

Individual factors contributing to HIV serostatus disclosure to partners among mothers on ART at Kiyunga Health Centre IV, Luuka District. A cross-sectional study.

Vicky Mwagale*, Hasifa Nansereko, Francisco Ssemuwemba, Jane Frank Nalubega
Mildmay institute of health sciences

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Abstract

Background:

The study aimed to identify the individual factors contributing to HIV serostatus disclosure to partners among mothers on ART at Kiyunga Health Centre IV, Luuka District.

Methodology:

A descriptive cross-sectional study using quantitative methods was conducted among 96 HIV-positive mothers on ART at Kiyunga Health Centre IV, Luuka District. Participants on ART for at least six months were recruited consecutively using convenience sampling. Data were collected using a pretested structured questionnaire administered face-to-face or self-administered where privacy was preferred. Data were checked, coded, entered into Microsoft Excel, and analysed manually using tally sheets. Findings were presented using frequency tables, bar graphs, pie charts, and narratives. Ethical approval and informed consent were obtained.

Results:

Among 96 respondents, 54 (56.3%) were aged 26–35 years, 18 (18.8%) were aged 15–25 years, and 24 (25.0%) were aged 36 years or above. Regarding individual factors, 54 (56.3%) had known their HIV status for more than two years, while 8 (8.3%) had known it for less than six months. Stable income was reported by 50 (52.1%) respondents, whereas 10 (10.4%) had no income. Concerning education, 50 (52.1%) had higher education, 20 (20.8%) secondary education, 18 (18.8%) primary education, and 8 (8.3%) had no education. Household income was high among 50 (52.1%), moderate among 18 (18.8%), low among 16 (16.7%), and very low among 12 (12.5%). Regarding relationship status, 54 (56.3%) were married, 22 (22.9%) had stable relationships, 12 (12.5%) were in new relationships, and 8 (8.3%) were not in relationships.

Conclusion:

Individual factors such as long duration since HIV diagnosis, financial stability, higher education, and stable marital relationships contributed positively to HIV serostatus disclosure among mothers on ART.

Recommendation:

The Ministry of Health should provide biannual training for healthcare workers to strengthen HIV disclosure counseling in ART clinics.

Keywords: HIV serostatus disclosure, Mothers on ART, individual factors, HIV diagnosis, Financial stability, Health education.

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Corresponding author: Vicky Mwagale
Mildmay institute of health sciences

BACKGROUND OF THE STUDY

Individual characteristics can influence a mother's readiness, confidence, and ability to disclose her HIV status to her partner. Duration since HIV diagnosis is one such factor because women may require time to accept their status, adjust psychologically, and develop confidence to communicate it. In Pune, India, 82% of adults who had lived with HIV for more than two years disclosed their status to partners compared with 57% of those recently diagnosed (Sharma et al., 2018). Similarly, in Chennai, 76% of women

diagnosed for more than three years disclosed compared with 52% of recently diagnosed women (Reddy & Krishnan, 2019). These findings suggest that longer exposure to HIV care and counseling may increase psychological adjustment and readiness for disclosure.

Employment and income may also influence disclosure by increasing economic independence and reducing dependence on partners. In Lagos, Nigeria, 74% of employed participants disclosed their HIV status to partners compared with 56% of unemployed participants (Adewale

et al., 2019). Similarly, in Kano State, 79% of women engaged in paid work disclosed compared with 60% of unemployed women (Mohammed & Bello, 2020). In Dar es Salaam, Tanzania, 81% of adults with regular income disclosed to sexual partners compared with 57% of those without regular income (Mhando & Mshana, 2018). Among mothers enrolled in PMTCT programmes in Mbeya, disclosure was also higher among women with higher incomes than among those with lower incomes (Simba et al., 2021). These findings indicate that economic empowerment may strengthen women's autonomy and reduce concerns about the potential consequences of disclosure.

Education is another individual factor associated with HIV disclosure. Higher educational attainment may improve health literacy, understanding of HIV transmission and treatment, and confidence in communicating health information. In Eastern Cape, South Africa, partner disclosure among postpartum women living with HIV was 81.8%, increasing to 88.2% among women with higher education levels (Adeniyi et al., 2021). Similarly, secondary and tertiary education increased the likelihood of disclosure among HIV-positive pregnant women in Mpumalanga Province (Ramlagan et al., 2019). Family characteristics may also influence disclosure. In Addis Ababa, 79% of mothers with two or more children disclosed compared with 61% of mothers with one child, while in Oromia, disclosure was 83% among multiparous women compared with 64% among primiparous women (Gebremariam & Teklay, 2019; Tesfaye & Alemayehu, 2020). Increased family responsibility and repeated contact with health services may contribute to greater willingness to disclose.

The study aimed to identify the individual factors contributing to HIV serostatus disclosure to partners among mothers on ART at Kiyunga Health Centre IV, Luuka District.

METHODOLOGY

Study Design and Rationale

The study used a cross-sectional descriptive design employing quantitative methods. This approach was appropriate because it allowed for the assessment of individual, psychosocial, and health system factors that influenced HIV serostatus disclosure at a single point in time. It also enabled the identification of associations and trends among the variables without requiring long-term follow-up.

Study Area

The research was conducted at Kiyunga Health Centre IV in Luuka District, which lies approximately 150 km east of Kampala at coordinates 0.6420°N latitude and 33.2320°E longitude. Kiyunga HC IV provides comprehensive HIV services, including ART, PMTCT, counseling, and testing. It serves mothers and caregivers from across Luuka District

and nearby sub-counties, making it a representative site for examining disclosure practices and their determinants in the district.

Study Population

The study population comprised mothers enrolled in ART programs at Kiyunga HC IV. Eligible participants were those who were on ART for at least six months and sexually active, as disclosure to sexual partners was the focus. The study included mothers from diverse socio-economic and cultural backgrounds to ensure comprehensive coverage of factors influencing disclosure.

Sample Size Determination and Rationale

The sample size of the study will be estimated using the formula by Kish (1965). This method was used because it is associated with minimal errors and is suitable for cross-sectional studies

$$\text{Sample size, } N = \frac{Z^2 pq}{d^2}$$

Where,

Z= standard normal distribution taken at 95%=1.96 C. I n= sample size

P= the assumed prevalence of HIV sero disclosure among mothers at Luuka District, 50% or 0.5. q = 1-p = (1-0.5) = 0.5

d = allowable error = 10% or 0.1 Therefore, $n = \frac{1.96^2 \times 0.5 \times 0.5}{0.1^2}$

$$= \frac{3.8416 \times 0.25}{0.01}$$

$$= 96.04$$

Therefore, 96 respondents were used in this study.

Sampling Method / Procedure

A convenience sampling approach was used to select participants. This ensured that every eligible mother attending ART services at Kiyunga HC IV had an equal chance of being included, minimizing selection bias and enhancing representativeness.

Based on a convenience approach, every mother who turned up at the ART clinic was recruited in the study as they turned up as long as they met the inclusion criteria. The consecutive method enabled the researcher to achieve the sample size within the shortest time possible.

Inclusion and Exclusion Criteria

Inclusion criteria

HIV-positive mothers on ART who will voluntarily consent, are Ugandan, and can read and write English.

Exclusion Criteria

HIV positive Mothers who will withdraw during data collection.

Study Variables

Dependent Variable

HIV serostatus disclosure to sexual partners by mothers, measured based on the binary response (Yes/No) on a dependent variable.

Independent Variables

Individual factors contributing to HIV serostatus disclosure to sexual partners by mothers were measured based on high-frequency scores on attributes set in the questionnaire per respective objectives.

Research Tools

A standardized, pretested questionnaire with closed-ended questions was used to collect data efficiently from multiple participants. The questionnaire included sections on Socio-demographic information, psychosocial factors, and health system factors, as extracted from the reviewed literature.

Data Collection Method and Procedure

Data were collected using a structured questionnaire administered face-to-face. The questionnaire covered individual, psychosocial, and health system factors affecting HIV serostatus disclosure. A self-administered approach was used where participants preferred privacy, with research assistants available to provide clarification or guidance. Permission was sought from the District Health Officer and Kiyunga HC IV administration. Eligible participants were approached, the study was explained, and informed consent was obtained. Questionnaires were administered with guidance to ensure clarity and completeness. Data collection continued at the ART clinic daily until all 96 participants completed the survey.

Data Management and Analysis

After collecting the questionnaires from the respondents, they were checked for completeness and accuracy of the information. All the questionnaires identified as inaccurately or incompletely filled were corrected before the respondents left. After data analysis, the questionnaires were kept under lock and key for the safety and

confidentiality of the participants' data. The data were manually analyzed using statistical tally sheets and then entered into a computer using Microsoft Excel software.

Data Presentation

The findings were presented quantitatively through frequency distribution tables, pie charts, and bar graphs, accompanied by narratives to facilitate easy interpretation.

Quality Control

Pretesting: The questionnaire was pretested on 21 HIV-positive mothers at Bugabula HC III, a nearby health facility so as to ensure clarity and reliability. Any mistakes identified were corrected before actual data were collected.

Pilot Study: The pilot study was done at Kiyunga HC IV so as to determine the reliability and validity of the research tools; any unclear items were revised before actual data collection.

Training of research assistants: Assistants were trained on ethical conduct, questionnaire administration, and probing techniques.

Data collection timeline: Data collection spanned four weeks, with each participant taking 30–40 minutes to complete the questionnaire.

Standard Operating Procedures (SOPs): Confidentiality, privacy, informed consent, and infection prevention measures were strictly followed.

Ethical Consideration

The findings of this study were approved by the Uganda Health Professions Assessment Board (UHPAB) and the research committee of Mildmay Institute of Health Sciences. The researcher sought permission to carry out data collection and access to the health facility records from the DHO through the hospital in charge. In order to ensure confidentiality, the participants' names were not written. Consent was also sought before the participants were allowed to take part in the study; those who consented were surveyed, whereas those who did not consent were not forced to participate in the study. Also, a participant was allowed to withdraw from the study if they decided to do so, and they were not punished in any way.

RESULTS

Socio-demographic characteristics of the caretakers

Table 1: Distribution of respondents by sociodemographic characteristics (n=96).

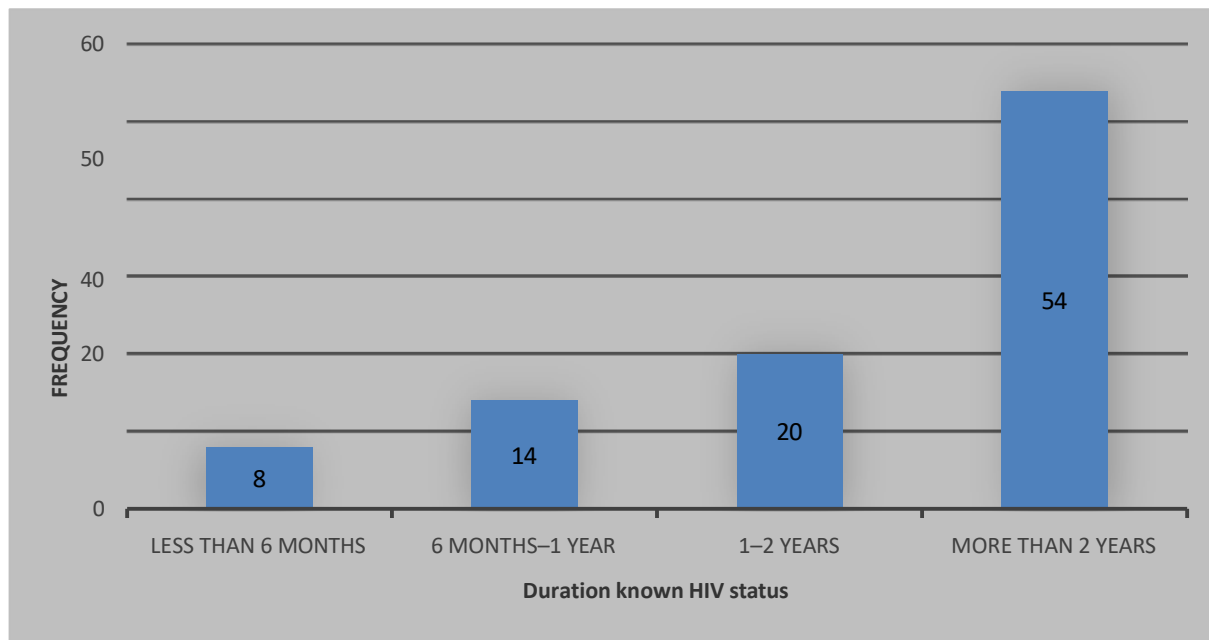
Variable	Category	Frequency (n)	Percentage (%)
Age group	15–25 years	18	18.8
	26–35 years	54	56.3
	36 years and above	24	25.0
Marital status	Single	14	14.6

	Married	58	60.4
	Separated/Divorced	16	16.7
	Widowed	8	8.3
Level of education	No schooling	10	10.4
	Primary	22	22.9
	Secondary	50	52.1
	Tertiary	14	14.6
Work status	Not working	15	15.6
	Small business	28	29.2
	Farming	45	46.9
	Formal job	8	8.3

Source: Field data, 2026

The table above shows majority of respondents 54(56.3%) were aged between 26–35 years, 58(60.4%) were married, 50(52.1%) had attained secondary education and 45(46.9%) were farmers while the minority 8(8.3%) had formal jobs.

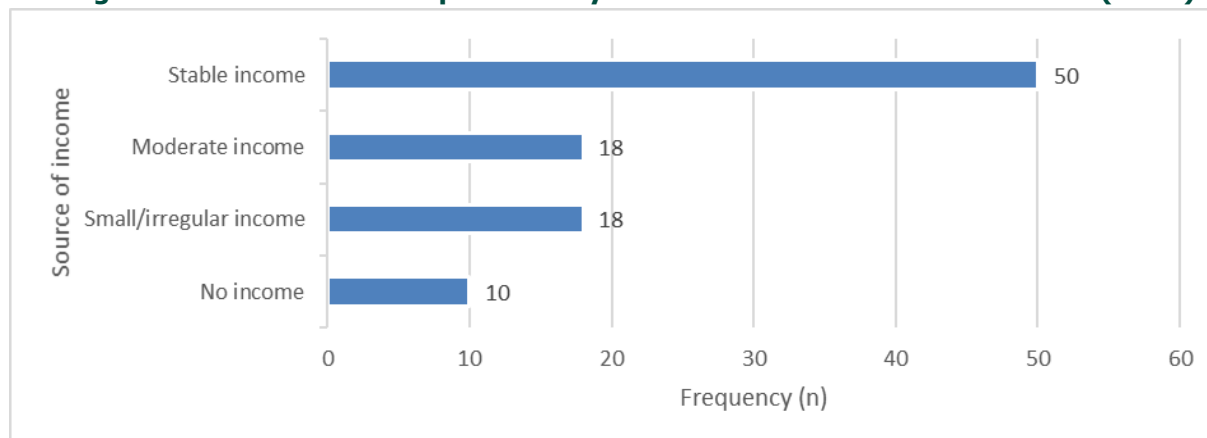
Individual factors contributing to HIV serostatus disclosure among mothers on ART
Figure 1: Distribution of respondents by their duration of knowing HIV status (n=96)



Source: Field data, 2026

Figure 1 shows majority of respondents, 54(56.3%), had known their HIV status for more than 2 years, while the minority, 8(8.3%), had known their status for less than 6 months.

Figure 2: Distribution of respondents by the nature of their source of income (n=96)



Source: Field data, 2026

Figure 2 shows most of respondents 50(52.1%) had a stable income, while the minority (10; 10.4%) had no income.

Table 2: Distribution of respondents by highest level of education, Household income level, and Relationship status with partner (n=96)

Variable	Category	Frequency (n)	Percentage (%)
Highest level of education	No education	8	8.3
	Primary	18	18.8
	Secondary	20	20.8
	Higher education	50	52.1
Household income level	Very low	12	12.5
	Low	16	16.7
	Moderate	18	18.8
	High	50	52.1
Relationship status with partner	Not in relationship	8	8.3
	New relationship	12	12.5
	Stable relationship	22	22.9
	Married	54	56.3

Source: Field data, 2026

Table 2 shows majority of respondents, 50(52.1%), had higher education, while the minority, 8(8.3%), had no education. Most respondents, 50(52.1%), reported having a high

household income, whereas the minority, 12(12.5%), had a very low income. More than half of respondents, 54(56.3%), were married, while the minority, 8(8.3%), were not in relationships.

DISCUSSION

Page | 6 The majority of respondents 56.3% had known their HIV status for more than 2 years. This is probably because mothers who have lived longer with HIV gradually become more comfortable with their HIV status. This finding is in agreement with a study by Sharma et al. (2018) in Pune,

India, which reported that 82% of adults living with HIV for more than two years disclosed to their partners compared to 57% of those recently diagnosed. The findings imply that mothers who have lived longer with HIV are more likely to disclose their HIV serostatus because they become emotionally prepared and more knowledgeable about disclosure benefits.

The majority of respondents 52.1% had a stable income. This is probably because they had stable sources of income that enabled them to meet their personal and family needs. It may also be because some respondents were engaged in income-generating activities that made them financially independent. This finding is in agreement with a study by Mhando and Mshana (2018) in Dar es Salaam, which reported that 81% of adults with regular income disclosed to their sexual partners compared to 57% without regular income. Similarly, Simba et al. (2021) found that 78% of higher-income mothers disclosed compared to 53% of lower-income mothers. The findings imply that financially stable mothers are likely to disclose their HIV status because they are self-dependent and do not fear financial loss after disclosure.

About half of respondents 52.1% had higher education. This is probably because educated mothers are more informed about HIV prevention and disclosure benefits. It may also be because education improves communication skills and confidence needed to discuss HIV-related issues with partners. This finding is in agreement with a study by Adeniyi et al. (2021) in Eastern Cape Province, South Africa, which found that disclosure increased to 88.2% among women with higher education levels. The findings imply that educated mothers are more likely to disclose their HIV serostatus because they better understand the importance and benefits of disclosure.

Most respondents 52.1% reported having a high household income. This is probably because many respondents were involved in stable economic activities that improved their family income levels. This finding is in agreement with a study by Mhando and Mshana (2018), which found that 81% of adults with regular

income disclosed their HIV status compared to 57% without stable income. Similarly, Simba et al. (2021) found that 78% of higher-income mothers disclosed compared to 53% of lower-income mothers. The findings imply that mothers with high household income are more likely to disclose their HIV status because they are economically empowered and less fearful of negative financial consequences.

The majority of respondents 56.3% were married. This is probably because married couples tend to have stronger emotional attachment and trust between partners. It may also be because married partners usually communicate more openly about family and health-related matters. This finding is in agreement with a study by Wambua et al. (2017) in Nairobi, Kenya, which found that 72% of married participants disclosed to their sexual partners compared to 45% of unmarried individuals.

Similarly, Otieno and Mwangi (2018) found that 68.5% of married women disclosed their HIV status compared to 41.2% of single women. The findings imply that married mothers are more likely to disclose their HIV serostatus because of trust, emotional support, and relationship stability.

Conclusion

Individual factors such as long duration since HIV diagnosis, financial stability, higher education, and stable marital relationships contributed positively to HIV serostatus disclosure among mothers on ART.

Recommendation

The Ministry of Health should strengthen HIV disclosure counseling programs in all ART clinics through continuous training of healthcare workers every six months because skilled providers improve counseling quality and support safe disclosure among mothers on ART.

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this study.

List of abbreviations

ART – Antiretroviral therapy
CI – Confidence interval
DHO – District Health Officer
HC – Health Centre
HIV – Human immunodeficiency virus
MCH – Maternal and child health
PMTCT – Prevention of mother-to-child transmission
SOPs – Standard operating procedures
UHPAB – Uganda Health Professions Assessment Board

Source of funding

The study received no external funding.

Conflict of interest

The authors declare no conflict of interest.

Informed consent

Written informed consent was obtained from all participants prior to their inclusion in the study. Participants were informed about the purpose of the study, procedures involved, potential risks and benefits, and their right to withdraw at any time without penalty.

Author contributions

VM: conceptualization, methodology, investigation, writing the original draft.

HN: data curation, visualization.

FS: validation, supervision.

JFN: supervision, validation, formal analysis.

Data availability

Data is available upon request from the author.

Author biography

Vicky Mwagale, a student pursuing a diploma in clinical medicine and community health.

Hasifa Nansereko, research supervisor at Mildmay School of Allied Health Sciences

Francisco Ssemuwemba, research supervisor at Mildmay School of Allied Health Sciences

Jane Frank Nalubega, research supervisor at Mildmay School of Allied Health Sciences

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