

Risk behavior among PLWHA receiving ARV treatment in Thailand

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Research on risk behavior among HIV-positive individuals has found that unsafe sexual practices may continue even among those who know their status.¹ In Thailand and elsewhere, studies that examine the determinants of risk behavior have attempted to identify factors that may be targeted effectively through well-designed interventions. Voluntary counseling and testing (VCT) is one such program that has been found to significantly reduce risk behavior.² Others include programs that address knowledge about HIV transmission and the progression of the disease; community attitudes towards PLWHA and HIV prevention; and behavioral skills for self-efficacy in condom use, sexual interactions and relationships.³

This paper reports the results of a survey of HIV-positive individuals currently receiving ARV treatment in a hospital setting in Thailand. The study was designed to evaluate the Global Fund project to enhance service systems on care, treatment and support. The objective of the project is to increase access to treatment, including community-based care and support, with an emphasis on empowering HIV positive persons to take charge of their own treatment, in 908 hospitals throughout Thailand. Besides receiving ARV treatment and monitoring of CD4 and viral load, the respondents in the study receive counseling about maintaining a healthy lifestyle and controlling risk behavior. The holistic care centers situated within these hospitals include counseling training, home visits by trained volunteers, and discussion forums to share experiences. The holistic centers also provide resource persons for educating group members, community members and youth in schools.

¹ Amirkhanian, Y.A., Kelly, J.A., and McAuliffe, T.L. 2003. Psychosocial needs, mental health, and HIV transmission risk behavior among people living with HIV/AIDS in St. Petersburg, Russia. *AIDS* 17:2367-2374; Crepaz, N. and Marks, G. 2002. Towards an understanding of sexual risk behavior in people living with HIV: a review of social, psychological and medical findings. *AIDS* 16:135-149; Bunnell, R. et al. 2008. HIV transmission risk behavior among HIV-infected adults in Uganda: results of a nationally representative survey. *AIDS* 22:617-624; Muller, O., Sarangbin, S., Ruxrungtham, K., Sittitrai, W., and Phanuphak, P. 1995. Sexual risk behaviour reduction associated with voluntary HIV counselling and testing in HIV infected patients in Thailand. *AIDS Care* 7:567-572. Luchters, S., Sarna, A., Geibel, S., Chersich, M., Munyao, P., Kaai, S., Mandaliya, K., Rutenberg, N. and Temmerman, M. 2007. Sexual risk behaviors of HIV-positive persons receiving ART in Mombasa, Kenya: Longitudinal study findings, *Horizons Research Summary*. Nairobi: Population Council.

² Weinhardt, L.S., Carey, M.P. Johnson, B.T. and Bickham, N.L. 1999. Effects of HIV counseling and testing on sexual risk behavior: A meta-analytic review of published research, 1985–1997. *American Journal of Public Health* 89 (9); The Voluntary HIV-1 Counseling and Testing Efficacy Study Group 2000. Efficacy of Voluntary HIV-1 Counseling and Testing in individuals and couples in Kenya, Tanzania, and Trinidad: a randomised trial. *The Lancet* 356:103-112. Allen, S., Meizen-Derr, J., Kautzman, M., Zulu, I., Trask, S., Fideli, U., Musonda, R., Kasolo, F., Gao, F., Haworth, A. 2003. Sexual behavior of HIV discordant couples after HIV counseling and testing. *AIDS* 17:733-740.

³ Samuels, F., Simbaya, J., Sarna, A., Geibel, S., Ndubani, P. and Kamwanga, J. 2008. Engaging communities in supporting HIV prevention and adherence to antiretroviral therapy in Zambia, *Horizons Research Summary*. Washington, DC: Population Council; Sarna, A. and Weiss, E.. Current research and good practice in HIV and AIDS treatment education. 2005. Paper prepared for the HIV and AIDS Treatment Education Technical Consultation, Paris, 22–23 November 2005; Cornman, D. et al. 2008. Clinic-Based Intervention Reduces Unprotected Sexual Behavior Among HIV-Infected Patients in KwaZulu-Natal, South Africa: Results of a Pilot Study. *Journal of Acquired Immune Deficiency Syndrome*.

The data to be used in the paper were collected through structured interviews of HIV positive persons aged 18 or over receiving ARV treatment from a hospital either with or without a holistic center. Multistage random sampling was used to select first hospitals and then patients. Altogether 16 provinces are represented in the sample of holistic center patients and 10 provinces in the sample of patients at hospitals without a holistic center. The first round of the survey collected in 2007 consists of N=588 individuals (N=293 from a hospital with a holistic center and N=295 without). A second round of interviews, also of approximately 600 individuals, is currently being conducted and will be included in the analysis to examine change over time. The survey included detailed information about social and psychological characteristics, CD4 levels, HIV status disclosure to partners, discrimination experiences, sexual behavior and risk practices.

The paper will present descriptive information on the sample of PLWHA receiving treatment, including their health status, household livelihood, their sexual partners, and their partners' HIV status. It will include multivariate analysis in the form of logistic regression models to investigate the determinants of risk behavior among PLWHAs receiving ARV treatment. This analysis will include an examination of the programmatic factors that may help to reduce risk behavior.

Some preliminary results from the sample of N=588 collected in 2007 are presented here. As seen in Table 1, males in the sample are much more likely to be single than females, while females have a high proportion that are widowed (40%). Slightly more than half of the males and slightly less than half of the females are currently married.

Table 1: Marital status of the sample by gender

	Male	Female	Total
Single	22.9	3.2	11.6
Married living together	53.4	46.6	49.5
Married living separately	3.2	1.2	2.0
Divorced	12.4	9.4	10.7
Widowed	8.0	39.5	26.2
Total	100.0	100.0	100.0
(N)	(249)	(339)	(588)

As seen in Table 2, most respondents know the HIV status of their spouse or other regular partner, but males are more likely to know their partner's status than females (94% vs. 83%). About two-thirds of the males reported that their partner is HIV positive, while the proportion was slightly lower for females (61%).

Table 2: HIV status of partner by gender for those with regular partners

	Male	Female	Total
Know partner is HIV positive	66.4	61.4	63.7
Know partner is HIV negative	27.3	21.7	24.2
Do not know	6.3	16.9	12.1
Total	100.0	100.0	100.0
(N)	(122)	(148)	(270)

Respondents were also asked how often they use condoms with their regular partner. As seen in Table 3, the results do not differ much between those who know their partner is HIV positive and those who know their partner is HIV negative—87% of respondents said that they always use condoms in either case. However, only 78% of those who do not know their partner status said that they always use condoms with this partner, and 11% in this group say that they never do so.

Table 3: Condom use by HIV status of partner for those with regular partners

	Know partner is HIV positive	Know partner is HIV negative	Do not know partner status
Never	2.5	4.0	10.8
Less than half the time	3.0	2.7	0.0
About half the time	4.1	1.3	5.4
More than half the time	3.6	5.3	5.4
Always	86.8	86.7	78.4
Total	100.0	100.0	100.0
(N)	(197)	(75)	(37)

These patterns will be investigated in more depth in the final paper, including the additional information available from the 2008 sample. Reasons for non-use of condoms, partner disclosure, and use of hospital and community services will also be examined. The results will be discussed in light of global findings on effective programs for incorporating prevention into care and treatment services.