## ASSOCIATED FACTORS AMONG MOTHERS ATTENDING ELIMINATION OF MOTHER TO CHILD TREATMENT CLINIC IN MBALE REGIONAL REFERRAL HOSPITAL

### CHELIMO JULIET 2019-MPH-AUG-RL-A18

# A POSTGRADUATE RESEARCH DISSERTATION SUBMITTED TO THE INSTITUTION OF PUBLIC HEALTH AND MANAGEMENT IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE AWARD OF MASTER OF PUBLIC HEALTH AT CLARKE INTERNATIONAL UNIVERSITY

**JANUARY, 2022** 

#### Abstract

**Introduction:** Disclosure of one's HIV status to a sexual partner(s) during pregnancy has been shown to result in better clinical outcomes to the mother and baby. In Mbale, 1 in every 3 mothers is reported to have disclosed their status. We assessed disclosure of HIV positive status to sexual partner(s) and associated factors among mothers attending the Elimination of Mother-To-Child Transmission (EMTCT) clinic at Mbale Regional Referral Hospital, Mbale City.

**Methodology:** We conducted an analytical cross-sectional study utilizing both quantitative and qualitative methods on a systematic random sample of mothers attending the EMTCT clinic at Mbale Regional Referral Hospital. We used a researcher-administered questionnaire to collect data on individual, social and health facility characteristics. We also conducted key informant interviews to help further understand factors associated with HIV status disclosure. Data was analyzed using SPSS version with p-value of <0.05 used to declare statistical significance. Oualitative data was coded and main themes associated with disclosure established.

**Results:** We interviewed 148 mothers with a mean age of 29.2297 and standard deviation of 6.2757 Disclosure of HIV positive statuses to sexual partner(s) was 51.4%. Disclosure of HIV status to sexual partners was positively associated with having social support from family member and friends (aOR: 7.143, 95% CI: 3.157-13.329, p<0.001) having no formal education (aOR: 4.426, 95% CI: 1.738-8.526, p-0.002), having primary education (aOR: 5.586, 95% CI: 2.705-10.701, p<0.001). Being Catholic (aOR: 0.159, 95% CI: 30.023-0.418, p-0.001), Anglican (aOR: 0.311, 95% CI: 0.103-0.499, p-0.044), ever missing taking ART medication (aOR: 0.631, 95% CI: 0.114-0.668, p<0.001) were negatively associated with disclosure.

Conclusion and recommendations: Approximately half of all HIV positive mothers didn't disclose their HIV status to their sexual partner(s). Disclosure was positively associated with having social support from family member and friends and negatively associated with ever missing A. Factors negatively associated with disclosure included being catholic or Anglican, ever missing to take ART medication. We recommend treatment adherence monitors for HIV positive mothers, especially family members and friends, to provide support that will help in eventual disclosure to sexual partner(s).

#### Introduction and background

Disclosing one's HIV status to a sexual partner involves talking honestly about one's sexual orientation, possible drug use, and results of HIV testing (Alema et al., 2019). Disclosure has been shown to result in better adherence to therapy, good clinical outcomes, and reduction in the risk of HIV transmission among couples (Kenu et al., 2019, Muhindo et al, 2019). On the other hand, disclosure is harmful when it brings adverse consequences. Negative consequences such as stigma, discrimination, rejection, divorce, blame, shame, and abandonment, among others, are major hindrances of disclosure because they reduce the pace of HIV prevention (UNAIDS, 2015). Worldwide, HIV status disclosure rates vary from 7% to 79% (Atwiine et al., 2019; McHugh et al., 2018; Ubesie et al., 2016; Whembolua et al., 2018).

On the global scene, disclosure of sero-positive status to sexual partners among mothers attending Elimination of Mother to Child Treatment Clinics remains low despite the benefits of sero-status disclosure (Afolabi, 2020). Studies from developing countries show disclosure rates vary from 24-79% with the lowest being reported among women attending antenatal clinics.

The magnitude of HIV-positive status disclosure in developing countries among EMTCT mothers is lower than in developed countries. The magnitude of HIV-positive status disclosure among EMTCT mothers in developing countries ranged from 16.7% to 86% with the average of 49%. This indicates that on average, approximately only 50% of mothers on EMTCT mothers living with HIV/AIDS in developing countries disclosed their HIV-positive status to other person and partners. On the other hand, in developed countries, the average magnitude of HIV-positive disclosure status was 79% (WHO, 2019).

Nondisclosure of HIV-positive status to someone has many consequences such as distress, loneliness and social isolation, lack of support, infection from their partners with a new type of HIV strain, refusal to initiate Anti-retroviral Therapy (ART), poor adherence of ART, poor utilization of condoms, and chance of mother-to-child transmission of HIV (WHO, 2017).

In Africa, disclosure of sero-status to sexual partners among HIV positive mothers in eMTCT program remains poor as estimates of disclosure range from 19-56% (Charlebios et al, 2017). However, there are many factors at both the social and individual level associated with disclosure and this includes rampant stigma and discrimination which fuel the negative attitude towards the affected persons as well as fear of partners' reaction and inadequate support. (Nkera et al, 2020). In East Africa, disclosure rates among EMTCT mothers remains low and estimates average between 25-51% (Baiden et al, 2017). For instance, Tanzania, disclosure rates range from 17% to 55% (Mwanga, 2017). In Uganda, only 43% of the EMTCT mothers disclose their sero-status to their partners (Bwambale, 2020).

Pinkerton and Galletly (2019) identified that the effect of disclosure of HIV status to sexual partners has significant implications in the transmission of the virus. Furthermore, individuals who fail to disclose their HIV status are less likely to change sexual behavior and practice safer sex than individuals who have disclosed. Disclosure to non-sexual partners is important, as it has been shown to increase emotional and social support improves access to medical care, namely anti-retroviral therapy (ART) and reduces stress according to Medley et al. (2019). This aspect does not directly influence the transmission of the virus nor reduces the incidence of HIV.

There is low disclosure rate of HIV status to partners among women of reproductive age (Medley et al. 2019). In Mbale Regional Referral hospital EMTCT clinic, only 1 in every 3 pregnant women is reported to have disclosed to their HIV sero-status to their spouse (Mbale Regional Referral Hospital record, 2019/2020). Within EMTCT and HIV Counseling and Testing (HCT) programs, emphasis is placed on the importance of HIV status disclosure among HIV infected clients, particularly to their sexual partners (WHO, 2018).

Access to counseling and testing of HIV; initiation of lifelong antiretroviral therapy (ART) with support for good adherence; and viral suppression for women living with HIV; safe delivery

practices; and access to postnatal antiretroviral (ARV) prophylaxis for infants all contribute to the PMTCT; thus, reducing maternal and child mortality (WHO, 2017).

Some of potential benefits for the mothers and partners including increased opportunities for social support, improved access to necessary medical care (antiretroviral treatment), increased opportunities to discuss and implement HIV risk reduction with partners and the child or unborn child, and increased opportunities to plan for the future, motivating sexual partners to be tested, change bad behaviors, reduce vertical and sexual transmission risk (Gemechu et al, 2018). Consequently, women on EMTCT programs who disclose their HIV sero-status to their sexual partners may be more likely to participate in programs for prevention of HIV transmission to their sexual partners as well as to their infants (Walcott et al, 2018).

Despite, all the mentioned benefits, HIV infected women may face a lot of potential risks following disclosure: including loss of economic support, blame, abandonment, physical and emotional abuse, discrimination and disruption of family relationships (<u>Deribe et al</u>, 2018).

Despite the availability and scale up of life-saving interventions, the disclosure rate in Mbale is still low. This study intends to investigate disclosure of HIV positive status to sexual partner(s) and associated factors among mothers attending Elimination of Mother to Child Treatment clinic in Mbale Regional Referral Hospital, Mbale City.

#### Objective of the study

#### Main objective

To investigate disclosure of HIV positive status to sexual partner(s) and associated factors among mothers attending the Elimination of Mother to Child Treatment clinic at Mbale Regional Referral Hospital, Mbale City.

Specific objectives

i) To determine the individual factors associated with disclosure of positive HIV status to

sexual partner(s) among mothers attending the eMTCT clinic in Mbale Regional Referral

Hospital, Mbale City

ii) To assess the social factors associated with disclosure of positive HIV status to sexual

partner(s) among mothers at eMTCT clinic in Mbale Regional Referral Hospital, Mbale City.

iii) To assess the health facility factors associated with disclosure of positive HIV status to

sexual partner(s) among mothers at eMTCT clinic in Mbale Regional Referral Hospital,

Mbale City.

Research questions

i) What individual factors are associated with disclosure of HIV positive status to sexual

partner(s) among mothers attending eMTCT clinic at Mbale Regional Referral Hospital,

Mbale City?

ii) What social factors are associated with disclosure of positive HIV status to sexual partner(s)

among HIV mothers attending eMTCT clinic at Mbale Regional Referral Hospital, Mbale

City?

iii) What health facility factors are associated with disclosure of positive HIV status to sexual

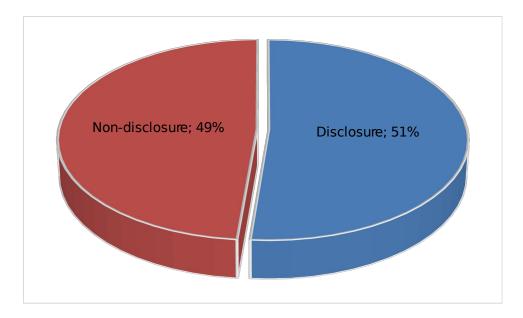
partner(s) among positive mothers attending eMTCT clinic at Mbale Regional Referral

Hospital, Mbale City?

**KEY RESULTS** 

Disclosure status of HIV positive status

Showing the disclosure status of the respondent



When the participants were asked if they had disclosed their HIV status to their sexual partners, 51.4% of the participants had disclosed off their status to their sexual partners while 48.6% had not.

Multivariate analysis of factors associated with disclosure of positive HIV status to sexual

partner(s)

Variable	aOR(95%CI)	P-value
Age of the respondents		
15-24 years	10.102(6.033-20.321)	<0.001
25-34years	3.702(1.101-5.762)	0.008
35-44 year	1.0	
Highest level of education attained		
None	4.426(1.738-8.526)	0.002
Primary	5.586(2.705-10.701)	<0.001
Secondary	2.519(0.725-4.724)	0.315
Tertiary	1.0	
Religion		
Catholic	0.159(0.023-0.418)	0.001
Anglican	0.311(0.103-0.499)	0.044
Muslim	0.426(0.216-2.617)	0.241
Born again	1.0	0.211
Earnings per month		
≤108,000 shillings	5.556(2.005-10.695)	0.009
>108,000 shillings	1.0	
Ever missed taking ART medication		
Yes	0.631(0.114-0.668)	<0.001
No	1.0	
Family member remind you to take your drugs		
Yes	3.006(1.676-6.122)	<0.001
No	1.0	
Social support from family member and friends		
Yes	7.143(3.157-13.329)	<0.001
No	1.0	
Privacy during consultation and counseling		
Yes	0.065(0.027-0.103)	<0.001
No	1.0	

On adjustment of the variables that were significant at bivariate level, disclosure of HIV status to sexual partners was high among participants who were aged 15-24 years (aOR: 10.102, 95% CI: 6.033-20.321, p<0.001), being aged 25-34 years (aOR: 3.702, 95% CI: 1.101-5.762, p-0.008), having no formal education (aOR: 4.426, 95% CI: 1.738-8.526, p-0.002), having primary education (aOR: 5.586, 95% CI: 2.705-10.701, p<0.001), earning  $\leq 108,000$  shillings (AOR: 5.556, 95% CI: 2.005-10.695, p-0.009), and having social support from family member and friends (aOR: 7.143, 95% CI: 3.157-13.329, p<0.001). While disclosure was less likely among participants who were Catholics (aOR: 0.159, 95% CI: 30.023-0.418, p-0.001), Anglican (aOR: 0.311, 95% CI: 0.103-0.499, p-0.044), ever missing taking ART medication (aOR: 0.631, 95% CI: 0.114-0.668, p<0.001) and those who said there is privacy during consultation and counselling (aOR: 0.065, 95% CI: 0.027-0.103, p<0.001).

#### Conclusions and recommendations

Approximately half of the women disclosed their HIV status to their sexual partner(s)

Being aged below 34 years, having primary education and no formal education, monthly income of  $\leq$ 108,000 shillings were positively associated with disclosure of HIV status to sexual partners.

While being a Catholic, Anglican and having missed taking ART medication were negatively associated with disclosure of HIV status among HIV positive mothers.

Being reminded by family members to take drugs and receiving support supports from family member and friends were positively associated with disclosure of HIV status to sexual partners.

Having privacy observed at the health facility was negatively associated with disclosure of HIV status among HIV positive mothers.

#### **Qualitative findings**

From the qualitative aspect, factors that facilitated disclosure were treatment availability, social support and keeping the relationship and responsibilities while stigma, fear of rejection, and loss of social and financial support were negatively associated with disclosure.

#### Recommendation

The following are recommended in response to findings revealed by this study

The study recommends that HIV positive women should be encouraged to have treatment adherence monitors from the family members. These monitors provide the much needed support and coping skills which may status disclosure.

That Health promotion and stigma reduction interventions by all stakeholders so as to increase social support for HIV positive women, reduce stigma and discrimination and increase accepting attitudes towards HIV positive women.

Strengthening of HIV support groups for infected persons will also provide another avenue for the ongoing support that may help PLWHA to work through their disclosure processes for the needed social support.

Creating awareness on benefits of HIV-sero disclosure in individuals, cultures and environment where disclosure of HIV is impended by fear, health facility limitations such as counseling could benefit from more informed individuals about benefits of disclosure through awareness whereby the process of disclosure is fostered and welcomed by one's partner, family and the wider community.

Disclosure should be the pinnacle of Pre and Post-counseling and should be considered a seminal concern of healthcare providers of various disciplines who care for persons living with HIV as well as health authorities, municipalities and community organizations.

Women should be encouraged to get involved with income generating activities so that they can sustain themselves in cases of rejection from social partners.

#### References

- ALEMA, K., ANGLEWICZ P. & CHINTSANYA J. (2019). Disclosure of HIV status between spouses in rural Malawi. AIDS Care: Psychological and Socio-medical Aspects of AIDS/HIV. 2017, 23 (8): 998-1005.
- KENU, L., NAIGINO, R., MAKUMBI, F., MUKOSE, A. (2019). HIV status disclosure and associated outcomes among pregnant women enrolled in antiretroviral therapy in Uganda: a mixed methods study. Reprod Health 14, 107. <a href="https://doi.org/10.1186/s12978-017-0367-5">https://doi.org/10.1186/s12978-017-0367-5</a>.
- KADOWA, I., & NUWAHA, F. (2019). Factors influencing disclosure of HIV positive status in Mityana district of Uganda. African health sciences, 9(1), 26–33.
- Gobena, Gemechu. (2021). Gemechu- 21. International Online Journal of Educational Sciences. 7. 355-371.
- ATWINE, BARNABAS & KIWANUKA, JULIUS & MUSINGUZI, NICHOLAS & DANIEL, ATWINE & HABERER, JESSICA. (2014). Understanding the role of age in HIV disclosure rates and patterns for HIV-infected children in southwestern Uganda. AIDS care. 27. 1-7. 10.1080/09540121.2014.978735.
- MUHINDO, T., ANTELMAN G, SMITH FAWZI MC, KAAYA S, MBWAMBO J, MSAMANGA GI, HUNTER DJ. (2019). Predictors of HIV-1 serostatus disclosure: a prospective study among HIV-infected pregnant women in Dar es Salaam, Tanzania. AIDS. 2017, 15(14):1865-1874.
- ANTELMAN G, SMITH FAWZI MC, KAAYA S, MBWAMBO J, MSAMANGA GI, HUNTER DJ & FAWZI, WW. (2017). Predictors of HIV-1 status disclosure: A prospective study among HIV-infected pregnant women in Dar Es Salaam, Tanzania. AIDS 15(14):1865-74.
- CENTRE FOR DISEASE CONTROL. (2017). Fear of disclosure and popular stigmas contribute to bad outcomes. CDC finds that 1 in 5 people stigmatize HIV. AIDS Alert 16(2):13-16.
- CHANDRA, PS, DEEPTHIVARMA, S & MANJULA, V. (2018). Disclosure of HIV infection in South India: patterns, reasons and reactions. AIDS Care 15(2):207-215.
- CREPAZ, N & MARKS, G. (2018). Serostatus disclosure, sexual communication and safer sex in HIV-positive men. AIDS Care15:379-387.
- DENUE B, JACKS S, BELLO S, AKAWU C, HUSSAINI M, ADEBAYO O. (2017). Attitudes of Patients at Disclosure of their HIV Sero-Positive Status during Post-Testi Counseling in Tertiary Institution in Northeastern Nigeria. Global Journal of Medical Research. 2017, 12:9
- DERIBE K, WOLDEMICHAEL K, NJAU BJ, YAKOB B, BIADGILIGN S, AMBERBIR A. (2020). Gender differences regarding barriers and motivators of HIV status disclosure among HIV-positive service users. Journal of Social Aspects of HIV/AIDS. 2020, 7(1): 30-39.
- DERIBE K, WOLDEMICHAEL K, WONDAFRASH M, HAILE A, AMBERBIR A. (2018). Disclosure experience and associated factors among HIV positive men and women clinical service users in southwest Ethiopia. BMC Public Health. 2018, 8:81.
- DERIBE, K, WOLDEMICHAEL, K, WONDAFRASH, M, HAILE, A & AMBERBIR, A. (2018). Disclosure experience and associated factors among HIV positive men and women clinical service users in Southwest Ethiopia.BMC Public Health.

EUSTACE, RW & ILAGAN, PR. (2020). HIV disclosure among HIV positive individuals: a concept analysis. Journal of Advanced Nursing 66 (9): 2094-2103

FORSYTH B, VISSER M, MAKIN JD. (2016). Disclosure of HIV status among South African women: factors that impede disclosure and subsequent repercussions. In: Program and abstracts of the XVI International AIDS Conference; August 13-18, 2016; Toronto

GALLETLY, CL & PINKERTON, SD. (2016). Conflicting messages: how criminal HIV disclosure laws undermine public health efforts to control the spread of HIV. AIDS and Behavior 10:451-461.

GARI, T, HABTE, D & MARKOS, E. (2020). HIV positive status disclosure to sexual partners among women attending ART clinic at Hawassa University Referral Hospital, SNNPR, Ethiopia. Ethiopia Journal of Health Development 24(1):9-14.

HOLT, R, COURT, P, VEDHARA, K, NOTT, KH, HOLMES, J & SNOW, MH. (2018). The role of disclosure in coping with HIV infection. AIDS Care, 10 (1): 49-60.

ISSIAKA, S, CARTOUX, M, ZERBO, OK, TIENDREBEOGO, S, MEDA, N & DABIS, F. (2017). Living with HIV: Women experience in Burkina Faso. West Africa. AIDS Care 13:123-8.

JOINT UNITED NATIONS PROGRAMME ON HIV/AIDS. (2020). Global report: UNAIDS report on global AIDS epidemic.

JOINT UNITED NATIONS PROGRAMME ON HIV/AIDS. (2017). World AIDS day report. JOINT UNITED NATIONS PROGRAMME ON HIV/AIDS. (2017). Global report: UNAIDS report on global AIDS epidemic.

KADOWA I. & NUWAHA F. (2019). Factors influencing disclosure of HIV positive status in Mityana district of Uganda. African Health Sciences. 2019, 9(1):26-33.

KADOWA, I & NUWAHA, F. (2017). Factors influencing disclosure of HIV positive status in Mityana district of Uganda. Journal of Public Health.

KAIRANIA R, GRAY R, KIWANUKA N, MAKUMBI F, SEWANKAMBO N, SERWADDA D. (2020). Disclosure of HIV results among discordant couples in Rakai, Uganda: A facilitated couple counseling approach. AIDS Care. 2020, 22(9): 1041-1051.

NDAYANGA, A. (2019). Prevalence and factors affecting HIV status disclosure among pregnant women receiving PMTCT services in Dar es Salaam.

WONG. LH, ROOYEN HV, MODIBA P, RICHTER L, GRAY G, PAEDS F. (2019). Test and Tell: Correlates and Consequences of Testing and Disclosure of HIV Status in South Africa (HPTN 043 Project Accept). J Acquir Immune Defic Syndr. 50(2): 215–222.

WORLD HEALTH ORGANIZATION. (2019). HIV Status Disclosure to Sexual Partners: Rates, Barriers and Outcomes for Women.

ZOU, J, YAMAMAKA, Y, JOHN, M, WATT, M, OSTERMANN, J & THIELMAN, N. (2018). Religion and HIV in Tanzania: influence of religious beliefs on HIV stigma, disclosure and treatment attitudes. BMC Public Health 2019

Pinkerton, S.D. & Galletly, C.L. (2019). Reducing HIV Transmission Risk by Increasing Serostatus Disclosure: A Mathematical Modeling Analysis. Aids Behavior 11(5): 698-705.

Medley, A., Garcia-Moreno, C., McGill, S. & Maman, S. (2019). Rates, barriers and outcomes of HIV serostatus disclosure among women in developing countries: implications for prevention of mother-to-child transmission programmes. Bulletin of the World Health Organization 82(4).