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Disclosure of HIV Positive Test Results and Clients' awareness of the Advantages of Sharing the Results. A Case of three selected Care and Treatment Clinics (CTC) in Zanzibar

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ABSTRACT

Human Immunodeficiency Virus (HIV) status disclosure is an important approach pursued in the Voluntary Counselling and Testing (VCT) services, hospitals, and Care and Treatment Clinics (CTCs) to prevent the spread of HIV. This study aimed to examine drivers for HIV-positive results disclosure and clients' awareness on the benefits of disclosing the HIV positive test results. The study was conducted in Zanzibar, focusing on clients attending for care and treatment at Mwembeladu, Fuoni, and Makunduchi Care and Treatment Clinics (CTCs) and data were collected from 210 clients attending CTCs. Collected data were analysed using descriptive statistics and crosstabulation. The results showed that the majority (92.6%) of People Living with HIV (PLWHIV) prefer to disclose their HIV status to partners or people with a formal relationship, the majority (100%) who initially tested HIV in the hospital disclosed the results and 87.7% who tested at TVC also disclosed, and the disclosure rate had no significant variation by gender. This study observed a high HIV disclosure rate (88%) among PLWHIV in Fuomi ward, Zanzibar, driven by awareness of benefits like partner discussions and care access. However, 46.7% of respondents remain unaware of these benefits, indicating a need for enhanced education and support. The study recommends that stakeholders like ministries and departments responsible for public health, particularly on HIV related issues should launch community-based campaigns (e.g., radio programmes, peer-led workshops) to raise awareness of disclosure benefits. Healthcare providers should receive regular training on counselling techniques to support PLWHIV in overcoming stigma and fear of discrimination.

1. Introduction

Disclosure of HIV-positive status, defined as voluntarily sharing one's HIV status with others, is critical for HIV prevention, treatment adherence, and social support (Ambissa et al., 2021). Globally, disclosure rates vary widely, from 42%–100% in developed countries to 16%–86% in developing ones (Maman and Medley, 2013). In Tanzania, HIV prevalence is 4.4% among adults, with Zanzibar reporting less than 1% in the general population but higher rates in key populations (PHIA, 2024; URT, 2024). Despite progress toward UNAIDS 95-95-95 targets, little is known about the contextual drivers of disclosure in Zanzibar, particularly in Fuoni ward, where high disclosure rates (88%) have been reported (RGZ, 2020). This study addresses this gap by examining reasons for disclosure and clients' awareness of its benefits at three Care and Treatment Clinics (CTCs) in Zanzibar.

2. Materials and Methods

The study was conducted on Unguja Island, Zanzibar at Fuoni ward, focusing on Mwembeladu, Fuoni, and Makunduchi CTCs. The study area was selected due to the presence of the majority (88%) of PLWHIV who disclosed their HIV status, hence being interested in knowing what inspired them to disclose. Data collection approval was obtained in a flow manner from the Institute of Rural Development Planning which has the mandate and core function of conducting field research in Tanzania. In Zanzibar, approval was obtained from the Second Vice President's Office, the Office of the

Chief Government Statistician, and the Zanzibar Health Research Institute. During the interview, respondents were also asked for their consent and assured that the data they provide will be kept confidential. To accomplish this study, both primary and secondary data were collected from different sources. Primary data were collected from HIV-positive clients attending for care and treatment at Mwembeladu, Fuoni, and Makunduchi. Secondary data were obtained from accessed documents, like books, research reports, records, HIV reports, and journals. The study adopted a cross-sectional research design. The design allowed researchers to collect both qualitative and quantitative data from different participants at one point in time (Kumar, 2011; Babie, 2013; Krishnaswami *et al.,* 2016). The design helped researchers to collect data urgently to meet the study objective. The study was conducted in 2021, and the targeted study population was PLWHIV who were attending care and treatment in the CTCs. According to ZIHHTLP (2020), client enrolment varied by CTC, Mwembeladu CTC had 1116 clients, Fuoni CTC had 153 clients and Makunduchi CTC had 140 clients. The unit of analysis was individual clients attending CTCs.

The sample size was drawn from 1409 clients from the three selected CTCs. The sample size was estimated using Yamane's (1967) formula expressed as n=N/[1+N(e)2], Where n = sample size estimate, N = sampling frame/study population, e = error of prediction (probability level), and 1 = constant. Therefore, the clients' population per CTC sample size comprised 92 clients from Mwembeladu, 60 from Fuoni, and 58 from Makunduchi; this made a total of 210 respondents, as shown in Table 1. Non-probability sampling technique is a type of sampling technique that was used in sampling respondents. This technique was used because of its cost-effectiveness, speed, and ability to focus on specific populations like PLWHIV who were hard toreach and the sampling frame was not available but also the study focuses on in-depth understanding rather than broad generalizations. Accidental sampling was used in selecting respondents. Nonprobability sampling, where participants are selected based on accessibility rather than random selection, was used due to its cost-effectiveness and suitability for hard-to-reach populations like PLWHIV (Allison, 2025).

Table 1: Population and Sample size by CTC

CTC Name/Location	Population	Sample	Percent
Mwembeladu (Urban)	1116	92	43.8
Fuoni (Peri-urban)	153	60	28.6
Makunduchi (Rural)	140	58	27.6
Total	**1409**	**210**	**100**

The study used structured interviews to collect primary data from respondents and documentary review to collect secondary data from accessed documents like books, research reports, records, HIV reports, and journal articles. A questionnaire as a tool for interviews consisted of both closed and open-ended questions. The questions in the questionnaire were structured to collect primary data related to the client's reasons for disclosing and awareness of the benefits of disclosing the HIV-positive test results. The use of the interviews that were held at clinic premises helped in collecting data to answer the key research questions. The collected primary data using a questionnaire were coded, edited, and entered into the IBM-SPSS Statistics version 25 computer programme for data processing and analysis followed by cleaning and verification before data analysis at different levels. Data were analysed using IBM-SPSS Statistics Version 25 to calculate frequencies, percentages, and relationships between variables such as partner relationship type and disclosure. A Likert scale index, based on respondents' agreement with statements about disclosure benefits, was used to assess awareness.

3. Results and Discussion

This section presents the findings and discussion based on the analysed data collected from the field. The section includes discussion of the major findings related to partners association with HIV positive disclosure, the status of HIV disclosure, reasons for disclosure of HIV positive test results, and awareness of the benefits of disclosing HIV positive test results.

3.1. Partners' relationship type and disclosure of HIV status

Disclosure is an important public health goal for several reasons. As the disclosure may motivate sexual partners to seek testing, change behaviour, and ultimately decrease transmission of HIV. Also, it increases opportunity for social support, improves access to necessary medical care, and increase opportunity to discuss and implement HIV

risk reduction with partners. Along with cross-tabulation, the chi-square test of independence as a statistical hypothesis test was used to determine whether the categorical or nominal variables, namely partner's relationship and disclosure of HIV status are likely to be related or not. The findings in Table 2 revealed no statistically significant (P>0.05; χ^2 cal < χ^2 critical) association between the type of partner's relationship and disclosure of HIV-positive test results. The distribution data in Table 2 show that 75.0% of the respondents with informal relationships disclosed their status. However, 92.6% of the respondents with formal relationships also disclosed. This implies no significant association existed between the type of partner's relationship and HIV-positive disclosure, despite a higher proportion (92.6%) of the respondents having formal relationships with partners. Non-disclosure may stem from fear of emotional rejection or the belief that partners are already infected. Since fear of partners' reactions, not wanting to worry their partners, fear of blame for infidelity, lack of time for discussion, and fear of breach of confidentiality by partners of health workers. Therefore, clients' variation in the type of partner's relationship does not significantly influence HIV-positive disclosure. These findings differ with Chaudoir *et al.* (2011) observation that the disclosure rate is significantly higher among people with formal relationships compared to those having informal relationships.

Table 2: Association between partners' relationship type and disclosure of HIV status

	Disclosed HIV test result?		
Type of Partner's Relationship	**Yes**	**No**	**Total**
Formal Relationship	87 (92.6) *	7 (7.4)	94 (100)
Informal Relationship	9 (75.0)	3 (25.0)	12 (100)
Total	**96 (90.6)**	**10 (9.4)**	**106 (100)**
Cal χ^2 = 1.105	tab/critical χ^2 = value 3.841, df =1 p = 0.593		

**Values in parentheses are percentages*

3.2 Status of HIV Positive Disclosure

The study aimed to examine the association between place for HIV testing and HIV-positive disclosure. Respondents were asked to mention the place where they were initially tested for HIV and disclosed the HIV-positive test results. Findings in Table 3 reveal that 100% of respondents who initially tested HIV in the hospital when admitted reported that they disclosed HIV-positive results. Whereas 93.1% of those who tested at ANCs also disclosed, and 87.7% of those who tested at VCT clinics disclosed as well after some thinking about the situation. Respondents who tested in other places had the least proportion (50%) disclosed and the rest (50%) did not. The chi-square test revealed no statistically significant association (P>0.05; χ^2 cal < χ^2 critical) between the place initially tested for HIV and disclosure of HIV-positive test results. Therefore, the place of HIV testing for the first time did not influence disclosing HIV-positive test results. HIV status disclosure depended on pre- and post-test counselling, as well as participation in treatment and care programs. These findings are in line with Exavery et al. (2021) who assert that disclosure of HIV status is based on a complex interplay of individual, social, and situational factors, including the individual's desire for support, relationship dynamics, and fear of stigma or discrimination. Other factors include the individual's knowledge of their partner's status, their access to treatment and support, and the specific context of the disclosure (e.g., disclosure to a sexual partner, family member, or healthcare provider). According to Ssali *et al.* (2012) HIV-positive status disclosure is associated with the number of counselling sessions that the infected individuals receive. This kind of finding is evident in the study conducted in Uganda which found that 117 patients who at the time that VCT services were offered did not disclose their HIV-positive status; however, following the counselling session and after tracking these patients for three years found that about 65% of them had disclosed their serostatus (Ssali *et al.,* 2012).

Table 3: Place where initially tested HIV and disclosure of test results

	Disclosed HIV Positive Test Results?		
Place where initially tested HIV	**Yes**	**No**	**Total**
Voluntary counselling and testing (VCT) clinic	150 (87.7) *	21 (12.3)	171(100.0)
Antenatal clinic (ANC)	27 (93.1)	2 (6.9)	29 (100.0)
Hospital when admitted	6 (100)	0 (0)	6 (100.0)
Other places	2 (50)	2 (50)	4 (100)
Total	**185 (88.1)**	**25 (11.9)**	**210 (100.0)**
Cal χ^2 = 7.063	tab/critical χ^2 = value 7.815 df = 3	P = 0.070	

**Values in parentheses are percentages*

Regarding the time frame from initial diagnosis to disclosure, respondents were asked to specify the time of disclosure after receiving HIV test positive results to any persons apart from healthcare workers and partners. Results in Table 4 indicate that the maximum time between testing and disclosure was 26 years, the minimum time was one month, and the mean period was five years and six months. This data reveal that some of the clients delayed disclosing their HIV status, perhaps due to taking some time to think of the benefits and possible consequences of disclosing. These results are in line with Damian *et al.* (2019) who studied factors associated with the disclosure of HIV-positive test results among women attending Care and Treatment Clinics (CTCs) in the Kilimanjaro region, Tanzania, and revealed that the time to disclose after receiving the HIV positive test results was above five years. Thus, early HIV status disclosure should be emphasized so that HIV negative partners can avoid becoming infected by introducing appropriate preventive measures and potential positive partners can be initiated into early therapy.

Table 4: Duration between initially HIV testing and disclosure

n	Range	Minimum	Maximum	Mean		Std. Deviation
Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic
111	25.0	0.1	26.0	5.518	0.3519	5.0871

To determine the status of the HIV-positive disclosure rate among clients attending Mwembeladu, Fuoni, and Makunduchi CTCs, respondents were asked about HIV-positive disclosure to any persons apart from partners and health workers. Results in Figure 1 show that 88% of the respondents disclosed HIV-positive results, while 12% never disclosed it to anyone. The higher rate of HIV-positive disclosure is over three quarters compared to non-disclosure; this is possibly due to awareness and attitudes among HIV positive clients, and healthcare workers.

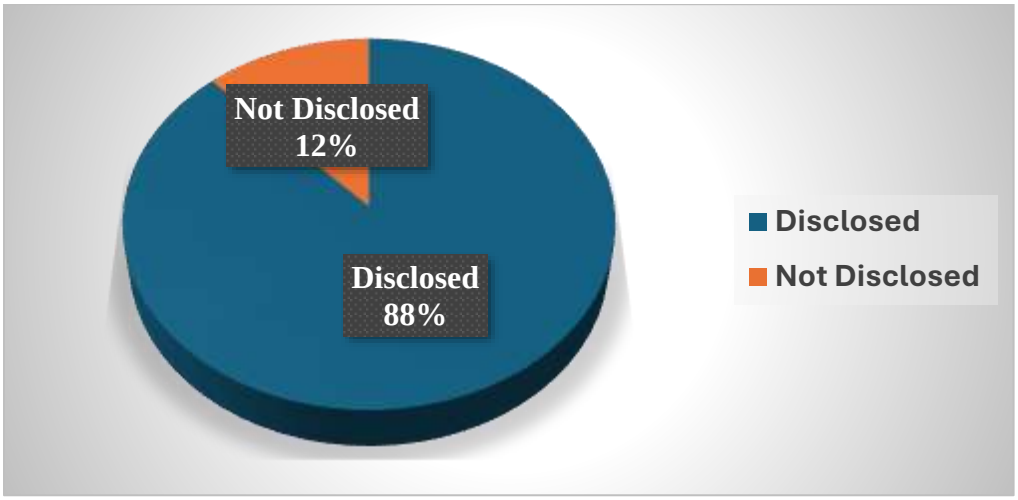

Figure 1: Respondents' HIV- status disclosure

The HIV-positive disclosure rate observed in Zanzibar (88%) was higher compared to that of pregnant women in Dar-es-Salaam (51%), Morogoro (41%), and Kilimanjaro (66%) (Hallberg *et al.,* 2019; Darmian *et al.,* 2019). Moreover, it was higher than that which was observed in South Africa (34% -36%) (Okorie et al., 2023). According to Issifou and Bayaki (2015), in Togo HIV disclosure to sexual partners among PLWHIV was 60.9%, and 69% for HIV-positive women. The results from the respondents were contrary to those from key informants; 75% of them reported a moderate HIV-positive disclosure rate. Furthermore, over 80% of the HIV clients attending CTCs disclosed their HIV test results. In a similar vein Maman and Medley (2013) report that the rate of disclosure varies with location, a subgroup of PLWHIV, potential confidence, experienced kindness, understanding, and acceptance of the situation.

HIV status disclosure rates in Tanzania have generally increased over the years, although there is variation based on factors like age, location, and

caregiver characteristics, for example Exavery et al. (2021) in their study observed an increased caregivers' HIV status disclosure to the USAID *Kizazi Kipya* project staff by 14.8%, from 81.3% at baseline to 96.1% at midline within an average project exposure period of 1.4 years. Several studies also have shown a rise in the proportion of people living with HIV (PLHIV) who are aware of their status and subsequently disclose it to others, particularly within specific projects or interventions (Erio and Moyer, 2024; John and Chipwaza, 2022; Exavery et al., 2021; UNAIDS, 2020). Several factors can influence disclosure rates. For instance, older individuals and those with higher levels of education are more likely to disclose their status (Erio and Moyer, 2024; Exavery et al., 2021). Improved counselling before and or after HIV testing, discussion with partners on HIV, and awareness of the partner's HIV status could also influence HIV disclosure to other persons. In Ethiopia, Alemayehu *et al.* (2014) and Genet *et al.* (2015) reported higher disclosures among women who got pretesting counselling and those who had discussions with partners before HIV testing. In Mwanza, Tanzania, it was reported by Yonah (2014) that disclosure was higher because of close relationships, the need for help, and advice from VCT care providers. To clients who had never disclosed to any persons more emphasis is needed from stakeholders to increase awareness of the importance of early HIV-positive disclosure.

The **r**esearch findings on the association between gender and HIV-positive disclosure show no statistically significant association ($P>0.05$; χ^2 cal < χ^2 critical) between gender and disclosing HIV test results (Table 5). This implies that variation does not influence the disclosure of HIV positive to other people. These findings are in line with Mwanga *et al.* (2012) who observed that among people living with HIV attending Care and Treatment Clinic in Kisarawe district, Tanzania, the disclosure was observed to be similar between males (97%) and females (98.5%). According to Okorie et al. (2023), men are not necessarily more likely to disclose their HIV status than women. In fact, studies show that women may be more likely to disclose their status to a wider range of people, including family members, while men may be more likely to disclose to a partner. However, there are shades and variations based on cultural context, relationship type, and individual circumstances.

Table 5: Gender and HIV Positive Disclosure

Disclosure status	Female	Male	Total
Disclosed	141 (88.2)*	44 (88)	185 (88)
Not disclosed	19 (11.8)	6 (12)	25 (12)
Total	**160 (100)**	**50 (100%)**	**210 (100%)**
Cal χ2= 0.001 p = 0.981	tab/critical χ2= value 3.841,		df = 1

**Values in parentheses are percentages*

To find out the kind of relationship with a person to disclose for the first time, respondents were asked to mention who was the most preferred person to disclose their HIV status after receiving the test results. Findings in Figure 2 show that 74% of the respondents disclosed their HIV-positive results to their partners, while 51% did so to their close relatives. For the first time, most of the respondents disclosed their HIV-positive test results to their partners after some sessions of counselling with them. According to Vu *et al.* (2012), stable partners feel responsible for caring for their partner's health as well as the welfare of any child in the relationships. This finding implies that partners were the most preferred persons to disclose soon after knowing HIV-positive results. However, contrary findings have been reported by Yonah *et al.* (2014) who when studying HIV serostatus disclosure among people living with HIV/AIDS in Mwanza, Tanzania, observed that 50% of participants disclosed their HIV test results to their family members and close relatives.

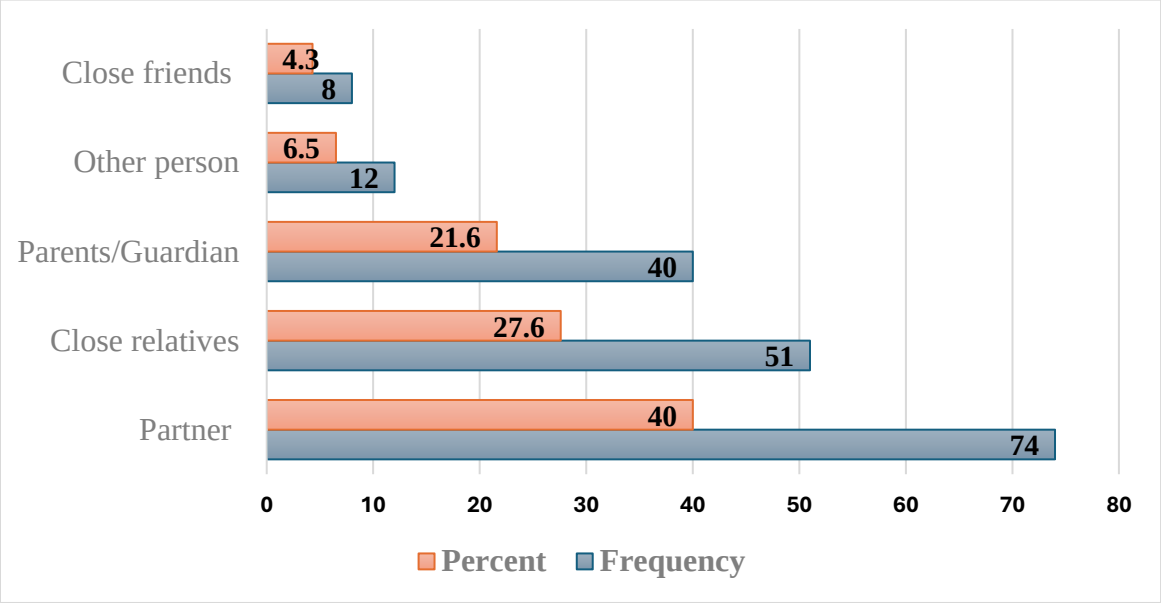

Figure 2: Preferred recipients of initial HIV status disclosure

3.3. Reasons for Disclosure and Awareness of the Benefits

To examine reasons for disclosure and clients' awareness of the benefits of disclosing HIV-positive test results, respondents were asked to specify reasons for disclosing and state some benefits of disclosure. Multiple response findings in Table 6 show that 61.0% of respondents agreed that disclosure helps to discuss HIV with a partner(s), 61.4% said it helps know partners' HIV status, 65.7% specified that it helps to seek care and treatment, and 60.5% mentioned reducing risk among couples. Similar findings were reported by Elopre *et al.* (2015) studying the role of early HIV status disclosure for retention in HIV care, observed that women who disclose their HIV test results to partners have higher ART adherence, especially in PMTCT programs, higher adherence to the infant feeding method chosen, a higher rate of using contraceptives/condoms, are retained into care more than those who do not disclose. Furthermore, Yonah *et al.* (2014) when studying HIV status disclosure outcomes in Mwanza, found that emotional support and financial support were reported by some of the participants, while others reported that they were able to use their ARV freely following disclosure as opposed to the habit of hiding their medications and using them secretly which was the case before disclosure.

Disclosure allows couples to engage in discussions leading to partners of infected individuals to undergo HIV testing and enter care promptly (Walcott *et al.,* 2013; Trinn *et al.,* 2016). Thus, HIV status disclosure gives infected persons access to social support, which improves health through a variety of mechanisms, including access to resources, an enhanced immune response, and improved health-related behaviours. It also allows discussing condom and contraceptive use that reduces transmission probability and it enables couples to make informed reproductive health choices that may ultimately lower the number of unintended pregnancies. In addition, some of the participants in this study mentioned other benefits of disclosure which include reducing stigma, living with hope, encouraging taking medication from family members, planning on how to handle children, and easy to get help when one gets a problem or when one falls sick. Therefore, the common reasons for disclosure of the HIV positive test results include the opportunity to discuss HIV with the partner(s), knowing the partner's HIV status, seeking care and treatment, and risk reduction factors among couples.

Table 6: Reasons for HIV status disclosure

Reason	Responses					
	1 = Strongly Disagree	2 = Disagree	3 = Undecided	4 = Agree	5 = Strongly Agree	Total (%)
Opportunity to discuss about HIV with partner(s)	4(1.9)	3(1.4)	21(10.0)	54(25.7)	128(61.0)	210(100) *
Know partner(s) HIV status	4(1.9)	2(1.0)	20(9.5)	55(26.2)	129(61.4)	210(100)
Seek for care and treatment	1(.5)	1(.5)	18(8.6)	52(24.8)	138(65.7)	210(100)
Risk reduction factors among couple	2(1.0)	2(1.0)	20(9.5)	59(28.1)	127(60.5)	210(100)
Reproductive health choices	1(.5)	1(.5)	34(16.2)	71(33.8)	103(49.0)	210(100)
Psychosocial support	1(.5)	2(1.0)	31(14.8)	78(37.1)	98(46.7)	210(100)
Behavioural change	4(1.9)	5(2.4)	47(22.4)	61(29.0)	93(44.3)	210(100
Adhere to infant feeding method chosen	1(.5)	2(1.0)	53(25.2)	70(33.3)	84(40.0)	210(100)

**Values in parentheses are percentages*

Respondents' awareness of the benefits of disclosing HIV status was captured using five level Likert scale items presented in Table 7. Respondents rated their agreement with statements about disclosure benefits on a five-point Likert scale (1 = strongly disagree, 5 = strongly agree). A mean index of 4.337 was calculated, with 53.3% of respondents scoring above this threshold considered aware of disclosure benefits and 46.7% below it considered unaware. These findings imply that community members need more knowledge to support PLWHIV psychologically, socially, and economically to increase the disclosure rate. HIV status disclosure has been reported subsequently beneficial to PLWHIV in several ways including psychological, emotional, and material support from family and other community members and freedom to use ARV medications. Furthermore, uninfected partners in discordant couples benefit through taking appropriate actions including safer sex practices to prevent the transmission of HIV. Some negative outcomes attributed to disclosureinclude rejection, assault, separation, divorce, stigma, and discrimination. However, do the advantages of disclosing HIV status outweigh the disadvantages of not disclosing? The literature informs that for most people, the advantages of disclosing HIV status often outweigh the disadvantages, particularly when considering long-term outcomes and overall well-being (UNAIDS, 2024; Aidsmap, 2020). While fear of negative reactions like stigma, blame, or rejection can be significant barriers to disclosure, studies show that positive outcomes such as increased social support, reduced anxiety and depression, and stronger relationships are more commonly reported (UNAIDS, 2024; Aidsmap, 2020). The decision to disclose is personal, and individuals should carefully weigh the potential benefits and risks in their specific context (Alhasan et al., 2023; Ambissa et al., 2021; UNAIDS, 2024; Aidsmap, 2020).

Table 7: Awareness index on the benefits for disclosing HIV positive test results

Index	Frequency	Percent	Cumulative Percent
1.0	1	0.5	0.5
2.4	1	0.5	1.0
3.0	17	8.1	9.0
3.3	1	0.5	9.5
3.4	1	0.5	10.0
3.5	4	1.9	11.9
3.6	3	1.4	13.3
3.8	6	2.9	16.2
3.9	4	1.9	18.1
4.0	39	18.6	36.7
4.1	11	5.2	41.9
4.3	10	4.8	46.7
4.4	8	3.8	50.5
4.5	12	5.7	56.2
4.6	7	3.3	59.5
4.8	9	4.3	63.8
4.9	9	4.3	68.1
5.0	67	31.9	100.0
Descriptive statistics			
Mean index		4.337	
Std. Error of Mean		0.0463	
Median		4.375	
Mode		5.0	
Std. Deviation		0.6714	
Variance		0.451	
Range		4.0	
Minimum		1.0	
Maximum		5.0	

4. Conclusion and Recommendations

This study highlights a high HIV disclosure rate (88%) among PLWHIV in Fuomi ward, Zanzibar, driven by awareness of benefits like partner discussions and care access. However, 46.7% of respondents remain unaware of these benefits, indicating a need for enhanced education and support. The study recommends that stakeholders like ministries and departments responsible for public health, particularly on HIV related issues should launch community-based campaigns (e.g., radio programmes, peer-led workshops) to raise awareness of disclosure benefits. Healthcare providers should receive regular training on counselling techniques to support PLWHIV in overcoming stigma and fear of discrimination.

References

Aidsmap. (2020). Telling people you have HIV: Pros and Cons of disclosing you HIV status: Retrieved from: https://www.aidsmap.com/about-hiv/pros-and-cons-disclosing-your-hiv-status#:~:text=You%20need%20to%20think%20very, can%20be%20a%20complex%20decision.

Alemayehu, M., Aregay, A., Kalayu, A., and Yebyo, H. (2014). HIV Disclosure to Sexual Partner and Associated Factors Among Women Attending ART Clinic at Mekelle Hospital, Northern Ethiopia. *BMC Public health*, 14(1), 746, doi: 10.1186/1471-2458-14-746.

Alhassan, R. K., Nutor, J. J., Gyamerah, A., Boakye-Yiadom, E., Kasu, E., Acquah, E., and Doe, E. (2023). Predictors of HIV status disclosure among people living with HIV (PLHIV) in Ghana: the disclosure conundrum and its policy implications in resource limited settings. *AIDS research and therapy*, 20(1), 84. https://doi.org/10.1186/s12981-023-00569-1

Allison, H. (2025). Accidental Sampling, Retrieved from: https://www.ebsco.com/research-starters/social-sciences-and-humanities/accidental-sampling#:~:text=Accidental%20sampling%2C%20also%20known%20as,has%20limitations%20in%20broader%20applications.

Ambissa, M., Sendo, E. G., Assefa, Y., and Guta, A. (2021). HIV-positive status disclosure to a sexual partner and associated factors among HIV-positive pregnant women attending antenatal care in Dire Dawa, Ethiopia: a cross-sectional study. *PloS one*, 16(4), e0250637

Babie, E. (2013). *The Practice of Social Research,* 13th Edition, Wadswort, Cengage Learning, Belmont.

Chaudoir, S. R., Fisher, J. D., and Simoni, J. M. (2011). Understanding HIV Disclosure: A Review and Application of the Disclosure Processes Model. *Social Science and Medicine,* 72(10), 1618 - 1629.

Clarke, T.R., Gibson, R., Barrow, G., James, S., Abel, W. D., and Barton, E. N. (2010). Disclosure HIV status among HIV Clinic Attendees in Jamaica. *West Indian Medical Journal,* 59(4), 445 - 449.

Damian, D. J., Ngahatilwa, D., Fadhili, H., Mkiza, J.G., Mahande, M. J., and Ngocho, J. S. (2019). Factors Associated with HIV Status Disclosure to Partners and its Outcomes Among HIV- Positive Women Attending Care and Treatment Clinics at Kilimanjaro Region, Tanzania, https://doi.org/10.1371/journal.pone.0211921

Elopre, L., Hook, E.W., Westfall, A.O., Zinski, A, Mugavero, M.J., Turan, J. V., and Wagoner, N. (2015). The Role of Early HIV Status Disclosure in Retention in HIV Care. *AIDS Patient Care STDS*, 29(1), 646–650.

Erio, T., de Klerk, J., and Moyer, E. (2024). HIV status disclosure in the era of treat-all: the complexities of societal expectations and disclosure in marital relationships in Shinyanga, Tanzania. *AIDS care*, *36*(12), 1891-1901.

Exavery, A., Charles, J., Barankena, A., Kuhlik, E., Mubyazi, G. M., Kyaruzi, C., ... and Jere, E. (2021). Accelerating caregivers' HIV status disclosure to community-based lay social welfare volunteers in Tanzania. *AIDS Research and Therapy*, *18*, 1-14.

Genet, M., Sebsibie, G.,and Guitie, T. (2015). Disclosure Of HIV Seropositive Status to Sexual Partners and its Associated Factors Among Patients Attending Antiretroviral Treatment Clinic Follow up at Mekelle Hospital, Ethiopia: A Cross-Sectional Study. *BMC Res Notes* 8:109. https://doi.org/10.1186/s13104-015-1056-5

Hallberg, D., Kimario, T. D., Mtuya, C., Msuya, M., and Björling, G. (2019). Factors affecting HIV disclosure among partners in Morongo, Tanzania. *International Journal of Africa Nursing Sciences*, *10*, 49-54.

Issifou, Y., and Bayaki, S. (2015). HIV Status Disclosure to Sexual Partners, Among People Living with HIV and AIDS on Antiretroviral Therapy at Sokodé Regional Hospital, Togo. *Plos one*, 10 (2), 119-125.

John, M. E., and Chipwaza, B. (2022). HIV status disclosure among adults attending care and treatment clinic in Kilombero district, South-Eastern Tanzania. *International Journal of Africa Nursing Sciences*, 17, 1-6.

Krishnaswami, O. R., Ranganathan, M., and Herikumar, P.N. (2016). *Research Methodology,* 1st Edition, Himalaya Publishing House, New Delhi.

Kumar, R. (2011). *Research Methodology*. A Step-by-Step Guide for Beginners, 3rd Edition. SAGE, London.

Maman, S., and Medley, A. (2013). Gender Dimensions of HIV Status Disclosure to Sexual Partners: Rates, Barriers and Outcomes. [Review Paper]. Addis Ababa, Ethiopia. https://api.semanticscholar.org/CorpusID:68513471.

Mwanga, J.A. (2012). HIV Sero-status Disclosure and Associated Factors Among People Living with HIV/AIDS Attending Care and Treatment Centre in Kisarawe District Hospital, Tanzania. MPH Thesis, Muhimbili University of Health and Allied Sciences, School of Public Health.

Okorie, C. N., Gutin, S. A., Getahun, M., Lebu, S. A., Okiring, J., Neilands, T. B., and Camlin, C. S. (2023). Sex specific differences in HIV status disclosure and care engagement among people living with HIV in rural communities in Kenya and Uganda. *PLOS Global Public Health*, *3*(4), e0000556.

PHIA. (2024). Release of Tanzania Population based HIV impact assessment data showing notable progress and identified gaps that stand in the way of epidemic control, Retrieved from: https://phia.icap.columbia.edu/release-of-tanzania-population-based-hiv-impact-assessment-data-shows-notable-progress-and-identifies-gaps-that-stand-in-the-way-of-epidemic-control/#:~:text=Stop%20Animations-,Release%20of%20Tanzania%20Population%2Dbased%20HIV%20Impact%20Assessment%20Data%20Shows,on%20ART%20are%20virally%20suppressed.

Revolutionary Government of Zanzibar (RGZ). (2020). Annual Report Zanzibar Integrated HIV, Hepatitis, Tuberculosis and Leprosy Programme, Retrieved from: https://zhhtlsmz.go.tz/annual-reports.html.

Ssali, L., Wasagami, F., Kateeba, A., Nantume, S., and Kiboneka, A. (2012). Disclosure of HIV status outcome of regular counselling in a cohort of patients attending HIV clinics. *Retrovirology*, *9* (Suppl 1), P59. doi: 10.1186/1742-4690-9-S1-P59. PMCID: PMC3360370.

Trinn, T. T., Yatich, N., Ngomoa, R., McGrath, C. J., Richardson, B. A., Sakr, S. R., ... and Chung, M. H. (2016). Partner disclosure and early CD4 response among HIV-infected adults initiating antiretroviral treatment in Nairobi Kenya. *PloS one*, *11*(10), e0163594. doi: 10.1371/journal.pone.0163594.

UNAIDS. (2020). Country Progress Report -United Republic of Tanzania, Retrieved from: https://www.unaids.org/sites/default/files/country/documents/TZA_2020_countryreport.pdf

UNAIDS. (2024). The benefits of knowing your HIV status. Retrieved from: https://www.unaids.org/sites/default/files/benefits-of-knowing-your-hiv-status_en.pdf.

URT. (2024). Tanzania HIV Impact Survey 2022-2023 Summary Sheet. Retrieved from: https://www.nbs.go.tz/nbs/takwimu/THIS2022-2023/THIS2022-2023_Summary_Sheet.pdf.

Vu, L., Andrinopoulus, K., Mathew, C., Chopra, M., Kendall, C., and Eisele, T.P. (2012). Disclosure of HIV Status to Sex Partners Among Infected Men and Women in Cape Town, South Africa. *AIDS Behaviour,* 16(1):13-28. doi: 10.1007/s10461-010-9873-y. PMID: 21197600.

Walcott, M., Hatcher, A., Kwena, Z., andTwan, J.M. (2013). Facilitating HIV Status Disclosure Pregnant Women and Partners in Rural Kenya: A qualitative Study. *BMC Public Health* 13, 1115 (2013). https://doi.org/10.1186/1471-2458-13-1115.

Yamane, T. (1967). Statistics: An Introductory Analysis, 2nd Edition, Harper and Row, New York.

Yonah, G., Fredrick, F., and Leyna, G. (2014). HIV Serostatus Disclosure among People Living With HIV/AIDS in Mwanza, AIDS Research and Therapy. Tanzania.