

## Original Research Article

HIV Status Disclosure Experiences and associated factors amongst clients attending ART Clinic at University of Nigeria Teaching Hospital, Enugu

**Comment [h1]:** Rephrase the title. Suggestion: Prevalence, patterns and predictors of status disclosure amongst HIV clients accessing care in a tertiary health facility in Nigeria.

You stated in your methods section that you used logistic regression to determine predictors

### **ABSTRACT**

**Introduction:** Mankind has been battling the AIDS pandemic since its advent in the eighties. So far, diverse measures have been taken and strategies formulated to combat the disease one of which is geared towards establishing barriers to its spread. HIV status disclosure as a preventive tool amidst other benefits is a key strategy of the end AIDS goal by 2030. This study was to determine the prevalence, patterns and reasons for disclosure as well as disclosure outcome and influencing factors in the antiretroviral clinic of a tertiary facility in Enugu State, Nigeria.

**Comment [h2]:** In addition to the comments below, attention must be given to grammar and clarity of sentences

**Methods:** A cross sectional analytical survey was conducted among 260 HIV seropositive clients using questionnaires. Simple random sampling was carried out. Ethical issues were considered. Data were analyzed using IBM SPSS and summarized using proportion, percentages and mean. Chi-square test was used for associations at significant level of  $p < 0.05$ .

**Comment [h3]:** The aim of the study is not appropriately stated. Suggestion: To determine the prevalence, patterns and factors associated with HIV disclosure among HIV clients accessing care in the ART clinic of the University of Nigeria Teaching Hospital, Enugu.

**Comment [h4]:** Is it self-administered or interviewer?

**Comment [h5]:** There are different Chi-square statistics. I believe you mean Pearson Chi-square test

**Comment [h6]:** You also stated in your methods section that you used logistic regression

**Comment [h7]:** Usually in biomedical research, the level of significance is either 0.05 or less.

**Results:** All participants chosen for the study responded (100%). The survey revealed that; 96.5% of the respondents had disclosed their status to someone, 82.7% to their relative/friend. For clients who had spouse/partner, 91.4% have informed them. Majority had disclosed to more than one person (74.6%) with a good number disclosing because they felt it was their duty to tell whoever they told. Most had no negative long term outcomes as a result of disclosing. Specifically, 31.5% and 31.1% reported to have received increase support and adherence to viral treatment respectively. There was a relationship between gender ( $p = 0.031$ ), length of on treatment ( $p = 0.009$ ), parity status ( $p = 0.049$ ), think it is important to disclose ( $p = 0.000$ ) and years of diagnosis ( $p = 0.003$ ) with disclosure status.

**Comment [h8]:** The result section should flow from the prevalence of disclosure, significant patterns of disclosure and the significant factors associated with disclosure.

**Comment [h9]:** Your conclusion should be based on an overriding significant finding or findings which must have been captured in your result section. Followed by a brief recommendation which must also be related to your findings and conclusion

**Conclusion:** Seropositive individuals experienced a lot more positive consequences than negative when then disclosed their status. Gender, opinion on the importance to disclose, length

**Comment [h10]:** This is obvious, however, your study was not comparing disclosure between seropositive and seronegative, so how is it part of your conclusion?

of treatment, time of diagnosis and parity of clients were associated with status disclosure. HIV disclosure counseling and training should pay attention to support group involvement of clients.

**Key words:** Status disclosure, HIV/AIDS and Experiences

**Comment [h11]:** You are repeating your result

**Comment [h12]:** Is this based on your finding? I saw you reported 96.5% of the respondents disclosed their status!!! So what will be the impact of HIV disclosure counselling and training?

**Comment [h13]:** Keywords are inadequate. Suggestions; HIV status disclosure, prevalence, patterns, Nigeria

## INTRODUCTION

HIV/AIDS has remained a problem of public health significance since the first cases ~~that~~ were diagnosed in 5 gay men in the United States in 1981.<sup>1</sup> It was theorized to be a GAY disease but with the advent of technology and research it is now clearly known and understood that the virus can infect and affect anyone.<sup>2</sup> The number of newly infected persons peaked in 2005 with an estimated 2.5million people infected. Nonetheless, the pandemic is slowly being curtailed and the number of new cases drops each year. Sadly, an estimated 35.4 million people have died from AIDS-related illnesses since the start of the epidemic, a great loss for the human race.

**Comment [h14]:** REFERENCE?

Recent data shows that in 2017, 1.5 million new cases were reported with an estimated 36.9 million people globally living with the virus and 940000 deaths from AIDS-related illnesses.<sup>3</sup> Sub-Saharan Africa bears the greatest burden of the disease with about 70% of new cases ~~been~~ reported in 2017 and of this population, 35.1million ~~[29.6million 41.7million]~~ adults and 1.8million ~~[1.3 2.4 million]~~ children were recorded. (<15 years).<sup>3</sup> Nine of every ten PLWHA in the world are from non-industrialized countries.<sup>5</sup>

**Comment [h15]:** The full meaning should first be stated with the abbreviation in the bracket before you start using the abbreviation in follow-up statements.

Despite the fact that only 12% of the global population resides in Sub-Saharan Africa, this developing region has recorded a higher total number of death from HIV/AIDS than other developed regions.<sup>5</sup> Approximately 71% of PLWHA in Sub-Saharan Africa are women and children. It was asserted that social determinants of health, including gender inequalities,

differential access to health services, social violence, and socioeconomic status (SES) have contributed to disparities in HIV transmission rates. These inequalities have posed serious developmental challenges for Sub-Saharan African countries.

Disclosure of HIV status is very important to People Living with HIV/AIDS (PLWHA), partners, and society at large. There are several factors associated with disclosure of HIV status such as fear of negative outcomes of disclosure, communication skills to disclose, initiated antiretroviral therapy, and ever seen people publicly disclose their HIV status.<sup>8</sup> In a study conducted in Tanzania a close relationship with the person they told, the need for help, and advice from VCT care providers were the factors which facilitate the disclosure of the HIV status.<sup>9</sup> In another study in Ethiopia educational status, and ART status influenced disclosure.<sup>10</sup>

Some of the potential benefits of disclosure were improving emotional and psychological wellbeing, early enrolment on antiretroviral therapy, and better adherence to therapy.<sup>11,12</sup> Disclosure to a sexual partner may increase HIV testing and reduce the risk of HIV transmission<sup>13</sup>-including HIV transmission from the mother to child.<sup>13, 14</sup> The disclosure of an HIV status to a sexual partner can have varying effects. It may motivate partners for Voluntary Counseling and Testing (VCT), reduce risk behaviour, and increase acquisition of support and adherence to ART.<sup>15</sup>

However, on the contrary, it may cause blame, discrimination, abandonment, depression and loss of economic support and disruption of family relationships. Therefore, it is easy to see why some patients may not disclose their HIV-positive status.<sup>16</sup> It can also have a negative effect on treatment outcomes and feelings of regret about disclosing. Other negative effects include high levels of distress, low levels of self-esteem and social support,<sup>17</sup> increased depression,<sup>18</sup> as well

**Comment [h16]:** Pls clarify, it is not understood. Rephrase the statements according to the understanding of what the study was trying to convey

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**Comment [h18]:** Grammar??

as poorer mental and physical health.<sup>17-19</sup> A fear of stigma may also lead to non-disclosure of diagnosis.<sup>20</sup>

The decision on whether to disclose or not has been a dilemma where the individual weighs up the risk of experiencing stigma (discrimination and feelings of shame) against the potential of receiving positive support.<sup>21</sup> Tackling the reluctance to disclose one's status is key as there is evidence that non-disclosure is linked to poorer health<sup>21</sup> and disclosing has been found to be strongly associated with positive aspects for health, such as, a better perception of physical health, lower depression scores, and better mental health.<sup>21,22</sup>

Within HIV counseling and testing programs, HIV positive clients are generally actively encouraged to disclose to their partners. Despite this advice, disclosure to partners remains sub-optimal in many settings in Sub-Saharan Africa, with a significant proportion of HIV-positive individuals waiting for over a year to inform their partners.<sup>23</sup> Disclosure rates within countries differ by ethnicity, gender and by the kind of testing facility. Although studies have found that health facilities offering HIV testing in Sub-Saharan Africa are trying to accommodate the needs of couples, uptake remains a challenge, with a low number of couples testing together.<sup>24</sup> Nevertheless, some studies have reported success in increasing testing among couple,<sup>25</sup> especially through home-based testing, while one recent study on HIV testing within routine health services reported high rates of partner referral in post-test counseling.<sup>26</sup> Fear of enacted stigma<sup>27</sup> including violence, abandonment and divorce<sup>28</sup> negatively affects rates of partner disclosure.<sup>23,24</sup> The Multi-Country African Testing and Counseling for HIV (MATCH) study conducted in Burkina Faso, Kenya, Malawi and Uganda found that despite the emphasis on partner disclosure in post-test counseling, only 37% of the HIV-positive women tested within Prevention of Mother-to-Child Transmission (PMTCT) programmes had disclosed to their

Comment [h19]: Grammar?

partners.<sup>26</sup> When they did so, disclosure often led to serious rifts, including abandonment and divorce. Men disclosed more often and experienced less negative consequences upon disclosing than women.<sup>27</sup> Partner disclosure requires trust that the intimate other will provide care and will not contribute to the stigmatization of the affected individual. Small-scale ethnographic studies suggest that HIV positive individuals find it easier to disclose to other HIV-positive persons in support groups or in clinics than to their partners. These studies also suggest that HIV-positive individuals often pursue strategies of incremental, partial or indirect disclosure, which in some cases allow their partners to disclose first.<sup>28,29</sup>

Disclosure is complicated by the close and complex relationship between disclosure, stigma, and culture which impacts on each other. Furthermore, HIV disclosure is a complex and difficult personal matter that entails communication about a potentially life threatening, stigmatized, and transmissible infection. The attempt to normalize nondisclosure by people affected by and infected with HIV, makes disclosure even more complex, given that the desire to maintain silence about an HIV test persists in many societies.

The vision of the national strategic plan (NSP) is “An AIDS-free Nigeria, with zero new infections, zero AIDS-related discrimination and stigma. Considering that disclosure of HIV status to sexual partners and relatives especially those who are most likely to come in contact with the virus is a key strategy in curbing the epidemic and preventing the emergence of new cases, this study will provide a guide in policy making towards achieving the end AIDS goal of 2030 in the country.

There already exist too many challenges associated with HIV/AIDS eradication. In order to combat the AIDS pandemic and end AIDS by 2030 as stipulated by the new Sustainable development goals, status disclosure has to be sought as a strategy for curtailing the spread of

this infection. The study is aimed at looking at the prevalence rate of HIV/AIDS disclosure, the experiences of clients who have disclosed their status in ART clinic in UNTH and derive associated factors that fuel or slow down this crucial process. This will contribute to the limited data on HIV serostatus disclosure among seropositive individuals, increase community members' awareness of the importance of disclosing their HIV serostatus to someone especially those who are most likely to come in contact with the virus.

**Comment [h20]:** The aim of the study is not appropriately stated

## **MATERIALS AND METHODS**

### **Study area**

The study was conducted at the HIV/AIDS clinic of the University of Nigeria Teaching Hospital (UNTH) in Enugu (UNTH), Southeast Nigeria. Enugu metropolis has an estimated population of 722,664 according to the 2006 Nigerian census and has long been inhabited by the subgroup of the Igbo people called the Nike. However, thousands of individual are attracted to the city from other tribes and ethnic groups all around the country for business and studies predominantly. According to Nigeria HIV/AIDS Indicator and Impact Survey (NAIIS), prevalence of HIV/AIDS in this region stands at 2.1% in the country's list of prevalence by state. The tertiary health facility is the largest HIV treatment facility in the state of Enugu. The institution houses 41 main departments with three out- posts-Comprehensive health centers and 9 training schools/programs. The community service rendered by the hospital extends beyond the South-East Geo-political zone of the country. The hospital has more than 10, 000 patients enrolled for ART services.

**Comment [h21]:** What year?

**Comment [h22]:** Are you referring to the HIV treatment facility? Or you are referring to the teaching hospital of which the HIV facility is part of?

### **Study design and population**

The study is an institution-based analytical cross-sectional survey among PLHIV on treatment and care at ART clinic, aged 18 years and above willing to take part in the study via consenting.

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### Sample Size and sampling technique

The sample size was determined using single population proportion formula  $[n=Z^2pq/d^2]$ .

Sample size determination was based on disclosure status from a previous study which is 81%

using a marginal error of 5% critical value, a confidence interval of 95% and a non-response rate

of 10%. A total of 260 respondents were studied.

Simple random sampling by balloting was used to recruit the subjects during their routine clinic visits. Each day small pieces of papers were labeled YES and NO which the clients picked from.

Those who picked a Yes paper were enrolled in the study. Patients who visited the clinic during entire period of the study and fulfilled the selection criteria were recruited (no client was interviewed twice) until the required sample size was obtained.

### Data Collection Instrument and Method

Pre-tested interviewer administered semi-structured questionnaire was used for data collection.

The researcher and two trained research assistants administered the questionnaires. They were trained on the tools to be used, purpose of the study and how to approach respondents and obtain consent. The instrument was pretested at another similar hospital ART clinic among patients a week before the study. This was geared towards assessing the clarity of the instruments and making necessary modification prior main data collection.

### Data analysis

Data was entered and analyzed using IBM Statistical Package for the Social Sciences (SPSS) version 21 for analysis. Frequency tables were used in presenting the data. Chi-square test was done to determine the association between independent variables and disclosure status at significance level of  $p<0.05$ . Binary logistic regression models were built to identify predictors of HIV status disclosure for significant variables at  $p < 0.2$ .

**Comment [h24]:** Reference?

**Comment [h25]:** Is 95% the confidence interval??

**Comment [h26]:** Your statements appear contradictory, you stated simple random sampling was done and at the same time you are stating that patients who visited .....were recruited?? Secondly for you to do simple random sampling, you need to establish a sampling frame. From your description, it appears no sampling frame was established. As patients came in they picked labelled papers to decide on enrolment

## Ethical considerations

Ethical approval for the study was obtained from the University of **Nsukka** Enugu Campus School of postgraduate, Ethical Review Committee. Informed consent was obtained from all those who **partook** in the study. Participants' freedom to withdraw from the study at any point in time in spite of the consent was respected with their confidentiality ensured.

Comment [h27]: Grammar

## RESULTS

Table 1 shows that the study consisted of 260 HIV-positive clients aged between 18 to 70 years with a mean age of 40.70 years (SD = 10.38). About three **quarters** of the sample was between 18 and 49 years old. **There was 60.8% female to 39.2% male with male: female ratio stood at 1:1.5.** **Majority had secondary education 122(46.9%) and a 225 (86.6%) were employed.** More than half of the study population were married, 155 (59.6%) and about two thirds reported having at least 1 living child, 194 (74.6%).

Comment [h28]: Grammar

Comment [h29]: Grammar

Table 2 shows that majority of the respondents were not aware of existing support groups 151(58.1%) even though only 34(13.1%) were actively participating in such groups. Many of the clients 113(43.5%) acknowledged to have been tested voluntarily and more than half of the clients said they were tested because they fell ill, 144(55.4%) followed by a comparatively smaller group of 32 (12.3%) persons who tested because they knew or suspected their partner was positive. Only 26 (10.0%) clients have not received any form of counseling prior to and after the test. Meanwhile, 162(62.3%) did not blame themselves for having the disease and 159(61.2%) persons thought it important to disclose their status to someone. Also 208(80%) have been diagnosed for at least 5 years and 195(75%) on HAART for at least 5 years.

Table 3 shows that majority 251 (96.5%) of clients had disclosed their status to someone. Of all the clients 185 (71.2%) who had sexual partners 167 (64.2%) of them knew their partners' HIV status. Also, 202 (77.7%) respondents have not witnessed someone who is seropositive disclose his/her status. Also, of this group of disclosed persons, 120 (46.6%) preferred to disclose to their relative for the first time, 117 (45.0%) preferred their partner and 14 (5.4%) preferred a friend. A great number of correspondents had told one person only, 66 (25.5%); also many correspondents had told many persons as is the case with 6 and above persons 47(18.1%).

Table 4 shows that major reasons for disclosure were because they felt it was their duty to tell whoever they told 96 (37.8%) and that they trusted the person to keep it secret 51(20.3%). Of 7 that have not disclosed their status to anyone, 6(2.3%) persons said they felt they don't have a close enough relationship and therefore saw no need to tell while 2(0.8%) cited fear of rejection. Nevertheless, 7 (2.7%) of the respondents promised future disclosure if need be. About half of the disclosed population 136 (54.2%) said they received advice and encouragement on first disclosure, 79 (31.5%) said they received material and emotional support from those they told while 175 (69.7%) reported they had no negative effects. Also three quarter of the clients had disclosed immediately 199 (79.3%) followed by a much smaller number of 38 (15.1%) persons who took at least 1 year to disclose their status to someone.

Table 5 shows that there were statistical significant associations of status disclosure and gender ( $\chi^2 = 5.810$ ,  $p = 0.031$ ), length of time the clients have been on treatment ( $\chi^2 = 8.632$ ,  $p = 0.009$ ), parity status of the clients ( $\chi^2 = 4.480$ ,  $p = 0.049$ ), think it is important to disclose ( $\chi^2 = 14.676$ ,  $p = 0.000$ ), and year of diagnosis ( $\chi^2 = 12.689$ ,  $p = 0.003$ ). However, there were no statistical

significant associations of status disclosure and age ( $\chi^2 = 2.808$ ,  $p = 0.422$ ), marital status ( $\chi^2 = 2.780$ ,  $p = 0.249$ ), occupation ( $\chi^2 = 4.770$ ,  $p = 0.189$ ), participation in support group ( $\chi^2 = 1.403$ ,  $p = 0.611$ ), pre and post test counseling ( $\chi^2 = 5.640$ ,  $p = 0.050$ ), witnessed disclosure ( $\chi^2 = 2.677$ ,  $p = 0.214$ ), knowledge of partner status ( $\chi^2 = 3.934$ ,  $p = 0.106$ ) and blame ( $\chi^2 = 0.075$ ,  $p = 1.000$ )

## **DISCUSSION**

Disclosure dynamics are context-specific. They are influenced by the practices of healthcare providers and support groups, by cultural views on HIV/AIDS as well as by kinship dynamics and gender relations. The overall high HIV disclosure rate in this study is comparable to previous studies in Nigeria on the prevalence, pattern and predictors of disclosure amongst clients in Federal Medical Center Bida<sup>55</sup> and also similar to another study on associated factors of disclosure by clients in the Northeast of the country.<sup>67</sup> These similar results are extracted from a different geopolitical zone of the country so reason for this high disclosure cannot be explained in the southeast and Enugu context in particular. However, it was speculated in the other studies that women who are the vast majority in the study, may be getting adequate HIV related information that empowers them to disclose their status (ongoing disclosure counseling). Nonetheless, comparatively lower rates of disclosure in Illorin, Tanzania and elsewhere in Africa have been reported.<sup>54, 66</sup> Another of such study carried out in the same institution but on infected children and adolescence revealed a comparatively low level of disclosure to these individuals.<sup>68</sup> This finding is encouraging and if well applied can lead to higher detection of HIV, improved enrollment in HIV programmes and ultimately control of HIV.

This study reported that most of the respondents had received counseling in which they were advised on the need and importance of disclosure. This may have contributed to the high proportion that thought that their status disclosure is necessary. This finding agrees with that of a Northern Ethiopian study which reported a good level of knowledge on the importance of disclosure.<sup>69</sup> Most of the respondents in their studies agreed that it was important to disclose their HIV status. Although the attitudes towards disclosure and the actual disclosure practices reported by the participants in the study were encouraging, the participants only disclosed their status to trusted individuals.

The length of time in which the respondents knew their status differed. Majority of them had been diagnosed over 5 years ago and beyond and were tested through VCT. This study also reported that a large number of individuals were not members of any support group even though most were aware of support group just like the study in Ethiopia<sup>63</sup> but contrasts other countries like Tanzania.<sup>70</sup> Being a member of HIV/AIDS support system/group could provide clients with information on the merits of disclosure as well as for sharing and discussing their problems freely with other individuals so as to help them in acquiring possible solution. This in turn might have an effect in disclosure of HIV status. It is obvious that as patients stay longer in HIV care services, they are informed about the benefits of HIV/AIDS care, including disclosure, experience sharing with others and counseling. With regard to reason for testing, over half got tested because they fell sick and had need for HIV testing. Second to that was suspicion of partners' seropositive status and then routine check for most of the clients. This agrees with studies done in Mekelle Ethiopia.<sup>69</sup>

All the respondents had disclosed their HIV status to someone (96.5%) with majority reporting to family members/ friends (82.7%) and for those who had partners, the disclosure rate to their partners (91.4%). Similar to the finding is the results of a study on ANC women in South Africa; 74.4% had disclosed their HIV serostatus to their sex partners. An even higher proportion of the participants (80.0%) had disclosed their HIV serostatus to at least a family member<sup>71</sup> Of the 62.2% that consisted female disclosed population, 35.5% disclosed to a family member or a friend, compared to only 17.9% of the 37.8% of disclosed males. This finding is consistent with results reported elsewhere with family members being the most frequent group disclosed to<sup>71</sup> and men being more reluctant to disclose to family and friends compared to women<sup>72</sup> Contrary to this finding is what was observed in Federal Medical Center Bida in which correspondents mostly disclosed to their spouse.<sup>55</sup> Disclosure of serostatus was also done within a year of diagnosis and even about 80% of the disclosed persons reported to have done so on the same day. This particular finding is creditable if it is true as the study was based on self-report and wasn't confirmed by the disclose party. It falls in line with a study carried out in Niger state, Northern Nigeria<sup>55</sup>

Respondents had different reasons to disclose their HIV status or not. Some reasons revealed include; is a duty for the clients to tell the significant person, trusting that the person will keep it a secret, need for advice and getting support. A wide range of reasons which coincides with those of this study were found in Uganda and elsewhere although the Ugandan study categorized these reasons to be target-specific.<sup>73</sup> On the other hand participants who had not disclosed expressed lack of close relationship as reason for not disclosing but assured that there is room for disclosure in the nearest future. This contradicts a number of studies in which nondisclosure was mostly

influenced by issues such as the fear of being blamed, the belief that HIV status disclosure is against traditional practice, fear of divorce, fear of loss of traditional support, and fear of being abused.<sup>70,73</sup> In two particular studies, the reason for nondisclosure varied with the sexes. Men were more concerned about their partners' reaction while women were concerned about losing material support.<sup>63,74</sup>

Immediate disclosure reaction from this study showed that a majority of the disclosers said they received encouragement and advice from the person they disclosed to. Nonetheless, a good number of them reported that the partner, family or loved one was saddened and disappointed by the news. In the long run, people seemed to come to terms with the status of the disclosed as two thirds of these persons reported they had no negative experience since they disclosed. Those who suffered bad experiences reported rejection, loss of intimacy with spouse/partner and threats to personal wellbeing. The finding of an Ethiopian study confirmed that women who disclosed their status to sexual partners experience negative outcomes such as discrimination, stigma, and rejection.<sup>64</sup> The implication of disclosure from this study is an increased support from those close to them, taking drugs regularly and feeling more confident because the burden was shared and getting partners to test themselves. The analysis of disclosure narratives in another study revealed that acceptance of a partner's HIV status is a gradual process. While the initial reaction was often one of shock and disbelief, most partners grew more supportive over time.<sup>75</sup>

Concerning factors that determine HIV status disclosure, the present study identified clients' perception on the importance of disclosure, sex, parity, length of ARV treatment and time of diagnosis as relevant. A study in Ogun state reported that disclosure increased with age unlike

this study.<sup>56</sup> Also, having children was positively associated to disclosure status. The present study revealed that knowledge on the importance of HIV disclosure was associated with status disclosure; most respondents knew that disclosing their status was important. This corresponds with a study done in Ethiopia.<sup>69</sup> None of the undisclosed thought it important to tell someone about their status. As opposed to other studies, blame, witnessing someone else disclose, being a part of a support group, marital status and occupation had no relationship with status disclosure of clients. This may be due to differences in setting and study design.

## **CONCLUSION**

The proportion of disclosure status was very high especially to household member, friend or sexual partner. The immediate and subsequent consequences of HIV status disclosure were predominantly positive. Disclosure of HIV status helped respondents to adhere to anti-retroviral therapy and encouraged their partner to test themselves. Factors associated with disclosure were: gender, age, length of treatment, parity, counseling, time of diagnosis and knowledge on partner status. Effective decisions on disclosure improve well-being and quality of life of HIV clients. This in turn have a considerable impact on levels of stigma and discrimination as well as on the HIV epidemic especially as we progress towards the global vision of zero new HIV infections, zero discrimination, and zero AIDS-related deaths.

**Table 1: Socio-demographic characteristics of respondents**

<b>Variable</b>	<b>Frequency (N=260)</b>	<b>Percentages (%)</b>
<b>Gender</b>		
Female	158	60.8
Male	102	39.2
<b>Age Category</b>		
18-29	42	16.2
30-39	68	26.2
40-49	90	34.6
50-69	60	23.0
<b>Level of Education</b>		
Primary	65	25.0
Secondary	122	46.9
Tertiary	73	28.1
<b>Marital Status</b>		
Single	83	31.9
Married	155	59.6
Widowed	22	8.5
<b>Occupation</b>		
Civil Servant	53	20.4
Self Employed	172	66.2
Unemployed	11	4.2
Student	24	9.2
<b>Number of living children</b>		
At least 1 child	194	74.6
None	66	25.4

**Table 2: Knowledge of clients on HIV support groups, counseling, testing and psychological characteristics as well as diagnosis and treatment commencement**

Variable	Frequency (N=260)	Percentage (%)
<b>Knowledge On Existing Support Groups</b>		
Yes	109	41.9
No	151	58.1
<b>Active participation in support group</b>		
Yes	34	13.1
No	226	86.9
<b>Pre and post test counseling</b>		
Not counseled	26	10.0
Counseled	234	90.0
<b>Blame</b>		
No	162	62.3
Yes	98	37.7
<b>Voluntary testing</b>		
No	147	56.5
Yes	113	43.5
<b>Reason for testing</b>		
Fell sick	144	55.4
Do the test regularly to know status	29	11.2
Suspected that my partner was HIV positive	32	12.3
Came for pregnancy clinic and was tested	16	6.2
Health provider recommended the test	13	5.0
Family/friend encouraged to test self	8	3.1
Others	18	6.9
<b>Think it is important to disclose</b>		
No	101	38.8
Yes	159	61.2
<b>Diagnosed (years)</b>		
<5 years	208	80.0
≥5 years	52	20.0
<b>HAART Commencement (Years)</b>		
<5 years	195	75.0
≥5 years	65	25.0

**Comment [h30]:** The heading is not appropriate and the contents not relatable. A table should comprise factors within the context of a particular variable or similar factors associated with a particular variable or similar variables within the context of a general variable. This is taken into consideration when designing your instrument

**Table 3: HIV status disclosure and patterns of HIV status disclosure of respondents**

Variable	Frequency (N=260)	Percentage (%)
<b>Disclosure status</b>		
Disclosed	251	96.5
Not disclosed	9	3.5
<b>Clients who have partners</b>		
Have sexual partner	185	71.2
No partner	75	28.8
<b>Knowledge of partner status (N=185)</b>		
Yes	167	90.3
No	18	9.7
<b>Witnessed disclosure</b>		
Yes	58	22.3
No	202	77.7
<b>Disclosure to partner (N=185)</b>		
No	16	8.6
Yes	169	91.4
<b>Disclosed to other persons</b>		
No	45	17.3
Yes	215	82.7
<b>Preferred disclosure party for first time (N=251)</b>		
Partner	117	46.6
Relative	120	47.8
Friend	14	5.6
<b>Number of persons HIV status disclosed to (N=251)</b>		
1	66	25.4
2	52	20.0
3	52	20.0
4	21	8.1
5	22	8.5
>6	47	18.1

**Comment [h31]:** This title does not depict the contents of the table. If this is the intended title, then you should have columns of disclosure and non-disclosure cross-tabulated with variables that will highlight the patterns

**Table 4: Reason for status disclosure and non disclosure, Outcome of status disclosure and Time of disclosure from diagnosis**

Variable	Frequency (N=260)	Percentage (%)
<b>Reason for disclosure (N=251)</b>		
It is my duty to tell the person	95	37.8
I needed advice	34	13.5
I knew that the person is HIV positive too	10	4.0
I needed material and emotional support	32	12.7
I needed to prepare for the future	29	11.6
I trusted the person to keep it a secret	51	20.3
<b>Reason for non disclosure (N=9)</b>		
Fear of rejection	2	0.8
I don't know how to tell someone I'm positive	1	0.4
I don't have a close relationship with people so I see no need to tell	6	2.3
<b>Possibility of future (N=9)</b>		
No	2	.8
Yes	7	2.7
<b>Immediate reaction</b>		
Silence	34	13.5
sadness and disappointment	73	29.1
Encouragement and advice	136	54.2
Blame	8	3.2
<b>Negative impacts</b>		
Depression because of rejection by those who know status	28	11.2
Family relationship is destroyed	14	5.6
Loss of intimacy with spouse	17	6.8
Personal wellbeing is threatened	17	6.8
None	175	69.7
<b>Positive impacts</b>		
Increased support from those close to client	79	31.5
Take drugs regularly	78	31.1
Partner was encouraged to test self	32	12.7
Feel more confident and relieved because the burden is lifted	40	15.9
Able to share feelings and experiences with those close to client	16	6.4
None	6	2.4

Comment [h32]: Title not appropriate

Length of time from diagnosis to disclosure	Variable (N=260)	Percentage (%)
Immediately	199	79.3
≤1 year	14	5.6
>1 year	38	15.1

**Table 5: Cross tabulation of some variables and Chi square Association**

Variables	Disclosure status of clients		X <sup>2</sup> (P value)
	No (%)	Yes (%)	
<b>Gender</b>			
Female	2(0.8)	156(60.0)	5.810(0.031)
Male	7(2.7)	95(36.5)	
<b>Age group</b>			
18-29	2(0.8)	40(15.4)	2.808(0.422)
30-39	3(1.2)	65(25.0)	
40-49	4(1.5)	86(33.1)	
50-69	0(0.0)	60(23.1)	
<b>Marital status</b>			
Single	5(1.9)	78(30.0)	2.780 (0.249)
Married	4(1.5)	151(58.1)	
Widowed	0(0.0)	22(8.5)	
<b>Occupation</b>			
Civil servant	0(0.0)	53(20.4)	4.770(0.189)
Self employed	9(3.5)	163(62.7)	
Unemployed	0(0.0)	11(4.2)	
Student	0(0.0)	24(9.2)	
<b>Length of treatment</b>			
< 5 years	6(2.3)	59(22.7)	8.632(0.009)
≥5 years	3(1.2)	192(73.8)	
<b>Parity</b>			
None	5(1.9)	61(23.5)	4.480(0.049)
At least 1 child	4(1.5)	190(73.1)	
<b>Participation in support group</b>			
No	9(3.5)	217(83.5)	1.403 (0.611)
Yes	0(0.0)	34(13.1)	
<b>Pre and Post test counseling</b>			
Not Counseled	3(1.2)	23(8.8)	5.640 (0.050)
Counseled	6(2.3)	228(87.7)	
<b>Witnessed disclosure</b>			
No	9(3.5)	193(74.2)	2.677 (0.214)
Yes	0(0.0)	58(22.3)	
<b>Knowledge of partner status(N=185)</b>			
No	2 (1.1)	16(8.6)	3.934 (0.106)
Yes	4(2.2)	163(88.1)	
<b>Think it is important to disclose</b>			
No	9(3.5)	92(35.4)	14.676 (0.000)
Yes	0(0.0)	159(61.2)	

**Comment [h33]:** Title not appropriate. Suggestion; Factors associated with status disclosure among HIV clients in UNTH

Also, you mentioned developing a logistic regression model to determine the predictors? There is no table showing the odds ratio and p-values

<b>Blame</b>			
No	6(2.3)	156(60.0)	0.075 (1.000)
Yes	3(1.2)	95(36.5)	
<b>Diagnosis</b>			
< 5 years	6(2.3)	46(17.7)	12.689 (0.003)
≥5 years	3(1.2)	205(78.8)	

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