аналитического и информационного центра, Министерство здравоохранения, Республики Узбекистан, Государственного департамента статистики, Министерство макроэкономики и статистики Республики Узбекистан, апреля 2004 г. [Uzbekistan Health Examination Survey, 2002, Analytical and Information Center, Ministry of Health; Republic of Uzbekistan, State Department of Statistics, Ministry of Macroeconomics and Statistics, Republic of Uzbekistan, ORC Macro, April, 2004]

analyzing violence towards sex workers refute this notion, citing that while it may be a lucrative profession, it is one whereby sex workers surrender personal control to clients.[43]

When analyzing the chain of sexual partnering that spreads HIV infection from guest country to home country through male labor populations, the vulnerability of female sexual partners in both nations must be considered. Young wives in sending countries are not the only sexual partners at risk. Studies have found that commercial sex workers in Russian cities have little agency in negotiating safe sex practices.[44]

In order to develop an effective strategy of promoting safer sex measures to counter the rising infection rates in regions such as the FSU and sub Saharan Africa, it is important to recognize the fact that men are the primary decision makers when it comes to negotiating sex with women. This is true amongst male labor migrants. By examining the economic, cultural, and social situations in the greatest at-risk nation of the FSU it is possible to understand the degree to which male migrant population movement and gender inequality play in the continuing rise of HIV infection rates, much in the same manner as these factors played in Africa during the height of the HIV/AIDS crisis in that region. More importantly, a study of the most vulnerable populations in the FSU can

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[43] Open Society Institute, Sex Workers Action Network. Arrest the violence: human rights abuses against sex workers in Central and Eastern Europe and Central Asia, http://www.soros.org/initiatives/health/focus/sharp/articles_publications /publications/human-rights-violations-20091217/arrest-violence-20091217.pdf, cited 7/12/10

[44] Shannon, K., Strathdee, S., Shoveller, J., Rusch, M., Kerr, T., Tyndall, M., Structural and environmental barriers to condom use negotiation with clients among female sex workers: implications for HIV-prevention strategies and policy. American Journal of Public Health,99(4):659-665, 2009

offer insight into gender relations to understand who should be addressed to ensure an effective method of implementing safer sex prevention campaigns.

Of the fifteen former Soviet Republics, the Central Asian nation of Tajikistan appears to share the most similarities with those of sub Saharan Africa in terms of economic, social, and cultural norms, and thus provides an appropriate environment to analyze. Tajikistan is the poorest nation of the FSU. It also has the greatest per capita migrant labor population working outside its borders. Statistics have found Tajik culture and society to be the most conservative and traditional within former Soviet Central Asia.[40] By examining these two factors Tajikistan can provide a good insight into how male migration patterns, along with traditional values of male-female relations, influence regional HIV infection trends. These factors can reveal differences in vulnerability to infection between males and females. By evaluating these it is possible to deduce what roles men and women may play in successfully curbing increasing HIV infection rates, and who is a better audience to target in order to implement successful, effective, consistent behavior modification measures.

Tajikistan as a Case Study

Of the estimated 12 million migrants working in Russia, a reported half million Tajiks work in Russia.[45] Other sources report numbers of 600,000 to one million.[46] This is roughly 12 to 16 percent of the Tajik adult population who leave the country every year to seek seasonal work or to work abroad for a couple of years. The majority of labor migrants seek work in cities. In 2006 16 percent of documented workers lived in Moscow, and another 14 percent in the surrounding Moscow districts.[47] An estimated one million migrants live and work in Moscow.[48]

A majority of migrants are undocumented, and their population size is difficult to verify, as numbers reported vary greatly. While size is questionable, recent data show

[45] Иванова, Т., Таджики в Московском социуме, Иммигранты в Москве, ре. Зайончковская, ж., Центр миграционных исследований, Три квадрата Издательский, 2009, [Ivanova, T., Tajiks in Moscow Society, Immigration in Moscow, ed. Zaonchkovskaya, Z., Center for Migration Research, Three Squares Publishing, 2009]

[46] Erlich, A., Tajikistan: From Refugee Sender to Labor Exporter, Migration Policy Institute, Country Profiles, 2006; Parshin,K., Tajikistan: Dushanbe Braces for Shock, as Remittances Set to Fall off Cliff, Eurasia Insight, December 16, 2008

[47] Мониторинг легальной внешней трудовой миграци за 2005 - 2006 годы. Сборник/федеральная миграционая служба России. Управление внешней трудовой миграции, Москва, с. 7, 40, 2006, [Monitoring legal foreign labor migration for 2005 - 2006. Collection / Russian Federal Migration Service. Office of Foreign Labor Migration, Moscow, pp. 7, 40, 2006]

[48] Dmitriev, A., Миграции. Конфликтное измерение, [Migrations. The conflictual dimension], Moscow: Al'fa-M, pp. 231-269, 2006; Зайончковская, ж., Мкртчян, Н., Роль миграции в динамике числености и состава населения Москвы, Иммигранты в Москве, ре. Зайончковская, ж., Центр миграционных исследований, Три квадрата Издательский, 18-44, 2009, [Zaonchkovskaya, Z., Mkrtchin, N., Role of migration in dynamics on the size and composition of population of Moscow, Immigration in Moscow, ed. Zaonchkovskaya, Z., Center for Migration Research, Three Squares Publishing, pp. 18 – 44, 2009]

that the number of foreign workers is growing. The number of Tajiks seeking work in Russia has increased three-fold between 2002 and 2008.[49]

Official number of Tajik Laborers in Russia 2002 – 2008

	2002	**2004**	**2006**	**2008**
Tajikistan	5,346	4,717	6,523	20,717

Russian Federation Federal Service on Government Statistics, 2009

As with other FSU nations, economic disparity is driving much of this increase. The sudden collapse of the USSR in 1991 left Central Asian nations scrambling to transition to the status of independent sovereign states. Of the Central Asian nations Tajikistan has faced the greatest difficulty. The nation's declining economic environment has resulted in rising unemployment and decreasing wages. Tajikistan has the lowest per capita gross domestic product among the fifteen former Soviet republics.[50] Throughout the 1990s, unemployment in Tajikistan reached over 30 percent. The monthly salary averaged around $8-11, with over 67 percent of the workforce employed in the agricultural

[49] International Organization For Migration, http://www.iom.int/jahia/Jahia/about-migration/lang/en, cited 5/1/10

[50] Central Intelligence Agency World Fact Book, https://www.cia.gov/library/publications/the-world-factbook/geos/ti.html, cited 9/29/10

sector.[51] Tajikistan's economic situation remains fragile due to uneven implementation of structural reforms, corruption, weak governance, and the external debt burden. A civil war from 1993 to 1997 disrupted the nation's public infrastructures, and the nation is still recovering from the turmoil. As of 2009 fifty three percent of the population lived below the poverty line.[50] Most labor migrants in Russia are from the poorest rural mountainous regions of Tajikistan.[52] The lack of employment opportunities in Tajikistan has given rise to the large migrant labor population who support their families in Tajikistan with remittances.[53] Sources state that remittances comprise up to 46 percent of Tajikistan's GDP.[54]

The 2002 survey of Tajik labor migrants reported that 85 percent were male.[55] Over half are between 18 and 35 years old, with approximately 24 percent of labor

[51] Zotova, N., Трудовая миграция из Таджикистана. Из данных полевых исследований в Самаре и Москве [Labor Migration from Tajikistan. From Field Research Data in Samara and Moscow], Ferghana.ru, May 30, 2006

[52] Olimova, S., Процесс на суверенитет страну и миграцие процесу в Таджикистане, Миграционная ситуация в странах СНГ, Moscow: Kompleks – Progress, 1999, p. 230 [The Process of Sovereignty Nations and the migration process in Tajikistan, The migration situation in the CIS countries]

[53] World Bank, Денежные переводы и миграция: Восточная Европа и бывший Советский Союз [Remittances and Migration: Eastern Europe and the Former Soviet Union] http://siteresources.worldbank.org/INTECA/Resources/257896-1167856389505/Migration_RUSSIAN_Overview.pdf, cited May 23, 2009

[54] Marat, E., Shrinking Remittances Increase Labor Migration From Central Asia, Central Asia-Caucasus Institute Analyst, 02/11/2009, http://www.cacianalyst.org/?q=node/5035, cited 10/1/10

[55] Olimova, S., Bosc, I., Labour Migration from Tajikistan, International Organization for Migration in cooperation with Sharq Scientific Research Centre, July, 2003

migrants under the age of 25. The mean age is reported to be 35.4 years.[56] Reports state the percentage of those married is 68 percent[57], while other studies report that it may be closer to 80 percent.[56] These demographics match those of other global migrant labor groups, with the exception that Tajik labor migrants are more likely to have received a secondary level education than other groups. The majority of migrants seeking work in Russia go to large cities which offer the greatest opportunities for unskilled work. An estimated 31 percent of labor migrants work in construction, while 24 percent work in trade and sales.[58]

Despite their numbers and economic importance, labor migrants often face harsh and sometimes dangerous living and working conditions. Labor migrants living in foreign cities face discrimination, harassment, and exploitation from host nationals.[59] They also experience isolation and alienation. While Tajik workers are better educated in comparison to other global migrant groups, the disruption of Tajik educational structures during the civil war has often limited workers' educational opportunities. With the

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[56] Lianos,T.,Pseiridis, A., On the occupational choices of return migrants, Entrepreneurship & Regional Development, Vol. 21, No. 2,155–181, March, 2009

[57] Abdurazakova, D., Social Impact of International Migration and Remittances in Central Asia, United Nations Economic and Social Commission for Asia and the Pacific, Expert Group Meeting on Strengthening Capacities for Migration Management in Central Asia, 2010

[58] Мигранты в социокультурном пространстве региона, Институт социологии ПАН Москва, 2009, [Migrants in Sociocultural Space Region, PAN Moscow, 2009]

[59] Human Rights Watch, Эксплуатация трудовых мигрантов в российском строительном секторе [Are You Happy to Cheat Us? Exploitation of Migrant Construction Workers in Russia] http://www.hrw.org/ru/reports/2009/02/09-0, cited 10/18/10

collapse of the USSR and the replacement of Russian with Tajik as the official national language, public schools in Tajikistan discontinued teaching Russian to youth. The civil war during the 1990s as well disrupted educational systems. The consequences of this are workers inability to communicate effectively and utilize acquired work skills when living in an alien environment.

In addition to a myriad of issues, Tajiks face a lack of medical support while in Russia, and labor migrants are at increased susceptibility to health problems.[60] Many return to their home countries with far worse health than when they departed, a result of harsh living and working conditions.[61] Globally, migrants are at increased risk of contracting communicable diseases due to lack of health care services and poor living and working conditions. Rates of tuberculosis and sexually transmitted diseases are higher amongst labor migrants in South Africa than in the general population.[62] The public infrastructures of sending countries are often ill equipped to handle migrants who

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[60] Hansen, E., Donohoe, M., Health Issues of Migrant and Seasonal Farm Workers, Journal of Health Care for the Poor and Underserved, Vol. 14, No. 2, 2003

[61] Marat, E., Moldobaeva, B., Labor Migration in Central Asia: Implications of the Global Economic Crisis, Central Asia-Caucasus Institute & Silk Road Studies Program, p. 32, May, 2009

[62] Packard, R., Coetzee, D., White plague: black labour revisited: TB and the mining industry. In: Crush, J. and James, W. (Eds) Crossing boundaries: mine migrancy in a democratic South Africa. Creda, Cape Town, pp. 101-115, 1995

return home. The Tajik public health system is inadequately prepared to address rising rates of HIV/AIDS among returning labor migrants.[63]

To complicate living and working conditions is a lack of legal registration for a majority of Tajik workers in Russia. Ninety percent of labor migrants in Russia are estimated to be unregistered.[64] Russian government laws and policies pertaining to migration and employment for foreigners are generally complex and have changed frequently in recent years. The application is cumbersome and expensive for migrants. All foreigners arriving in Russia for a stay of more than 90 days must register with the Federal Migration Service within three business days of their arrival in Russia. Migrants must apply for a work permit.[65] A long term work permit requires medical documents, including tests for HIV status and tuberculosis. If a migrant is caught having failed to register and submit these documents, steep fines will be incurred. If a migrant is found to be positive for HIV or tuberculosis during examinations for health documents, he/she will be deported.

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[63] UNDP, ВИЧ/СПИД и человеческое развитие в Центральной и Восточной Европе и в Содружестве Независимых Государств, Глава I, 2004, http://europeandcis.undp.org/hiv/files/Kap.%201%20RUS.pdf, [UNDP report, Reversing the Epidemic, chap. 1, HIV/AIDS and human development in central and East Europe and in the cooperation of the independent states, 2004] cited 2/19/11

[64] Ivakhnyuk , I., Human Development Research Paper 2009/14, The Russian Migration Policy and its Impact on Human Development: The Historical Perspective, United Nations Development Programme Human Development Reports Research Paper, April, 2009

[65] Россия упростила процедуру трудоустройства иностранцев, Novosti, Lenta.ru. [Russia has simplified procedure of employment of foreigners, News, Lenta.ru], http://lenta.ru/news/2007/01/15/register/, cited 4/1/11

In 2007 the Russian government attempted to simplify the registration process. However, legislation included the expanding of a quota systems imposed to control the number of migrants. The quota numbers change, reflecting upon the state of the Russian economy. With the downturn of the global economy in 2008, the government ordered a 50 percent reduction of quota allowances.

Without official documentation, both Russian employers and labor migrants are forced to establish informal contracts. Over 65 percent of employment agreements among Tajik migrants in Russia are brokered without any written contract.[66] Among them, only one-third have legal employment authorization in Russia.

Unlike legal migrants and citizens, millions of unregistered workers are not able to lobby for better working conditions or social protection.[67] Their unregistered status puts them at greater risk of marginalization due to lack of legal representation or social and medical support.[68] They are also often at the mercy of employers. For example,

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[66] Nouraliyev, N., Проблему трудовых мигрантов из Таджикистана в Россию, [Challenges of Labor Migration from Tajikistan to Russia], 2005, http://www.ecsocman.edu.ru/images/pubs/2006/07/06/0000281728/009.NOURALIEV.pdf, cited on 1/13/09

[67] В 2009 году работы для гастарбайтеров не будет иметь? [Guest Workers Will Not Have Jobs in 2009?], www.pervouralska.net, Jan. 5, 2009

[68] Laruelle, M., 2007, Central Asian Labor Migrants in Russia: The "Diasporization" of the Central Asian States? Central Asia-Caucasus Institute & Silk Road Studies Program, China and Eurasia Forum Quarterly, Vol. 5, No. 3, pp. 101-119, 2007

more than half of unregistered Kyrgyz workers surveyed for a recent International Organization of Migration report claimed being forced to work overtime by employers.[69]

While Tajiks face a number of obstacles as labor migrants, they may have resources in larger cities with established Tajik communities. Tajik diaspora groups often help with negotiating issues between police and employers. These groups offer services such as mediating nonpayment of services between workers and employers. Sometimes diaspora groups work in association with non-governmental associations to redress issues. The organization 'Fund Tajikistan/Migration and Law' in Moscow is the most active and best known among labor migrants from Central Asia.[59]

[69] International Organization For Migration: Kyrgyzstan, Migration Initiatives Appeal, Трудящиеся-мигранты из Кыргызстана, 2009

HIV Risk Factors of Tajik Labor Migrants

The unregistered status of the majority of Tajiks working in Russia prevents most of them from accessing health and social services. This lack of access has been found to contribute to an increase of sexually transmitted infections, which independently increase susceptibility to HIV. Tajik labor migrants in Russia have been found to be at increased risk of HIV infection.[70] According to the 2008 MAP report, 56 percent of registered cases of HIV in Tajikistan were transnational labor migrants.[71] There are four primary factors that can be attributed to this increased vulnerability: patronage of sex workers; demographic make-up of Tajik labor migrants; low knowledge of HIV/AIDS risk; and marginalization that they face in Russia. The following analyzes these factors in greater detail.

Patronage of commercial sex workers: Studies have shown that large numbers of Tajik migrants are patronizing sex workers while working in Moscow and not using condoms.[2] A 2010 study by Amirkhanian about Central Asian labor migrants in St. Petersburg revealed that 60 percent of migrants reported sex with multiple partners or commercial partners – sex workers – during the previous three months.[72] The mean

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[70] Rafiev K., Mirzoev A., Abbasova, D., Lukyanov, N., Эпидемиологическая ситуация по ВИЧ / СПИД в Республике Таджикистан, эпидемиологии и инфекционных болезней, 1:13–5, 2006 [Epidemiological situation of HIV/AIDS in Republic of Tajikistan, Epidemiology and Infectious Diseases]

[71] AIDS in the Commonwealth of Independent States, 2008 MAP Report, http://unaids.ru/files/documents/en200.pdf, cited 10/11/10

[72] Amirkhanian, A., Kuznetsova, A., Kelly, J., DiFranceisco, W., Musatov, V., Avsukevich, N.,Chaika, N., McAuliffe, T., Male Labor Migrants in Russia: HIV Risk Behavior Levels, Contextual Factors, and Prevention Needs, Journal of Immigrant Minority Health, August, 2010

number of commercial partners in that time frame was 3.5. Labor migrants will sometimes hire one or two sex workers for an evening to provide sexual services for ten to 15 men.[2] Because of the small amount of money that labor migrants are paid, the women they hire are usually those who charge the lowest prices, and are of the lowest stratum of sex workers. They are usually Russian, having relocated from poorer rural regions. They too will be less likely to have access to health care services, and as a result will more likely be untreated for STDs. The national HIV/AIDS prevalence estimate for sex workers in 2007 was 15.6 percent, with rates again varying by location.[73]

This frequent patronage of sex workers by labor migrants is common globally. However, Tajik labor migrants in Russia are more vulnerable than many other global groups because of the current status of Russia and the nations of Central Asia as having the fastest growing rates of HIV infection in the world.[27] Between 2001 and 2007 the number of persons infected with HIV in Russia more than doubled, and has reached a generalized prevalence rate of 1.1 percent.[3] Other STDs which help facilitate the contraction of HIV are also on the rise.[74] While the government of Tajikistan reports low rates measuring 0.3 percent, the nation has experienced exponential increases in the

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[73] USAID: Russia, HIV/AIDS health Profile, Sept.,2010, http://www.usaid.gov/our_work/global_health/aids/Countries/eande/russia_profile.pdf, cited 10/6/10

[74] тихонова, л., общий обзор ситуации с инфекциями, передающихся половым путем. Анализ специальной ссылкой на врожденный с сифилисом в Российской Федерации, министерство здравоохранения Российская Федерация, Москва, 1999 [Tikhonova, L., An overview of the incidence of sexually transmitted diseases. The situation in the Russian Federation with special reference to congenital syphilis, Ministry of Health, Russian Federation, Moscow, 1999]

number of estimated infections.[3] UNAIDS and the Global Fund report that as of 2008 the estimated number of adults living with HIV or AIDS in Tajikistan was 10,000. [75] In 2001 this number was 2,500, indicating a four-fold increase within six years.

Low knowledge of HIV/AIDS: Another factor that exacerbates risk for Tajik labor migrants is low knowledge levels of HIV/AIDS among the general population. When compared with knowledge levels of neighboring Central Asian populations, Tajik citizens rank the lowest. While the 2006 UNICEF Multiple Indicator Cluster Surveys (MICS) reports performed in Uzbekistan and Kyrgyzstan found that households who had heard of HIV and AIDS to be ninety percent or more, the 2005 Tajik MICS found the number to be 42 percent.[40] Only 23 percent of women aged 15-19 had heard of AIDS. Surveys of Tajik teenagers also show low rates of knowledge. A 2006 Student Health Survey for Tajikistan sponsored by UNICEF and the WHO found that among 13-15 year old respondents, less than four percent correctly answered five questions about HIV transmission vectors.[76] Thus, while knowledge of the existence of HIV is low, knowledge about preventative measures is very low, especially among adolescents.

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[75] ЮНЭЙДС, Таджикистан[UNAIDS, Tajikistan factsheet], http://www.unaids.org/ru/dataanalysis/monitoringcountryprogress/2010progressreportssubmittedbycountries/file,33676,ru..pdf, cited 5/6/10

[76] World Health Organization EURO, CDC Atlanta, UNICEF Tajikistan Country Office: Global school based student health survey: Tajikistan country report, Tajikistan 2007

Low knowledge about HIV risk has also been found among Tajik migrants returning home.[77] This is confirmed by the Weine study of Tajik migrants in Moscow that found Tajiks had little or no knowledge of HIV risk they faced by patronizing sex workers.[2] Younger migrants in particular have little or no knowledge of HIV/AIDS. One interviewee stated, ‘‘I do not know. I did not think about it.’’ Another reported, ‘‘Most of us are very young. I am 20 years old. We need information.’’

Youth and gender as risk factors: The demographic make-up of Tajik labor migrants matches those of migrant populations worldwide, and this make-up – young and male - is found to be at the greatest risk of HIV infection. Of the HIV cases registered in Tajikistan in 2008, 85 percent were male, and 42 percent were among people 29 or younger.[71] These high rates among youth have been found in other Central Asian nations. In neighboring Uzbekistan 64 percent of the cumulative HIV cases have been among people aged 34 or younger[78], and in Kyrgyzstan 57 percent of all cases are in those younger than 30.[79]

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[77] Olimova, S., Kurbonova R., Behavioral survey among labour migrants and their families in Tajikistan. Presented at: UNAIDS First Eastern Europe and Central Asia AIDS Conference. Moscow,2006; Глобальный фонд, Таджикистан, http://portfolio.theglobalfund.org/Country/Index/TAJ?lang=ru [The Global Fund, Tajikistan], cited 5/3/11

[78] Giyassova, G., National program for HIV prevention in Republic of Uzbekistan, 2007–2011, International Conference on the HIV Epidemic in Central Asia and Neighbouring Countries, Bishkek, Kyrgyzstan, March 11–13, 2008

[79] Mamatov, M., Status of the HIV epidemic: infections and medical treatment of persons living with HIV in the Kyrgyz Republic. International Conference on the HIV Epidemic in Central Asia and Neighbouring Countries, Bishkek, Kyrgyzstan, March 11–13, 2008

A steep rise in migration levels has been observed among two age groups in Tajikistan, those between 20 – 29, and those between 40 – 49.[80] The younger group consists of a higher number of single men who are migrating to raise money in order to marry, build a house, and prepare to raise a family. The characteristics of this group put them at increased risk. Young males are sexually adventuresome. Loneliness and the inability to form mature female relationships may drive men to patronize sex workers. Young migrants who are removed from their environment are no longer answerable to traditional customs that bind them at home. Being outside of the social confines of home allows a freedom to practice behavior that would otherwise be unacceptable at home.

Marginalization: Migrants in Russia, the majority of who come from the southern Caususus and Central Asia, are at increased risk of marginalization due to ethnic and cultural differences. Since the collapse of the Soviet Union, Russia has experienced a rapid increase of xenophobia. In 1990, 52 percent of the Russian population condemned any expressions of ethnic phobias; by 2004, 68 percent reported negative attitudes towards ethnic immigrants.[81] A 2009 survey found that one out of four Muscovites holds negative feelings towards labor migrants.[82] Migrants report abuse by skinhead groups,

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[80] Olimova, S., Bosc, I., Labor migration from Tajikistan. Geneva: International Organization on Migration, 2003

[81] Mukomel', V., Миграционной политики России: постсоветском контексте, Institut sotsiologii, RAN, Moscow, 2005, [Migration politics in Russia: Post-Soviet Context, Institute of Sociology, RAN]

[82] Тюрканова, Е., трудовые мигранты в Москве: второе общество, Иммигранты в Москве, ре. Зайончковская, ж., Центр миграционных исследований, Три квадрата Издательский, 2009,

and harassment by Russian police.[83] In addition, Tajiks are at increased disadvantage for working in Russia because of a lack of skills, both employment and language. The lack of Russian language abilities, along with job related skills, put Tajik migrants at increased vulnerability for two reasons: a lack of language skills will create a communication barrier to social service outreach networks in Russia. These hindrances limit Tajik workers to the least skilled of job opportunities in Russia, primarily on construction sites.

Feelings of marginalization among individuals have been found to contribute to increased risky sexual behavior. Studies suggest that self efficacy – the ability to determine and control circumstances of one's surroundings – is a determinant of health related behavior. If an individual feels powerless to affect external conditions, he or she tends to become fatalistic, and behavior and actions tend to grow risky and reckless. One behavior associated with rates of self efficacy was condom use. [84] Low self efficacy has been found to discourage condom use. The dangerous working conditions of migrant miners in South Africa have also been linked to increased incidents of unprotected sex

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[Turkanova, E., Labor migrants in Moscow: the second society, Immigration in Moscow, Center for Migration Research, Three Squares Publishing, 2009]

[83] EurasiaNet.org, Центральная Азия: Трудовые Мигранты Постепенно Покидают Россию, Но Нападения На Национальной Почве Продолжаются [Central Asia: Migrant workers are gradually leaving Russia, but the attack on national soil continues] http://russian.eurasianet.org/departments/insight/articles/eav071009aru.shtml, cited 5/10/10

[84] Prieur, A., Norwegian gay men: reasons for the continued practice of unsafe sex. AIDS Education and Prevention 2(2), pp. 109-115, 1990

with commercial sex workers.[85] Similar attitudes of powerlessness as the result of unpleasant working and living conditions is noted in the Weine study of Tajik construction workers in Moscow.[2] The study quotes a Tajik worker as saying, ''Even, if labor migrants . . . worry about getting HIV, what can we do? We can not do much about it.''

Tajik Workers as a Bridging Group

The practice of circular migration as a mode of transmission in Africa is comparable to that of the FSU. Patterns of HIV transmission have been noted in Africa where predominantly male unemployed adolescents and adults leave their rural homes and families in search of work in urban centers.[86] Upon their return to home countries these workers have infected wives and girlfriends, allowing HIV to spread beyond the confines of the high risk group and to the general population.[17] As with African migrant populations, the majority of Tajik laborers working in Russia practice circular migration. The proximity of Russia to Central Asian nations allows labor migrants to travel frequently between home and work, much in the same way as African laborers between home and guest countries, and between urban and rural areas within their own countries. Tajik migrants who contract HIV while working in Russia may inadvertently spread the virus to wives and girlfriends when they periodically return home to Tajikistan. At least

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[85] Campbell, C., Migrancy, masculine identities and AIDS: the psychosocial context of HIV transmission on the South African gold mines. Social science & medicine, 45 (2). pp. 273-281, 1997

[86] Udoh, I., Mantell, J., Sandfort,T., Eighmy, M., 'Potential pathways to HIV/AIDS transmission in the Niger Delta of Nigeria: poverty , migration and commercial sex, AIDS Care, Vol. 21, No. 5, May, 2009

one study has reported an increase of HIV infections among wives of labor migrants after their return home.[87] As in other global regions such as Africa, Tajik workers serve as a 'bridge' population by providing channels for the spread of infection across geographical, cultural, and social boundaries.[16]

Despite the influence of seventy years of Soviet ideology which discouraged overt religious expression, conservative Islamic customs remained rooted in the culture and society of Central Asia, particularly in rural regions. While traditional Muslim norms highly discourage extramarital or multiple sexual relationships among women, Central Asian men are not held to the same social standard as those of women, and their practice of multiple sexual partnerships is less restricted. Recent demographic and health surveys in the Central Asian nation of Kazakhstan suggested that 10 percent of married men had extramarital sex with at least one woman during the preceding 12 months, increasing to 22 percent of those aged 20–24 years.[88] Men may spread HIV not only to wives, but also to girlfriends or, if in polygamous unions, to additional wives.

The results of recent studies measuring HIV infection among married couples within traditional cultures have put into question the degree of monogamy of wives. A study among traditional cultures of sub Saharan Africa has found high rates of HIV

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[87] Rafiev, K. , Mirzoev A. , Abbasova D. , Lukyanov N., Эпидемиологическая ситуация по ВИЧ / СПИД в Республике Таджикистан, эпидемиологии и инфекционных болезней, 1:13–5, 2006 [Epidemiological situation of HIV/AIDS in Republic of Tajikistan, Epidemiology and Infectious Diseases]

[88] Thorne, C., Ferencic, N., Malyuta, R., Mimica,J., Niemiec, T., Central Asia: hotspot in the worldwide HIV epidemic,www.thelancet.com/infection Vol 10, July, 2010

positive discordancy among couples, with wives in several settings being more likely to be HIV positive than their husbands.[89] While Tajik women, as with Central Asian women in general, are held to strict moral standards, the studies performed among traditional African cultures which are considered to be socially conservative may suggest that, despite high degrees of moral social norms, the degree of monogamy adhered to by Central Asian women should be taken into consideration. Despite conservative social and cultural norms, difficult economic conditions may result in an absence of migrant husbands, as well as a reliance by wives on 'survival sex'.

I. Male Tajik Migrants in Relation to Sex Workers and Wives

The nature of the HIV/AIDS epidemic in Russia and Central Asia is proof that the epidemic can take on unique characteristics in different global regions. While HIV was spread primarily through sexual contact in the Americas, Western Europe, and Africa, the transmission of the virus through the sharing of tainted needles was the primary transmitter in the nations of the FSU. However, in recent years statistics have shown that modes of transmission have changed in the region. During the past decade the number of new HIV cases among IV drug users in Russia has decreased from 96 percent in 2000 to 64 percent in 2007.[32] Despite this decrease, prevalence rates continue to rise, suggesting that heterosexual transmission has become a primary transmitter in the region. This can be confirmed by the fact that the epidemic in the FSU appears to be following global

[89] Bishop, M., Foreit, K., Seriodistant Couples in Sub-Saharan Africa: What Do Survey Data Tell Us? Washington DC: Futures Group, USAID, Health Policy Initiative, Feb., 2010

trends in which increasing numbers of females are becoming infected. As in South Africa, the prevalence rates of women in Russia and Central Asia are growing. In 2000, Russian women comprised 20.6 percent of new infections; in 2007, the proportion had grown to 44 percent.[31] Central Asia is experiencing similar trends. In Tajikistan estimates of infected women in 2001 were under 500; as of 2007 that number had risen to 2,100.[31] In neighboring Uzbekistan the estimated number of women with HIV rose from 10 percent in 2001 to 29 percent in 2007.[78]

The majority of females that Tajik male labor migrants come into sexual contact with are wives in Tajikistan and commercial sex workers in Russia. This involvement completes a chain of sexual partnering which results in the bridging of contact from at-risk partners in areas of high concentration – sex workers in Russian cities – to low risk partners in rural areas where HIV/AIDS infection is sparse – Tajik wives in rural regions of Tajikistan. While social and cultural characteristics and attitudes may be very different between sex workers in Russia and Central Asian housewives, research performed among these two groups suggests that the vulnerability to HIV exposure is similar. At the root of this vulnerability are cultural and social norms that favor male authority over females.

Gender Inequality

What is driving the increase of HIV infection among women? The most obvious reason is the biological context. Women are more susceptible to HIV infection through unprotected heterosexual intercourse because of the large amount of vaginal mucosal exposure to seminal fluids.[90] However, HIV infection differs from other infectious diseases such as tuberculosis and hepatitis, in that a variety of structural influences exacerbate HIV/AIDS infection in ways not found with other diseases.

A primary influence facing women who are directly involved with male labor migrants are factors resulting from gender inequality. Ideologies about sexual behavior may vary greatly by culture, but gender roles across a variety of groups assert that women are the passive acceptors of sex, whereas men are the controlling aggressors.[91] Some women implicitly associate sexuality with submissiveness.[92] Along with this is the belief that women should not be knowledgeable about sex, be sexually assertive, or have control over their own sexuality.[93]

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[90] Centers for Disease Control and Prevention, HIV/AIDS and Women, http://www.cdc.gov/hiv/topics/women/overview_partner.htm, cited 9/22/10

[91] Bowleg, L., Lucas, K., Tschann, J., "The ball was always in his court": An exploratory analysis of relationship scripts, sexual scripts, and condom use among African American women, Psychology of Women's Quarterly, Vol. 28, Issue 1., pp. 70-82, Mar., 2004

[92] Sanchez, D., Kiefer, A., Ybarra, O., Sexual submissiveness in women: Costs for sexual autonomy and arousal, Personal and Social Psychology Bulletin, Vol. 32, Issue 4, pp. 512-524, Apr., 2006

[93] Rosenthal, L., Levy, S., Understanding Women's Risk For HIV Infection: Using Social Cominancy Theory and the Four Bases of Gendered Power, Psychology of Women Quarterly, 34, pp. 21–35, 2010

Constructs that enforce gender imbalance can be found within the social norms of Central Asia. While the Soviets attempted to emancipate women from the strictures of Muslim influenced traditions, these traditions appear to have remained firmly rooted in Central Asian culture and society. [94] Some studies report that gender imbalance has increased in Central Asian nations since the collapse of the USSR.[95] A study of Uzbek women by Human Rights Watch reports an increased social pressure to marry earlier and to adhere to traditional customs of the region, such as familial duties and increased dependence on husbands.[39] This gender inequality affects not only the wives of Central Asian labor migrants but other female sexual partners as well, including commercial sex workers. While Russian cultural and social values allow women a certain amount of flexibility when negotiating condom use with male partners in comparison with Central Asian values, the nature of commercial sex work is likely to result in some forfeiting of power to the sex client.[96]

When analyzing theoretical constructs that address male-female relations in environments where traditional constructs are maintained such as in Africa or Central

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[94] Akiner, S., Between tradition and modernity: The dilemma facing contemporary Central Asian women, Post-Soviet women: Fom the Baltic to Central Asia, pp. 261-304, Ed. Buckley, M., Cambridge University Press, 1997

[95] Alimova, D., Решения женские вопросы в Узбекистане 1917-41, Tashkent, Uz:Fan, [Decisions of Women's Questions 1917-41],1987

[96] Todd, C., Alibayeva, G., Khakimov, M., Sanchez, J., Bautista, C., Earhart, K., Prevalence and Correlates of Condom Use and HIV Testing Among Female Sex Workers in Tashkent, Uzbekistan: Implications for HIV Transmission, AIDS Behavior, 11, pp.435–442, 2007

Asia, we can see that females as socially and culturally diverse as Central Asian rural housewives and sex workers in urban Russia are subjected to similar treatment by males.

HIV and Connell's Theory of Gender and Power

Robert Connell's *Theory of Gender and Power* analyzes gender inequality, and states that male-female relationships are characterized by three structures: the sexual division of labor; the sexual division of power; and the structure of cathexis, or social partnerships.[97] The three social structures exist at societal and institutional levels, and are maintained within institutions through social mechanisms such as cultural and societal forces that encourage gender inequality. Wingood and DiClemente adapted Connell's theory to argue that women's vulnerability to HIV is heightened by behavioral and social risk factors.[98] When studying female groups sexually involved with male Tajik migrants, the theory and its application give an understanding of how various structures can increase women's susceptibility as a result of gender inequities between men and women.

Sexual Division of Labor: According to Wingood and DiClemente's adaptation, economic forces are able to influence HIV exposure. When individuals experience economic constraints, they are forced to make compromising decisions to survive.

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[97] Connell, R., Gender and Power: Society, the Person, and Sexual Politics, Stanford University Press, 1987

[98] Wingood, G., DiClemente, R., Application of the Theory of Gender and Power to Examine HIV-Related Exposures, Risk Factors,and Effective Interventions for Women, Health Education Behavior, 27: 539, 2000

Because of gender constructs, women tend to be more vulnerable than men. This is evident with women who rely on exchange of sex for money or gifts to survive. A 2000 report from the United Nations Education, Scientific and Cultural Organization (UNESCO) found that 26 million jobs in the FSU vanished in the decade after 1989, with more than half—14 million—being women's jobs.[99] Worsening economic conditions in the nations of the former USSR have resulted in an increase of the sex trade population.

In general, women experiencing economic adversities may become more vulnerable to HIV exposure by relying on the commercial sex trade. In a survey of female sex workers in India, 80 percent reported having some type of debt at the time, thus underscoring their high levels of economic insecurity.[100] The sex trade involves working in a low control environment, where financial bargaining can influence condom use. Sex workers in sub Saharan Africa often report making more money for sex trades when no condom is used.[101] This is consistent with an existing study among sex workers in Thailand that found a link between debt owed by a sex worker and HIV infection.[100] Sex workers who reported debt were more likely to indicate greater exposure to sources of HIV risk via unprotected sex with occasional clients. In the economically unstable

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[99] UNESCO (2000). UNESCO Courier, February 2000, Issue 14, http://www.unesco.org, cited 12/2/10

[100] Reed, E., Gupta, J., Biradavolu, M., Devireddy, V., M. Blankenship, K., The Context of Economic Insecurity and Its Relation to Violence and Risk Factors for HIV Among Female Sex Workers in Andhra Pradesh, India Public Health Reports, Supplement 4, Vol. 125, p. 8, 2010

[101] Ntumbanzondo, M., et al, Unprotected intercourse for extra money among commercial sex workers in Kinshasa, Democratic Republic of Congo, AIDS Care,18:777-85, 2006

environment of the former USSR, women who are forced into the commercial sex trade have to make similar decisions concerning risky sexual behavior. A study of commercial sex workers in Tashkent, Uzbekistan attributed a rise of the number of sex workers to poor economic conditions and rising unemployment.[102]

Sex workers are not the only population at increased exposure risk as a result of economic adversity. While it is most evident in the case of sex workers, Tajik housewives are at risk as well. The economic instability of many FSU nations that has led to an increase of commercial sex workers in the region has also increased financial pressures on families. This coupled with the re-emergence of conservative values in Central Asia places many housewives in a subservient position in which they are solely dependent on their husbands. In Uzbekistan women report an increase in societal pressure for wives to not work and remain at home, and assume sole responsibility for household and childcare duties.[94] This has an effect on family incomes, especially in Tajikistan where the economy is unstable. This financial dependence on husbands may give wives little agency or leverage for negotiating condom use.

Sexual Division of Power: In addition to economic submission creating vulnerability, Wingood and DiClemente apply Connell's theory to illustrate how unequal gender power structures can contribute to HIV vulnerability through neglect and intimidation. While it can take the more egregious form of physical intimidation and violence, it can manifest

[102] Aral, S., Lawrence, J., Tikhonova, L., Safarova, E., The Social Organization of Commercial Sex Work in Moscow, Russia, Sexually Transmitted Diseases, Jan., 2003

itself in more subtle forms among social and political structures whereby females are prevented access to awareness and education opportunities. These structures often prevent young women from attending school or working outside of the home where they can receive health care information.

Physical violence towards women has been routinely reported in Russia and Central Asia. Commercial sex workers are especially vulnerable. Studies of countries in Central Asia and Europe have estimated a prevalence of physical and sexual violence of between 40 and 70 percent among sex workers over a one year period.[103] Particularly where sex work is criminalized and police are not motivated to protect sex workers, violence and threats of violence can be common in the daily life of a sex worker. This may include verbal harassment, physical assault, and rape. Studies support the observation that when violence against sex workers is pervasive and largely unaddressed, sex workers are forced to prioritize the immediate threat or fear of violence over attempts to insist on condom use with clients.[44] This puts sex workers at increased risk of HIV infection. Violence against sex workers includes police abuse as well. In a 2009 survey of sex workers in Eastern Europe and Central Asia, 42 percent reported physical abuse by police, and 37 percent reported having been assaulted sexually by police.[43]

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[103] Open Society Institute, Sex Workers Action Network. Arrest the violence: human rights abuses against sex workers in Central and Eastern Europe and Central Asia. http://www.soros.org/initiatives/health/focus/sharp/articles_publications /publications/human-rights-violations-20091217/arrest-violence-20091217, cited 7/12/10

Tajik wives also report partner abuse and harassment. Traditional beliefs concerning gender attitudes can conflict with safer sex negotiation. In Muslim societies of Africa the suggestion of condom use by the wife can imply infidelity on the husband's behalf, and may result in physical abuse.[104] Physical abuse against wives has been reported concerning discussion of the subject.[105] Abusive men are more likely to engage in high-risk behavior, including having multiple partners, placing themselves and their partners at increased risk of HIV.[106] One study of HIV infection among women in South Africa shows that abusive men are more likely to be HIV positive than those who are not.[103] The study suggests a connection between partner violence with lack of condom use, with the association of partner violence and attempted condom negotiation.

Along with physical violence, gender inequality can manifest itself among social and political structures whereby females are prevented access to awareness and education opportunities. Corollaries have been drawn between education levels and HIV risk. A 2007 study performed in Uganda found that each additional year of education was found to lower the risk of being HIV positive significantly among 18–29-year-old women.[107]

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[104] Beckmann , N., Pleasure and danger: Muslim views on sex and gender in Zanzibar, Culture, Health, and Sexuality, Vol. 12, No. 6, pp. 619-632, Aug., 2010

[105] Dunkle, K., et al., Gender-based violence, relationship power, and risk of HIV infection in women attending antenatal clinics in South Africa. Lancet, 363, pp. 1415–1421, 2004

[106] Garcia-Moreno C, Watts, C. , Violence against women: Its importance for HIV/AIDS Prevention, AIDS 24 (3):S253-265, 2002

[107] Gillespie, S., Kadiyalab , S., Greener, R., Is poverty or wealth driving HIV transmission? AIDS, 21 (suppl 7):S5–S16, 2007

In Central Asia knowledge levels reveal disparities of awareness of sexual health between males and females. Little information exists which measures awareness among Tajik men and women. The 2007 UNICEF Global School-Based Health Survey conducted in Tajikistan found disparities of HIV knowledge between adolescent boys and girls.[108] Thirty percent of boys knew that condoms could protect against infection, compared with 23 percent of girls. Other discrepancies existed of HIV/AIDS awareness between young males and females. The Uzbek 2002 Health Survey showed disparities in knowledge between males and females. When asked about knowledge of AIDS, 90 percent of Uzbek women reported affirmatively compared to 95 percent of men. Knowledge levels of prevention measures were more pronounced. Twenty-seven percent of men knew that condoms reduced the risk of HIV contraction, compared to 13 percent of women. Sixty-two percent of men knew where to acquire condoms, while only 40 percent of women knew this.

Social Relationships: In evaluating HIV vulnerability of women, Wingood and DiClemente apply Connell's theory to describe the influential factors of social arrangements such as marriage, family, and cultural norms. Their prevention model relates not only to practices found within these structures, but the attitudes and opinions that these structures foster.

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[108] UNICEF Global School-Based Health Survey, Tajikistan, 2007

In Tajikistan, as with other Central Asian nations, local customs and adherence to Islam are closely linked.[109] In the conservative tradition of Tajik culture, female sexuality is the center point of moral respectability. The wife's honor reflects not only her character but that of her husband and family as well.[110] Tajik women face strict moral and social codes. In cultures similar to those of Tajikistan virginity is highly valued and marriages are often arranged. The 2010 Beckmann study of Muslim gender customs in Zanzibar reported that the bride is expected not to know anything about sex, and to be frightened of her wedding night.[104]

As mentioned earlier, gender relations in Central Asia allow men to be held to a different standard of social norms than women. This applies to expectations of monogamy in marriage. In the Muslim regions of sub Saharan Africa and Central Asia, concurrent relationships in the form of polygamy have been cited as a possible contributor to rising HIV rates.[110] While the practice of polygamy is illegal in Tajikistan, the habit of a husband acquiring a 'second' or 'third' wife is common in the region. According to the Central Asian news website Fergana.ru an estimated 10 percent of Tajik

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[109] Akbarzadeh, S., Islam, Culture and nationalism: the post-Soviet experience of Turkmenistan, Uzbekistan and Tajikistan, Rethinking Central Asia: Non-Eurocentric studies in history, social structure and identity, ed. White, P., Stewart Logan, W, pp. 153-74, 1997

[110] Smolak, A., Contextual factors influencing HIV risk behaviour in Central Asia, Culture, Health & Sexuality, March 18, 2010

men practice polygamy.[111] This suggests that concurrent sexual relationships are widely practiced in the country.

The nature of concurrent relationships presents a conundrum for epidemiologists. Studies have found sexual practices in these relationships which would appear to discourage the spread of HIV. Studies of African men living in nations of high prevalence rates involved in multiple sexual relationships tended to have fewer partners when compared to men in other global regions with lower prevalence rates.[112] Additionally, concurrent relationships tend to be longer in duration, thus limiting the spread of infection. Despite these inhibitors, the practice of simultaneous multiple long term sexual relationships has been shown to facilitate the spread of HIV.[113] The high prevalence rates in sub Saharan Africa has been attributed to the level of concurrent partnerships which is much higher than in other regions of the world.[114] The reason for the high rates of infection is attributed to low condom use and the high prevalence of other STIs. Condom use among long term partners tends to be low, and this allows the

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[111] Ферганская Новости Информационное агентство [Fergana News Information Service] http://enews.ferghana.ru/article.php?id=2656, cited 11/1/10

[112] Morris, M., A comparative study of concurrent sexual partnerships in the United States, Thailand and Uganda. American Sociology Association Annual Meeting Published Abstracts, Anaheim, California, Aug. 18–21, session 409, 2002

[113] Lurie, M. , et. al The Impact of Migration on HIV-1 Transmission in South Africa - A Study of Migrant and Nonmigrant Men and Their Partners, Sexually Transmitted Diseases, Vol. 30, Issue: 2 pp. 149-156, 2005

[114] Halperin, D., Epstein, H., Concurrent sexual partnerships help to explain Africa's high HIV prevalence: implications for prevention. Lancet, 364, pp. 4–6, 2004

transmission of the virus between sexual partners, despite the low number of partners and the length of the partnerships.

As in Africa, low rates of condom use have been found in Central Asia. Results of UNICEF MICS reports for Tajikistan, Uzbekistan, and Kyrgyzstan confirm that condom use within long term relationships is reported to be very low.

Because of the nature of low condom use among partners involved in long term multiple relationships, marriage which is often assumed to ensure monogamy, does not provide assurance of prevention. Data from around the world suggest that married women's greatest risk of contracting HIV is through sexual intercourse with their husbands.[21] Other studies performed in Uganda propose that long term relationship increases a wife's risk of infection.[22]

The Intersection of Labor Migrants and Sex Workers

While there are wide societal and cultural differences between Tajik labor migrants and sex workers in Russia, both groups share many similarities. Both groups are prone to greater risk of HIV infection in comparison with the general population. Both groups also experience stigma and discrimination within Russia. While HIV/AIDS and stigma and discrimination are issues that are commonly interlinked, it is worthwhile examining the reasons why labor migrants and labor migrants are similarly at risk of HIV infection.

The growing unemployment and declining wages that motivate Tajik men to seek work in Russia also drive many women to pursue the sex trade. Women lacking the ability to find employment may rely on exchanging sexual favors for money or gifts. Studies have analyzed sexual relationships using social exchange theory, which postulates that when women's resources are limited, sex becomes a resource that has exchange value, giving power to the men who have the resources that women need.[115] This becomes particularly true during times of poor economic conditions, and lack of employment opportunities impels women to make sexually risky choices. As of 2005 there were an estimated 150,000 to 300,000 sex workers in Russia.[32]

As with labor migrants, sex workers work in an environment of quasi-legal status. The sex trade in Russia functions in a gray area, with the trade having neither a legal nor

[115] Baumeister, R., Vohs, K., Sexual economics: Sex as female resource for social exchange in heterosexual interactions, Personality and Social Psychology Review, Vol. 8, Issue 4, pp. 339-363, 2004

illegal status. Sex workers cannot be required to undergo regular health screenings because they are not legally recognized as sex workers. However, they cannot be arrested or punished for engaging in sex work, because sex work is not legally sanctioned. As a result of these undocumented states, both groups tend to be arrested for lack of documentation, including residency papers. Both report harassment from police in the form of bribes and physical abuse.

Both groups mutually benefit from each other. Labor migrants receive sexual recreation, while sex workers receive payment. The large influx of male labor migrants into Russian cities creates considerable demand for sex services.[102] Concurrently, young women who cannot find employment in their places of residence are attracted to perceived employment opportunities in Russian cities, resulting in an influx of young women. A portion of this influx enters into the sex trade.

Intersection of Other High-Risk Groups

While the intersection of labor migrants and sex workers increases the risk of infection of labor migrants, the intersection of IV drug users with sex workers contributes to rising infection rates among sex workers.

With the collapse of the Soviet Union and an opening of transnational trade in the FSU, heroin trafficking from Afghanistan to Russia has risen quickly. The result of this has been a rise in heroin use. The estimated number of drug users in 2004 ranged

between one to four million.[116] Studies have shown an intersection between IV drug users and sex workers. In Russia more than thirty percent of sex workers have reported IV injection drug use.[117] The cross-over of these at-risk groups provides opportunities for HIV infection among these groups, as IV drug using women will rely on the sex trade to support their habit. The number of those infected varies. Different sources report various numbers of sex workers infected in Russia, ranging between six percent[32] and 16 percent.[118]

As noted above, the decreasing number of infection among IV drug users from 96 percent to 64 percent between 2000 and 2007 is evidence that there is a shift occurring in the HIV epidemic in the FSU. The fact that rates continue to grow, and that increasing numbers of women are becoming infected suggests that heterosexual transmission is taking the place of infected needle sharing as a transmitter cause. The growing population of labor migrants in Russia interacting with sex workers suggests that this intersection is contributing to a change in the epidemic in the FSU.

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[116] Human Rights Watch, ВИЧ/СПИД и нарушения прав человека в Российской Федерации [Lessons Not Learned: Human Rights Abuses and HIV/AIDS in the Russian Federation], http://www.hrw.org/ru/reports/2004/04/06-0, cited 9/13/2010

[117] XVIII Международная конференция по вопросам ВИЧ / СПИДа и ВИЧ в Восточной Европе и Центральной Азии Института демографии государственного университета [XVIII International conference for questions on HIV/AIDS and HIV in Eastern Europe and Central Asia, Institute of demography state university],http://demoscope.ru/weekly/2010/0429/reprod2.php, cited 3/18/11

[118] USAID: Russia, HIV/AIDS Health Profile, Sept., 2010, http://www.usaid.gov/our_work/global_health/aids/Countries/eande/russia_profile.pdf, cited 10/6/10

Condom Usage

In the FSU the male condom is an under-utilized means of contraception and STI protection. Little data exist concerning condom use during the Soviet period.[119] The IUD and abortion were primary methods of contraception in the Soviet Union, and IUDs remain so in much of Central Asia.[120] In the 2002 Uzbek Health Survey, 73 percent of married Uzbek women said that they had ever used an IUD, while only 14 percent of married women had ever used a condom.[121] The wide-spread use of the IUD may have been influenced by the practice of international health foundations working in Central Asia during the 1990s to emphasize distribution of IUDs for family planning purposes, and less on condoms.[122]

While information measuring condom use in Central Asia is scarce, data from the few surveys performed confirm low usage. A series of MICS reports have been conducted amongst Central Asian nations, and these reports measure knowledge of health and gender issues amongst women.[40] The information gathered from a cross-sampling of

[119] Popov, A., Visser, A., Ketting, E., Contraceptive Knowledge, Attitudes, and Practice in Russia During the 1980s, Studies in Family Planning, Vol. 24, Issue 4, pp. 227-235, July-Aug., 1993

[120] Barrett, J., Buckley, C., Constrained Contraceptive Choice: IUD Prevalence in Uzbekistan, International Family Planning Perspectives, 2007, 33(2):50–57, Vol. 33, Number 2, June, 2007

[121] Sullivan, J., Kamilov, A., Contraception, in: Analytical and Information Center, Uzbekistan Ministry of Health, State Department of Statistics, Uzbekistan Ministry of Macroeconomics and Statistics, and ORC Macro, Uzbekistan Health Examination Survey 2002, Calverton, MD, USA: Analytical and Information Center, State Department of Statistics and ORC Macro, 2004

[122] Buckley, C., Challenges to Integrating Sexual Health Issues into Reproductive Health Programs in Uzbekistan, Studies in Family Planning, Vol. 37, Issue 3, pp. 155-168, Sept., 2006

Central Asia's populations is able to suggest attitudes and knowledge of women in households from where labor migrants come.

In addition to MICS, sources from neighboring Central Asian nations with cultural and societal similarities can also help inform about attitudes. The 2002 Uzbek Ministry of Health Examination Survey gives insight into condom use as reported by both men and women.[42] The Survey provides important information concerning condom use among segments of the population considered at increased risk, such as men who solicited sex from commercial sex workers.

The Uzbek Health Ministry Health Survey and the MICS reports provide data that is useful in understanding condom use in two types of sexual relationships: marriage and co-habitating relationships; and sexual partnering outside of long-term relationships. This is particularly useful for understanding cultural and societal attitudes in the nations of Central Asia.

Surveys performed in Tajikistan found that condom use in long term relationships was low. For the 2005 Tajik MICS the percentage of married women aged 15-49 who are using condoms was 2.2 percent.[40] The 2006 Uzbek and Kyrgyz MICS 3 studies revealed that the percentage of condom use in this group was 2.1 percent and 5.8 percent respectively. The 2002 Uzbek health survey reported that condom use of women married or in a co-habitating relationship was 2 percent, while amongst men the figure was 0.8 percent.[42]

Data showed condom use of men outside of marriage to be higher. The 2002 Uzbek health survey stated that the level of condom use among men with the last nonmarital, noncohabiting partner was 39 percent.[42] Condom use amongst men patronizing sex workers was higher in comparison with married couples. The 2002 Uzbek Health survey reported that 3 percent of men who had ever had sex reported paying for sex within the past year, and the rate of condom use at last sexual encounter was 41 percent. A more recent study showed higher rates of condom use. The 2010 Amirkhanian study found that of the labor migrants in St. Petersburg who practiced sex with casual partners during the last three months, 66 percent reported unprotected sex.[72]

Rates of STIs as an Indicator of Condom Use

Recent epidemiological trends reflecting growing rates of sexually transmitted infections (STIs) in Central Asian nations and Russia suggest that condoms are generally under-utilized.[123] Gonorrhea and syphilis rates rose quickly in Russia between 1987 and 1997 but then began to drop. Despite these decreases, an increase in the number of herpes diagnoses began in 1999 and are worthy of note, considering that herpes infection is a co-factor in the acquisition of HIV-infection, and also because the HIV surveillance data show a dramatic escalation beginning at this same time.[124] Much of the increase of

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[123] Buckley, C., Barrett, J., Asminkin, Y., Reproductive and Sexual Health Among Young Adults in Uzbekistan, Studies in Family Planning, Vol. 35 Issue 1, pp. 1 – 14, Mar. 18, 2004

[124] Aral, S., Lawrence, J., Dyatlov, R., et al., Commercial sex work, drug use, and sexually transmitted infections in St. Petersburg, Russia,Social Science and Medicine, Vol. 60, Issue: 10 pp. 2181-2190, May, 2005

STIs has been linked to the sex trade. Studies in other world regions marked by widespread heterosexual transmission, show that risk for STIs tends to be very high among sex workers.[125]

[125] Djomand, G., et al. The epidemic of HIV/AIDS in Abidjan, Cote d'Ivoire: a review of data collected by Project RETRO-CI from 1987–1993, Journal of Acquired Immune Deficiency Syndrome Human Retrovirology, 10:358–365, 1995

Why is Condom Use So Low?

While actual rates of condom use between labor migrants and sex workers are not known, the Amirkhanian study reported high rates of unprotected sex between labor migrants and casual partners during the last three months.[72] Why is condom use among Tajiks so low? There may be a cultural aspect to the low use of condoms. In the traditional culture of Central Asia, religious values may prohibit the use of condoms.[126] Globally Muslim clerics have been reluctant to promote condom use as a means of HIV prevention, opting for abstinence promotion. As noted earlier, cultural customs also may limit the discussion of condom use between husband and wife.[104]

Another reason may be based on gender concepts. Some Central Asian men's attitudes appear to associate contraception as solely the woman's responsibility. In the Weine survey a Tajik laborer in Moscow stated the belief that the woman is responsible for contraceptive use and not men. The respondee noted, ''the prostitutes never have condoms with them.''[2] This echoes an opinion mentioned in a case study where a young Uzbek woman stated, "they (men) think that contraception is women's problem."[102]

Along with cultural and gender reasons, lack of condom use may be simply a historical non-reliance on its use. The lack of reliance of condoms for birth control in Russia and Central Asia may have resulted in a perception that the condom's primary use

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[126] Barbieri, M., Blum, A., Dolkigh, E., Ergashev, A., Nuptiality, fertility, use of contraception, and family policies in Uzbekistan." Population Studies 50(1), pp. 69–88, 1996

is for STI prevention. This may have created a stigmatization of its use for possible contraceptive purposes amongst married couples. A focus group interviewing Uzbek couples found that condom use is associated with disease and with extramarital affairs.[123]

One reason for lower rates of use among married couples is the habit of sex on a regular basis in a steady relationship and the type of contraceptive preferred. Coital frequency is often positively associated with preference for coital-independent contraceptive methods such as oral contraceptives or the IUD rather than coital-dependent solutions like condoms.[127]

Reasons for lack of condom use outside of long-term relationships were different. The Tajik migrants surveyed in the Weine study who patronize sex workers cited multiple different reasons as to their low usage.[2] One reason mentioned was the use of alcohol. Individuals who drink are more likely to have casual sex without condoms.[128] The practice of alcohol use prior to sex among both sex workers and their clients has a significant association with inconsistent condom use during paid as well as unpaid sex.[129] A migrant stated, ‘‘we drink vodka and want a girl. And when we are drunk we never use

[127] Dixon-Mueller, Ruth, The sexuality connection in reproductive health. Studies in Family Planning, 24(3), pp. 269–282, 1993

[128] Stanton, M., et al., Risky sex behaviour and substance use among young adults, Health Social Work, 24, pp.147–54, 1999

[129] Saggurti, N, et al., HIV risk behaviors among contracted and non-contracted male labor migrants in India: potential role of labor contractors and contractual systems in HIV prevention. AIDS,22(suppl 5):S1–10, 2008

condoms.''[2] The practice of imbibing alcohol in combination with patronizing sex workers is a common recreational practice with labor migrants not only in Russia but in other world regions.[130]

A Tajik migrant in Moscow expressed other opinions. ''I do not have time to go out and buy a condom. It is dangerous. The police might catch you.'' They stated that sex with a condom is not 'real sex'. ''A person has to feel that he is having sex, but with condom you do not feel anything.''[2]

Uzbek sex workers in a 2007 survey echoed some of the opinions they heard from their clients.[96] The principal reasons cited for lack of use were client dislike (77 percent), ''no reason to use them''(11 percent), and non-availability of condoms (4.5 percent).

Lack of condom use was attributed to a number of reasons based on inconvenience of purchase, alcohol use, regard of its provision as the responsibility of the female partner, and reduction of pleasure. The majority of respondents did not cite condom use for protection from STDs.

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[130] Organista. K., Balls Organista, P., Bola, J., Predictors of Condom Use in Mexican Labor migrants, American Journal of Community Psychology, Vol. 28, No. 2, 2000

Why Should Male Tajik Migrants be Targeted for HIV Prevention?

Research of trans-national population movement and the spread of HIV infection have found that the responsibility for safer sex promotion lay equally with female and male sexual partners. As found in migrant populations in sub Saharan Africa, male Tajik labor migrants serve a major role in contributing to the spread of HIV in Russia as well as in Tajikistan. Female sex partners of labor migrants serve vital roles as the originators of infection in host countries, and the recipients of infection in sending countries, and both female groups need to be held accountable, along with male partners. In comparison with at-risk female groups of commercial sex workers and the wives of male labor migrants, however, the males are in a greater position of power to affect change due to gender structures.

Much of the existing literature concerning promotion of safer sex measures has targeted women who are at increased risk of HIV infection. Essays and reports have emphasized the importance of educating women about the need to encourage their male partners to use condoms during sexual partnering.[23] The 2002 Uzbek Ministry of Health Survey states that, "Health education campaigns and materials should include messages designed to encourage women to be proactive in negotiating condom use with their sexual partners in order to protect their own health."[42] The emphasis of much of this literature echoes the sentiment that the female participant, and not the male, is responsible for providing and ensuring protection from HIV infection.

Many reports espouse the need for sex workers to encourage condom use amongst their male clients in order to reduce the transmission of HIV. A 2010 report studied an Armenian campaign that provided a two hour training session for sex workers.[131] The authors reported a substantial increase in consistent condom reported among sex workers and their clients in that country.

While such results are laudable, the effectiveness of HIV prevention campaigns must be evaluated in the context of the culture and society of the targeted populations. In order to address safer sex practices to reduce the transmission of HIV among male Tajik labor migrants in Russia, a number of complex issues must be addressed. The culture of Tajikistan is unique with its combination of conservative traditions and the influence of Russian, or 'European', social norms. An effective health education program must address gender, environmental, and societal constructs. The Wingood and DiClemente adaptation of Connell's theory of gender and power illustrates the complexity of gender inequality. Literature addressing the traditional society and culture, and deep-rooted gender issues of Muslim Central Asia report that approaches to issues of HIV/AIDS must

[131] Markosyan, K., Lang, D., Salazar, L., DiClemente, R., Hardin, J., Darbinyan, N., Joseph, J., Khurshudyan, M., A Randomized Controlled Trial of an HIV Prevention Intervention for Street-Based Female Sex Workers in Yerevan, Armenia: Preliminary Evidence of Efficacy, Springer Science+Business Media, LLC, April, 2010

undertake many deep-rooted beliefs and attitudes. Other sources question the effectiveness of earlier condom promotion attempts that targeted sex workers.[132]

A paradox exists about the role of condom use among Central Asian men. Attitudes in this report expressed the opinion that contraceptive devices, including condoms, are the responsibility of women sexual partners. However, unlike most other popular forms of contraception where the usage is dependent upon the woman partner, such as the IUD and the birth control pill, the condom requires men to be an active participant.

In order to reduce the spread of HIV infection amongst Tajik workers, and thus curb the transnational transmission to Tajikistan, the group that is the most able to address this is the male Tajik labor migrants themselves. The question that arises is not who should be held responsible, but which party possesses the authority to enact consistent long term safer sex behavior.

Addressing HIV Prevention with Tajik Labor Migrants

The Tajik government has acknowledged the need to address growing rates of HIV infection in its country. It has agreed to collaborate with the United Nations to meet Millennium Development Goals (MDGs), a major priority being to reverse the spread of

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[132] Basu, I., Jana, S., Rotheram-Borus, M., HIV prevention among sex workers in India, Journal of Acquired Immune Deficiency Syndromes 36, pp. 845–852, 2004

HIV/AIDS.[133] The Tajik government has identified the health care system as a key sector in meeting the MDGs. The government has taken measures to address its migrant labor force for health behavior promotion. In addition, the Dushanbe branch office of the International Office of Migration has opened a HIV/AIDS information center to educate labor migrants about the risk of HIV/AIDS.[134]

Health foundations and organizations have attempted to promote HIV/AIDS prevention and safer sex practices, but as noted earlier, many of these have been misdirected, as in the case of addressing populations who have little agency in promoting safer sex practices, such as women with their male sexual partners. Identifying and targeting appropriate populations to implement safer sex practices is necessary for promoting prevention. Equally important is implementing suitable and efficient measures that will encourage effective behavior modification among those appropriate populations.

Many efforts at developing awareness among at-risk groups have failed because of poor planning, ineffective implementation, and lack of recognition of societal traditions. The effectiveness of these established models have been called into question.[37] Many health behavior models were developed in western countries during the 1950s when wide scale disease eradication programs were being established. Public

[133] Цели Развития Тысячелетия: достижения в Таджикистане 2010 - 2015, [United Nations Development Assistance Framework for Tajikistan 2010-2015], 2010

[134] Региональный Обучающий Центр по проблемам миграции и ВИЧ, http://www.rec.tj/, [Regional Training Center for Migration and HIV Problem] cited 3/22/11

health programs were designed to inform populations of particular health hazards and conditions, and to encourage healthy lifestyles. However, many of these programs were designed for audiences of the developed western world, and remained limited in their scope for addressing ethnically and economically diverse populations.

The Health Belief Model was one of the first theoretical models that attempted to explain and predict health behavior by focusing on the attitudes of individuals. The model since then has become a standard for behavior modification programs, and has been adapted to address a variety of health issues, including the growing pandemic of HIV/AIDS. The Health Belief Model asserts that two groups of factors determine people's behavior: the perceived threat of the harmful health conditions under consideration; and expectations with regard to the barriers and benefits when performing actions which prevent or relieve harmful health conditions. Other social learning theories of behavior modification using fundamentals from the Health Belief Model have been developed to address behavior change.

A basis of the Health Belief Model and other social learning theories is that, in order to guarantee behavior modification, individuals must feel a sense of self-empowerment that they can positively affect their outcomes. People with high assurance in their capabilities approach difficult tasks as challenges to be mastered rather than as threats to be avoided. They approach threatening situations with assurance that they can exercise control over them.

A lack of self-efficacy in which individuals feel as if they have little control creates a phenomenon which encourages risky behavior. Lack of self-efficacy has found not only to create lack of self-empowerment, but also to increase risky behavior. This attitude has been expressed among South African miners and Tajik workers in Moscow who live and work in dangerous and unpleasant conditions.

Bandura has pointed out that despite feelings of lack of personal empowerment, general attributions of control may be less important than specific ones. Although an individual may feel little control over one's life in general, the individual may nevertheless believe that he or she has power over one's health. In the case of labor migrants working and living in foreign environments in which they have little control, they may still feel that they have empowerment over the health decisions they choose. The question is how to empower labor migrants who have little control over external factors surrounding them, with a sense of efficacy towards healthy behavior.

In the past models of behavior modification that emphasize the theory of self-efficacy as a foundation have been implemented among various populations in differing cultural and societal environments. However, these programs' ability to increase self-empowerment among individuals was found to be limited. This was the case with the South African labor migrants who continued practicing risky sexual behavior despite required viewing of HIV/AIDS awareness videos by their mining management.[85] While knowledge of HIV/AIDS existed among at-risk groups, reports suggest that lack of self-empowerment prevented the miners from taking precautions. Similar behavior was found

among Tajik workers in Moscow in which Weine reported a lack of self efficacy among the migrants to take action in protecting themselves despite their knowledge of risk.[2]

Theories such as the Health Belief Model correctly identify the need for self-efficacy; yet the effectiveness of these behavior modification remains restricted due to their western oriented, ethnocentric limitations. The major failing of conventional behavior modification models can be attributed to two factors: they do not address broader structures that influence personal behavior; and they take into account individual actions, instead of group social dynamics that shape behavior. While conventional social learning theories may be practical for populations of western developed societies where wide-scale poverty is at a minimum and the majority of populations maintain consistent static living environments, they may not be suitable for groups beyond the developed world. Heise and Elias argue that global AIDS prevention strategies of encouraging people to reduce their number of sexual partners, and promoting the widespread use of condoms are inadequate for meeting the protection needs of many of the world's women because these strategies do not address larger contexts such as poverty. [135] The effectiveness of the ABC model (Abstinence, Be Faithful, Condom Use) of HIV prevention has received mixed evaluations. The ABC strategy has been attributed to reducing prevalence rates in Thailand and Uganda.[136] However, many health experts

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[135] Heise, L., Elias, C., Transforming AIDS Prevention to Meet Women's Needs: a Focus on Developing Countries, Social Science & Medicine, Vol. 40, Issue: 7, pp. 931-943, April, 1995

[136] USAID, Phase I Report of the ABC Study: summary of HIV prevalence and sexual behavior findings. Available at:http://www.usaid.gov/our_work/global_health/aids/News/ph1abcjan04.pdf, cited 3/22/11

assert that the program's approaches are suited for individuals who face static conditions and unchanging geographic locations.[137] Mobile populations would not fit into this category.

Research clearly underscores the factors which place groups at increased risk of HIV/AIDS are those factors that are likely to increase fluctuating geographic, economic, and social conditions. Primary at-risk groups such as commercial sex workers and IV drug users usually do not experience stable economic conditions. Transnational labor migrants are at increased risk because geographic, social, and cultural conditions are constantly in flux. These at-risk groups do not meet the criteria whereby the Health Belief Model is applicable. These factors are not taken into account in the implementation of many conventional HIV/AIDS prevention strategies.[138]

In order to support the key foundations of self-efficacy found in health belief models, major influencers upon decision making processes which are rooted in social, economic, and culture norms need to be addressed. This is particularly true when considering transnational labor migrants who face a variety of unstable structural factors. The two major failings of existing behavior modification programs need to be addressed: the neglect of considering broader structural factors that influence personal behavior; and

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[137] Parker. R., Easton, D., Klein, C., Structural barriers and facilitators in HIV prevention: a review of international research, AIDS, 14:S22–S32, 2000

[138] Macdonald D., Notes on the Socioeconomic and cultural factors influencing the transmission of HIV in Botswana. *Social Science Medicine*, 42, pp. 1325–1333, 1996

the focus solely on the motivating aspects which persuade individual behavior, instead of on group social dynamics that shape behavior.

The Influence of Broader Factors upon Personal Behavior

The reasons that behavior intervention programs based on the Health Belief Model have been accused of ethnocentricity and limited scope can be found in their original design. The ethnocentric fundamentals of these health models emphasized individual actions that could be taken to reduce health risks. These recommended actions remained out of context of any factors that may constrain or shape individual behavior. Healthy behaviors were encouraged with a cognizant understanding that they would be self-beneficial; any social, cultural, gender, or economic contexts that may help influence an individual's decision making were absent.[139]

In recent years HIV prevention efforts have begun to recognize behavioral interventions that take into account wider structural influences. Studies by Paiva promote the understanding that vulnerability to HIV infection must recognize structural HIV influences beyond an individual's control, such as poverty and gender inequality.[140] Paiva argued that the concept of vulnerability transcends an individual approach to emphasize the structural HIV influences which go beyond an individual's cognizant decision. Studies by Coates and colleagues show in their review of individual behavior change strategies that the success of these interventions is substantially improved when

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[139] Parker, R., Gagnon, J., "Introduction: Conceiving Sexuality," in *Conceiving Sexuality: Approaches to Sex Research in a Postmodern World*, ed. R. Parker and J. Gagnon (New York: Routledge,), pp. 3–19, 1995

[140] Paiva, V., Beyond magical solutions: prevention of HIV and AIDS as a process of psychosocial emancipation. Divulgacao em Saude para Debate, 27, pp.192–203, 2003

HIV prevention addresses the broader structural factors that shape or constrain individual behavior.[141]

As noted earlier, gender structures are one of the factors that must also be considered. By not acknowledging risk factors faced by women in these contexts, the attempt to target females for promoting HIV prevention measures in certain societies and cultures will meet with limited success. In their application of Connell's theory of gender and power to HIV vulnerability, Wingood and DiClemente argue that health behavior models meet with limited success because they assume that the individual has total control over his or her behavior. Contextual factors, such as power differentials and gender roles, influence individual behavior, and heighten women's HIV risk. While targeting females at an individual level may appear a logical choice, the social, cultural, and economic dynamics inherent in patriarchal societies and cultures in which they live remain strong. The ability to affect safer sex behavior modification by expecting women to promote condom use with male partners is limited. This is particularly true of women in traditional societies such as Tajikistan.

Identifying male Tajik labor migrants as an appropriate target group for implementing effective and appropriate behavior modification is not enough. Behavior modification measures recommended by conventional health belief models remain limited due to a lack of any contextual basis that relate to Tajik male labor migrants. In

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[141] Coates, T., Richter, L., Caceres, C., Behavioural strategies to reduceHIV transmission: how to make them work better. Lancet, published online, DOI:10.1016/S0140-6736(08)60886-7, Aug. 6, 2008

order to address this population the scope of influences that shape their thinking and behavior needs to be examined and integrated into health behavior measures.

The Collective Versus the Individual

In addition, the Health Belief Model and the HIV/AIDS prevention programs based on the Model's key components concentrate on aspects of behavior that are fundamentally different from those of the nations where these models are being implemented. Conventional models have focused on aspects of individual decision-making processes without accounting for dynamics of group or collective influences. Such influences are fundamentally different between developed and developing societies. A key cultural difference between western developed societies and those of developing nations is the perception of collective and individual relations. Attitudes of Western European and North American societies tend to be more individualistic and self-supportive, while societies of developing nations found in Asia and Africa rely on community and family ties for social support. Peer influence is very important in the developing world when addressing behavior change, and highlights the difference in attitudes between social and individual values.[142] The process of social and collective decision making plays a vital role in many developing nations where there is a lack of formal economic, cultural, and social infrastructures. To make up for the lack of services

[142] Friedman, S., de Jong, W., Rossi D., Touz´G., Harm reduction theory: Users' culture, micro-social indigenous harm reduction, and the self-organization International Journal of Drug Policy 18, pp. 107–117, 2007

which in the developed world are provided by the state and the free market, the dependence upon social and family networks is vital, and the needs of the individual are less emphasized.

In Central Asia a recent study underscores the role social dynamics play in behavior modification.[143] A 2004 study by Friedman illustrated the importance of social relations within IV drug user social circles in Tajikistan and Kyrgyzstan. Drug use was found to be performed in a collective and relational manner in which cooperation among IV drug users as well as among their family and friends was important. This was very different from communities of IV drug users in America and Europe where behavior was more individualistic. The authors of the study concluded that behavior change modification – encouraging the use of clean syringes - must be predicated on social relations of the users. The authors advanced the notion of social networks as an alternative to the limits of the individual-behavioral intervention, and described how community support can reduce risky behavior.

While IV drug use may be different from risky sexual behavior, the study of IV drug use in Tajikistan and Kyrgyzstan provides an understanding of how negative behavior is conducted in social, versus individual, levels in its cultural and social contexts. This calls into question the convention that what is considered non-social behavior – whether it is IV drug use or risky behavior with commercial sex workers - is

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[143] Friedman, S. R., Maslow, C., Bolyard, M., Sandoval, M., Mateu-Gelabert, P., & Neaigus, A., Urging others to be healthy: "Intravention" by injection drug users as a community prevention goal, AIDS Education and Prevention, 16(3), pp. 250–263, 2004

performed separately and isolated from social networks. The study also suggests that peer and social networks serve such an important role within Tajik society that they include those behaviors which in the western developed world are considered beyond the scope of social realms. When examining the risky sexual behavior of Central Asian male labor migrants this behavior can be understood as belonging to peer or social circles, and thus a possibility exists for approaching this targeted at-risk population through these networks.

HIV/AIDS Prevention and Social Dynamics

The influences that labor migrants in foreign nations find beyond their control are many, such as control of their living and working environments, lack of health and legal support systems, and the possible threat of abuse by police, employers, and ultranationalists. The need for considering those influencing constructs outside the control of the individual are important. Equally important are the roles that social and peer dynamics perform for migrant populations, for the marginalization and alienation which this group experiences can inversely heighten the significance these dynamics serve. Tajik labor migrants must depend on the social support of fellow migrants to find accommodations and employment. When confronting HIV/AIDS prevention, the need for recognizing social dynamics is vital, for social networking is also associated with the sexual conduct of this population which can involve risky behavior. The Weine study reported that Tajik labor migrants frequented sex workers as a group, not on an individual basis, with ten to 15 men sharing one or two sex workers collectively.[2]

Findings by researchers have documented the influence of collective social behavior on safer sex practices. In a 1993 study, Fishbein, Middlestadt, and Trafimow document peer influences which they call ‘‘perceived social norms’’.[144] The authors report that discussion of condom use with friends and knowledge of safer sex practices among peers has a potent impact on decision making about safer sex. They conducted a survey on the Caribbean island of St. Lucia, and found that peer pressure played a large part in influencing behavior concerning condom use. The questionnaire used key components of health belief models to measure condom use: Cues to Action, Perceived Susceptibility, Perceived Severity, Perceived (Locus of) Control, Normative Pressure, and Condom Use Outcome Expectancies. Normative pressure - the perception of social pressure to perform a behavior - was overwhelmingly a big influencer for condom use. Questions evaluating normative pressures asked whether participants talked to their friends about using condoms, whether they thought their friends used condoms, and whether sexual partners had ever suggested using condoms. All three questions showed that those who answered yes to these three questions were more likely to have used condoms than were those who had not. Findings of peer influence encouraging condom use have also been documented among Mexican labor migrants.[130] These findings suggest that peer attitudes and relations are a big influencer upon behavior.

Peer Education

[144] Fishbein, M., Middlestadt, S.,Traflmow, D., Social Norms for Condom Use: Implications for HIV Prevention Interventions of a KABP Survey with Heterosexuals in the Eastern Caribbean, Advances in Consumer Research, Vol. 20, 1993

Efforts are being made in both Russia and Central Asia to educate Central Asian migrants about the risk of HIV infection.[145] In Sverdlovsk local health officials have started providing videos and brochures to Kyrygz labor migrants.[146] However, the sole use of education materials absent of any human interaction has shown to be limited in affecting behavior change, as witnessed with the South African migrant miners. The use of peer education in promoting HIV/AIDS awareness provides a means to use social networking to approach hard to reach populations such as target migrant communities.[147] Peer-based interaction in which informed individuals approach their friends and colleagues are promising because each is familiar with one another's specific risk issues and behaviors practiced, and speak the same language as their peer friends and colleagues. AIDS education by peers is thought to be effective because of the perceived trustworthiness of the information source and role modeling. Social network-level approaches can reduce risk behavior and strengthen safer sex peer norms, condom

[145] Asia-Plus, НПО Таджикистана научат правильно работать с группой риска по ВИЧ/СПИД, 3/15/11 [NGOs in Tajikistan will be taught correctly to work with at-risk group for HIV / AIDS] cited 4/5/11
http://news.tj/ru/news/npo-tadzhikistana-nauchat-pravilno-rabotat-s-gruppoi-riska-po-vichspid, cited 3/28/11

[146] Мигрант Фергана. Ру, Мигрантов из Кыргызстана просветили об опасности СПИДа **[**Migrants from Kyrgyzstan enlightened about the dangers of AIDS**]**, 9/8/10**,** http://migrant.ferghana.ru/uncategorized/migrantov-iz-kyirgyizstana-prosvetili-ob-opasnosti-spida.html, cited 4/5/10,

[147] Pulley, L., McAllister, A., Kay, L., O'Reilly, K., Prevention campaigns for hard-to-reach populations at risk for HIV infection: theory and implementation. Health Education Quarterly, 23, pp. 488-96, 1996

attitudes, intentions, and self-efficacy. Peer education has been also successful as a cost-effective means of health interventions performed in South Asia and Africa.[148]

In the Netherlands an HIV/AIDS peer education program targeting Muslim migrants was implemented in order to bridge the gap between general mass media campaigns and the language problems of immigrant groups.[149] The evaluation of the peer education outreach efforts revealed mixed responses. A discussion of sexual contacts with different partners, extramarital contacts and condom use turned out to be difficult in the Muslim cultures of Turks and Moroccans. Yet there were positive outcomes. The program confirmed the need for continuous and careful discussion within migrant groups of condom use in order to address the taboo in their cultures. More importantly, approximately 65-70 percent of the audience thought it important to have education on AIDS in their native language by a peer.

Social Networks in Tajik Society

While peer and social influence are important for affecting behavior, understanding the social networks that facilitate these influences is equally vital. To understand better these social networks, basic cultural foundations need to be studied. Two types of social networks are rooted in the cultural foundations of Central Asia, and particularly in Tajikistan: the informal network of extended family clans, or *avlod*; and

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[148] Hogan, D., Baltussen, R., Hayashi, C., Lauer, J., Salomon, J.: Cost effectiveness analysis of strategies to combat HIV/AIDS in developing countries. British Medical Journal, 331:1431-1437, 2005

[149] Kocken, P., Voorham, T., Brandsma, J., Swart, W., Effects of peer-led AIDS education aimed at Turkish and Moroccan male immigrants in The Netherlands - A randomised controlled evaluation study, European Journal of Public Health, Vol. 11, Issue 2, pp: 153-159, June, 2001

those of religious institutions. While the clan affiliation is necessary in providing support where other traditional civil society institutions have failed, religious institutions are rooted firmly within Tajik culture and provide spiritual and community support; eighty five percent of the Tajik population are Muslim.

An analysis of these two networks will give an understanding of influencers of personal behavior; in addition it will show how Tajiks depend upon peer influenced dynamics, rather than on individual-based reasoning. The importance of cultural and spiritual values of a community is noted in a 2004 declaration of Muslim and Christian leaders who acknowledged that HIV/AIDS prevention programs should be based on cultures of their communities and spiritual values.[150] These two networks of the clan and religious institutions will also help inform about how migrant Tajik laborers can be approached for addressing HIV/AIDS prevention measures.

The *Avlod*

In Central Asia, agencies of civil society are based on community and family, or clan. The neighborhood, or *mahalla*, is the place where religious and family values are instilled and group members look out for each other, collectively parenting their children, connecting friends and families to jobs, distributing funds to those in need, and submitting to the judgment of the elders.[151]

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[150] HIV, AIDS, and Islam, a Workshop Based on Compassion, Responsibility, and Justice, USAID, 2004
[151] Seiple, C., Uzbekistan: Civil Society in the Heartland, Foreign Policy Research Institute, p. 245, Spring, 2005

Such networks are more pronounced in Tajikistan. The significance of these social units are stronger in Tajikistan possibly due to the greater amount of social, political, and economic upheaval the country has faced, in comparison with neighboring Central Asian countries. The *avlod* is a social network that has existed in Tajik culture for generations. Unlike the official *mahalla*, the *avlod* is a traditional social institution of informal authority in Tajik society. During the Soviet era, the power of the *avlod* was much diminished. But with the collapse of a centralized authority, and in the absence of agencies of civil society networks, the *avlod* has filled a huge social need that serves many purposes - economic, cultural, ideological, and legal – at the local community level. It is speculated that there are more than twelve thousand *avlod* in Tajikistan, covering approximately 60-65 per cent of the population.[152] The strength and complexity for such grass-roots social institutions arose out of necessity. The collapse of the Soviet Union, followed by the civil war from 1992 to 1997 left Tajik society in ruins. The *avlod* filled the need for a civil society which the government could no longer provide. The role of *avlod* also stretches beyond the borders of Tajikistan to include diaspora groups living and working in other nations. Offices in major Russian cities provide a variety of support for diaspora populations of Tajiks, particularly labor migrants.

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[152] Yusufbekov, Y., Babajanov, R. and Kuntuvdiy, N., Civil Society Development in Tajikistan, Agha Khan Development Network, 2007

Unlike official state institutions, the informal grass-roots structure of the *avlod* works to its advantage. The *avlod* can work in a flexible and adaptable manner, unlike government foundations which can be stymied by bureaucratic practices. The role of the *avlod* as a social institution during structural, ideological and economic changes means that they play an important role in the management of social relations at the micro-level.

In the absence of traditional agencies of civil society, the *avlod* can provide a means in which HIV/AIDS education can be successfully communicated to male labor migrants. The cultural basis of the *avlod* can give promotion efforts legitimacy, and this is necessary for supporting communications of safer sex promotion at the local level. This provides a means in which men can be addressed in a culturally and socially appropriate manner that is suitable for Central Asian culture.

HIV Prevention and Religious Institutions of Tajikistan

Along with *avlod* structures, Islamic religious networks also offer social support to Tajik society. Islam is intrinsically tied with Tajik culture.[109] Despite seventy years of Soviet rule in which religious expression was controlled and discouraged, Muslim tradition remained a primary cornerstone of Tajik tradition. With the social, economic, and political turmoil that resulted from the break-up of the USSR, followed by six years of civil war, Islam has remained a foundation for traditions and customs. Perhaps because of the difficult times following the Soviet Union's collapse, adherence to *Sharia*

has experienced a resurgence.[153] This can be found among attitudes of Tajik youth. Islamic belief has grown popular with Tajik youth, and teenagers express a respect towards religious leaders. Many mullahs and imams enjoy high opinion and popularity, especially among younger people.[154]

Islam provides a major social need of communications among young people. Seventy percent of the Tajik population lives in rural villages where Internet and cell phone access is nonexistent, and there are few movie theaters or recreational centers where youth can gather. Since the collapse of the Soviet Union, mosques have opened throughout the country, and these serve a social need as places where youth can congregate to meet with friends.[155]

The Muslim clergy hold an important position in Tajik society. Religious leaders are able to talk to their congregants concerning a number of social issues from a place of authority and respect. Many Tajik imams take pride in having young people flock to

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[153] Jamestown Foundation, The, Resurgence of Islamic Radicalism in Tajikistan's Ferghana Valley, Publication: Terrorism Focus, Vol. 3 Issue: 15, April 20, 2006, http://www.jamestown.org/programs/gta/single/?tx_ttnews%5Btt_news%5D=739&tx_ttnews%5BbackPid%5D=239&no_cache=1, cited 3/12/11

[154] Eurasianet.org, Таджикские Муллы, Срочнослужащие Бороться ВИЧ/СПИД [Tajik Mullahs Enlisted To Battle HIV/AIDS], http://russian.eurasianet.org/resource/tajikistan/, Oct. 17, 2008, cited 10/12/10

[155] Radio Free Europe, Tajik Youth Look to Mosque for Outlet, http://www.rferl.org/content/tajikistan_poverty_extremism_islam/2242717.html, cited 2/22/11

their sermons. In rural areas, clerics are often fully trusted and their advice closely followed.

Conservative Attitudes

While religious networks may provide channels for disseminating information about HIV/AIDS prevention, the subject of HIV/AIDS prevention remains controversial among traditional Muslim societies. Conservative attitudes towards discussion of the topic remain strong among Muslim clergy. Sex outside of marriage is considered a sin. Topics of men having sex with men, and extramarital sex are unpopular among many conservative religious leaders. What is opposed is the kind of sex education offered in many schools, particularly where the methodology and content are perceived as contravening Islamic principles.[156] The use of condoms has been a particularly sensitive subject. Talking about condom use and safer sex is not an option for many clergy, who choose to promote faithfulness and abstinence. Many religious clerics believe that condom use should be allowed only within marriage, and its advocacy promotes sex outside of marriage. An imam of a Dushanbe mosque said that, in his opinion, discussing preventative methods when it comes to sex would mean approving sex outside marriage "as long as it is performed with condoms."[157]

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[156] Halstead, J., Muslims and Sex Education, Journal of Moral Education, Vol. 26, No. 3,317, 1997

[157] EurasiaNet.org, Tajik Mullahs enlisted in battle with HIV/AIDS, http://www.eurasianet.org/departments/insight/articles/pp101808.shtml, cited 2/13/11

Solutions

Despite conservative attitudes, in recent years many clerics have come to recognize that growing epidemics can potentially threaten their communities, and have started addressing the issue of HIV/AIDS prevention.[158] Several studies have shown that despite widespread discrimination and stigmatization by conservative religious leaders, religious tenets can be used to encourage HIV prevention.[159] A UNICEF 2003 report describes how religious leaders as respected representatives of the community can be used to spread information about safe sex practices.[160]

A large hurdle of safer sex promotion is the advocation of condom use by unmarried youth. However, a doctrinal possibility of overcoming objections exists, in that flexibility is allowed within the application of *Shariah* law, which provides for analysis of a problem and the flexibility in extraordinary circumstances with the application of the Koran and Hadiths.[161] This approach is choosing the lesser of two evils for the sake of preserving public health interests. This tactic has been accepted in other

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[158] Исламские лидеры Таджикистана учатся навыкам предотвращения распространения ВИЧ/СПИД [Islamic leaders in Tajikistan learn skills to prevent the spread of HIV/AIDS], http://www.regnum.ru./news/fd-abroad/tajik/medicine/1379683.html, cited 3/14/11

[159] Beit-Hellamahmi, B., The psychology of religious behavior, belief and experience, London: Routledge, 1997

[160] What religious leaders can do about AIDS, Action for Children and Young People, UNICEF, 2003

[161] Al-Hibri, Y.A. , Familky Planning and Islamic Jurisprudence: The religious consultation on population, reproductive health and ethics, http://www.relgiousconsultiation.org/family%20planningand %20islamicjurisprudence%20.htm, cited 10/30/10

Muslim societies facing increasing HIV prevalence rates. Religious leaders in Kenya were willing to support condom use provided the use did not conflict with Islamic teaching. Many Muslims are not against sexual education, but only if it is carried out in the context of Islamic values.[156]

In some African countries with large Muslim populations, religious clergy has acknowledged the need for HIV/AIDS prevention amongst their communities and taken a proactive approach. In 1990 Senegalese religious leaders agreed to make AIDS control a national priority in their country. HIV/AIDS prevention has become a regularly discussed topic in Friday services of Senegal's mosques. The result has been a decrease of prevalence rates to 1.2 percent in Senegal's general population, in contrast to the average AIDS rates of 25 percent in other African states.[162] In 1992 the Islamic Medical Association of Uganda designed an AIDS prevention program aimed at the nation's Muslim communities. Over 3,000 religious leaders were educated by trainers. Knowledge of the risks of HIV increased amongst the Muslim population and resulted in a decline of HIV/AIDS incidence among the Muslim communities from 18 percent to 6 percent.[163] Using doctrine from the Koran, clerics address sexual conduct, condom use, and stigma and discrimination of HIV infected people.

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[162] Meda, N., et al., Low and stable HIV infection rates in Senegal: Natural course of the epidemic or evidence for success of prevention? AIDS, 13(11), 1397–1405, 1999

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In Tajikistan, at the request of health officials, mullahs are being asked to actively take part in Tajikistan's campaign to combat the spread of HIV/AIDS. While conservative attitudes prevent many topics from being addressed, some clergy are willing to accept that commercial sex work, drugs, and sex outside of marriage exist in Tajikistan, and that ignoring these issues will not help the country's efforts to combat HIV/AIDS.

The Role of the Collective Among Tajik Labor migrants

The social and religious networks within Tajikistan reveal that there are avenues in which HIV/AIDS prevention can be disseminated among the population. The collective nature of Tajik society and culture also provides a means in which behavior modification can be approached. These opportunities also extend to Tajik labor migrants working beyond their nation's borders. The Tajik migrant experience in Russia has become a collective endeavor. Travel to and from Tajikistan and Russia is performed in groups in order to save expenses and to provide security for travelers. Travelers pool money to pay travel expenses and bribes often requested at border checkpoints. An estimated 65 percent of construction workers travel abroad in groups called brigades.[55] The *avlod* also plays a major role in the decision making and planning process for Tajiks who seek work abroad. The *avlod* decides where the migrant's immediate family will live in his absence, and distributes his responsibilities among fellow *avlod* members. In Russian cities *avlod* representatives provide informal support to Tajik diaspora

communities who choose to avoid official state institutions for fear of bribes and harassment.

Along with *avlod* services and religious functions, other social networks exist which can be utilized for HIV prevention efforts among labor migrants. The use of sports for the purpose of socialization provides a means of transcending cultural, social, and economic boundaries. The international non profit organization Mercy Corps utilizes the mass popularity of soccer to promote the organization's social causes among youth.[164] Currently Mercy Corps promotes the use of soccer leagues in Tajikistan, Uzbekistan, and Kyrgyzstan to defuse ethnic tensions. In sub Saharan Africa and the Middle East the organization promotes HIV prevention by using role models who young people trust, such as soccer players and coaches, to confirm information about HIV and AIDS and integrate it into their personal behavior. These programs can be adapted to address not only youth but labor migrants who have returned to Tajikistan.

[164] Mercy Corps, Using Sport to Teach AIDS Awareness in Sudan, posted April 23, 2007, http://www.mercycorps.org/topics/sports?page=3, cited 4/28/11

Conclusion

A number of issues contribute to the fact that the former Soviet Union is experiencing the fastest growing rates of HIV infection in the world. Economic, social, and political upheavals contribute to environments where infection can easily spread. Much of the current epidemic in Soviet Central Asia is similar to that which occurred throughout sub-Saharan Africa during the 1990s. The colonization by European powers, and an eventual collapse of those powers left these regions socially, politically, and economically vulnerable to conditions in which HIV/AIDS could spread unhindered. The HIV pandemic has also taught epidemiologists that regional epidemics have their own distinct natures. While unprotected sex provided a channel for the virus to spread throughout Africa and the western world, increasing IV drug use in the former Soviet Union helped HIV spread from drug users to the general population.

Despite differences of regional epidemics, the global pandemic shares similarities in that an inordinate amount of poor people and an increasing numbers of females are becoming infected. The populations at greatest risk are those that thrive on the margins of society – men who have sex with men, IV drug users, migrant populations, and commercial sex workers – and their social status makes them the hardest groups to reach for intervention. Among the at-risk groups, migrant populations may be the most significant, for they are the most likely to spread HIV from isolated high-risk groups to the general population.

While conventional behavior modification models attempt to address these populations, many of these programs are flawed in their design. The goal of these well intended intervention programs is to implement behavior modification measures among individuals. Yet the primary principles in which they are founded suffer the same shortcomings indicative of the cultural values that limit access to those at-risk populations outside of mainstream society. The campaigns that target developing nations often emphasize a need for women to be proactive in condom promotion with sex partners, while not acknowledging cultural gender inequalities that make this difficult. In the same respect, health behavior modification models which identify the need for self-efficacy are limited by ethnocentric views which do not addressing the numerous contexts of a foreign environment where these models are intended.

In order to successfully reduce increasing HIV rates among at-risk groups, health behavior models need to address local cultural and social attitudes. This has been proven possible in sub-Saharan African countries where aid organizations have worked with religious leaders to reach local communities. These efforts can be duplicated within communities of vulnerable countries such as Tajikistan to reach at-risk populations. Aid organizations can also employ the services of social networks for which are linked with many of these populations. Only by addressing the social, economic, cultural, and gender contexts in which a culture thrives can HIV prevention measures achieve success among local at-risk populations.

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