### Manuscript

**Topic:** Factors associated with HIV infection among married people attending AIDS Information Centre clinics in Kampala, Kalangala, Mukono and Wakiso districts.

### Introduction;

HIV/AIDS is still an over whelming health burden worldwide and worse so in Sub-Saharan Africa. Globally, 33.4 million people were estimated to be living with HIV and 22.4 million were in Sub-Saharan Africa (UNAIDS, 2008). Although UNAIDS 2009, reported reduction of HIV infection world wide by 17% over a period of eight years, reduction in HIV related mortality and morbidity as a result of wide spread use and access to Antiretroviral treatment and the improved HIV health care, UNAIDS, 2010 reported an increase in the people living with HIV/AIDS especially in the Sub-Saharan region to 22.5 million people due to new infections.

In absence of a cure, prevention remains a key public health priority especially in the Sub-Saharan Africa.

Addressing HIV infection among married couples is critical to the attainment of Millennium development goal six (Fabian.S.A. et al, 2010).

Although, there is still scanty information to whether the HIV infection seen among married couples today was acquired during marriage or it's a pre existing infection given the fact that, in 1998, 1.9 million Ugandans aged between 12-49 years, majority single were living with HIV/AIDS (UNAIDS 1999). And now the trend has shifted to older age group (30-40years) and majority are married couples (Wabwire et al. 2008).

Could the HIV infection among married couples be attributed to the fact that previously HIV infected young people are now grown up and getting married to either negative or positive spouse? This study will retrospectively examine HIV preventive- behavior, socio demographic factors and proximate risk factors among HIV positive married couples (cases) and HIV negative married couples (controls) and comparison will be made.

This unmatched case control study was set to identify factors associated with HIV infections among married People attending HIV Voluntary Counseling and Testing and post test club services at AIDS Information Center outreach clinics in Kampala, Mukono, Kalangala and Wakiso districts.

**Methods:** A case–control study conducted with a sample size of 154 married clients. Cases consisted of 78 HIV positive married clients and controls were 76 HIV negative married clients. A Structured interviewer-administered questionnaire was used to collect data on socio-demographic factors, HIV preventive-behavioral factors and proximate risk factors.

Statistical analysis was performed using Stata 11.0 and logistic regression. All statistical tests and their respective confidence intervals were based on two-tailed test and were performed at the 5% error rate.

# **Results:**

The risk of acquiring HIV increased with the increase in the age of the partner, with those who reported to have partners aged forty years and above being four times more likely to have HIV than their counterparts who reported to have younger partners (AOR: 3.91, 95%CI: 0.23- 67.45) Respondents having HIV positive partners or not knowing sero-status of the partner were more likely to be infected with HIV than those who reported to have HIV negative partners (AOR:

12.10, 95% CI: 2.45- 59.84 and AOR: 22.95, 95% CI: 5.08-103.74 respectively). Respondents who reported ever been involved in any bleeding road traffic accidents with other people were thirty-four times more likely to be infected with HIV as compared to their counter parts who did not encounter any bleeding road traffic accidents (AOR: 34.86, 95% CI: 3.08, 394.65)

# **Conclusion:**

Spouses with older sexual partners (40 years and above) and with high monthly income are at a higher risk of HIV infection than those with young partners and of low monthly income. Having HIV negative results before marriage brings complacency among married couples to test again together and yet ignorance of the current HIV status of the sexual partner is a risk factor for HIV infection. Being involved in any bleeding road traffic accidents and traditional circumcision are risk factors for HIV infection among married people.

### **Recommendations;**

Interventions to change sexual behavioral patterns are clearly the major priority.

More than one HIV tests should be done before people could get married. Routine HIV couple counseling and testing should be mandatory for all married couples to facilitate disclosure of HIV status and emphasize preventive measures among married couples.

Increased efforts to totally eliminate traditional circumcision of men and women and work on measures to reduce road traffic accidents as these increase the risk of HIV infection among married couples.

### **References:**

 Jingu m, St. louis me, Mbuyi k, Mbu l, Ndilu m, Kaseka n, Assina y, Kolo M, Kazadi c, Ryder rw; International conference on AIDS.

Risk factors for HIV transmission: a case-control study among married couples concordant and discordant for HIV-1 infection *Int Conf AIDS*. 1992 Jul 19-24; 8: C274 (abstract no. PoC 4176).

National Insitute For Aging (2009, March). *HIV, AIDS and older people*. Retrieved May 11,
2011, from NIA: http://nia.nih.gov/healthinformation/publications/hiv-aids.htm

3. Quigleym, Munguti K, Grosskurth H, Toddj, Moshaf, Senkolo K, Newell J, Mavaud P, Kagina G, Klokke A, Mabey d, Gayyole A, Hayes R (1997), *Sexual behaviour patterns and other risk factors for HIV infection in rural Tanzania*: a case-control study. Journal Article, Research Support, Non-U.S. Gov't

4. UNAIDS.2008. *Report on the Global AIDS* UNAIDS. WORLD BANK.,2008. Ugandan methods of transmission study: National synthesis results, policy and program implication. *Presented at the International AIDS conference, Mexico City, August 3<sup>rd</sup> - 8<sup>th</sup> 2008.* 

5.UNAIDS report (2009). AIDS epidemic update.

6. Wabwire, F. M., Kawesa, K. D., Kirungi, W., Odiit, M., & Wanyama, O. J. (2008). Uganda hiv modes of transmission and prevention response analysis