

Disclosure Deficits among People Living With HIV on ART at Nekemte Specialized Hospital, Western Ethiopia

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Abstract

Background: Human immunodeficiency virus positive status disclosure deficit continues to drive the infection transmission. The major causes for expansion of HIV infection in developing were due to HIV infected individuals continue to have unprotected sex without informing their status to their sexual partner(s) who may be of negative or unknown sero-status. In the Ethiopia regarding disclosure deficit among people living with HIV there is no adequate findings. Thus, the aim of this study was to assess magnitude of disclosure deficit experienced by people living with HIV and application of the Health Belief Model at Nekemte Specialized Hospital Western, Ethiopia, 2020.

Methods: A facility based cross-sectional study was conducted to explore HIV disclosure deficit of people living with HIV at ART Clinic of Nekemte specialized hospital, Western Ethiopia from March 5 to April 15, 2020. Systematic random sampling was used to recruit 380 PLHIV. Participants were interviewed to obtain socio-demographic and health belief related data. Relevant medical history was obtained from participants' chart records. The collected data were processed and analyzed using Epi data version 3.1 and STATA version 14.0. Binary logistic regression analysis with 95% CI was conducted.

Results: The mean age of the 380 PLHIV was 31 (SD± 8.9) years. One fourth, (25%) of participants experienced disclosure deficit. Delayed to use, low level of education, using traditional healing and respondents' level of knowledge were significantly associated with disclosure deficit. Importantly, Disclosure deficit had significantly affected by respondents' perceived threat, perceived stigma and perceived low social support.

Conclusion: Magnitude of disclosure deficit was low. Disclosure deficit is more likely when the patient use traditional healing, delayed to start ART, has lower level of education, and perceives stigma and low social support. This finding also insight that the health belief model dimensions would be a valuable framework for providers, planners and policy makers to develop guidelines and policies for early and further HIV sero-status disclosure.

Keywords: ART • Disclosure deficits • Health belief model • PLHIV • Western Ethiopia

Abbreviations: AIDS: Acquired Immunodeficiency Syndrome • HIV: Human Immune Virus • LMIC: Low And Middle Income Country • PLHIV: People Living With HIV • UNAIDS: United Nation Program On AIDS • PCA: Principal Component Analysis • KMO: Kaiser-Meyer-Olkin • HBM: Health Belief Model • CI: Confidence Interval • IRB: Institutional Review Board • OR: Odds Ratio • ART: Antiretroviral Therapy • HIV: Human Immunodeficiency Virus

Introduction

Human immunodeficiency virus (HIV) infection continues to be a public health challenges. 38 million people were living with HIV as of 2019. Of these, 1.7 million were newly infected and thousands lost lives [1]. Sub-Sahara African countries share the highest burden of HIV impact [2]. In the same year Ethiopia contributed 737,186 PLHIV to the global total [3]. Disclosure deficit defined as denying to reveals own HIV positive status to sexual partner(s), families, and others in social networks [4]. HIV positive status disclosure deficit among PLHIV is an area of concern because it is the major current driver of

the HIV epidemic. PLHIV who are on therapy live longer and when their health returns they become sexually active [5]. However, individuals found it difficult to reconcile safer sexual practice in which they may engaged in risky sexual behavior like having multiple sexual partners and inconsistent condom use [6]. Thus, disclosure deficit drive unprotected sexual practice [7], and involved in variety of casual sex with little prior conversation [8]. Those who involved in an unprotected sex were less adherent to ART [9]. This may result in higher viral load and a higher chance of infecting sexual partners.

As finding from Nigerian showed, 32% of study participants had not disclosed their positive HIV status and among them 36% had multiple sexual partners in which less than 23% of them used condoms [7]. As study conducted in Addis Ababa, Ethiopia, more than 15% of participants had practiced unprotected sexual act with their partner after their confirmed positive HIV diagnosis but prior to disclosure [10]. Positive HIV status disclosure deficit is fuel for HIV epidemic [11].

Proportion of positive HIV status disclosure deficit is varying for developed and developing countries. Nearly in average about 50% of PLHIV did not disclosed their positive HIV status in developing countries whereas in developed countries in average less than 20% of PLHIV experience disclosure deficit [12].

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In Ethiopia little is known about positive HIV status disclosure deficit among people living with HIV.

Disclosure is a complex process of behavioral health beliefs that impacts its likelihood, including community-level norms and beliefs as well as individual-level relationship life circumstances, psychosocial issues and clinical status. HIV disclosure can have positive or negative consequences for PLHIV, and it often happens when positive consequences overshadow the negative consequences [13].

Researchers have identified that the frequent risk factors among PLHIV who experienced disclosure deficit are perceived or anticipated stigma [14], lack of knowledge on positive outcome of disclosure [15], level of perceived social support [16], and the individual's general understanding to reduce the likelihood of endangering once own and other's health [17].

The general understanding to reduce the possibility of endangering once own and other's health is measured by health belief model (HBM) [18]. The HBM is the theoretical models of behavioral change that guide and used to inform health promotion programs. It emphasizes on the importance of allowing attitudes towards behavioral propensities to play major role in decision-making.

The HBM is a psychological model that attempts to explain and predict health behaviors of individuals by focusing on the attitudes and beliefs of individuals. The theory designed to explore preventive healthy behavior if a person has a positive perception and it is a conceptual framework for investigating health behaviors and identifying key health beliefs using different dimensions. In our case perceived susceptibility, perceived severity, perceived benefit, perceived barrier and perceived self-efficacy to disclosure deficit were among HBM dimensions we have used. It is often used in predicting sick-role behaviors to take actions to restore good health or prevent disease progression. Thus, the perception of an individual could be affected by the socio-demographic, level of knowledge, threat, available intervention and their barriers, and influence of others.

Level of Knowledge of PLHIV on positive consequence of disclosure was measured through whether PLHIV know that disclosure helps them to reduce the probability that they will infect others and help them to have good adherence and to obtain strong social support. The aim of the study was to identify effects of health belief model in assessing behavioral factors of PLHIV toward disclosure deficit among people living with HIV/AIDS at Nekemte specialized hospital, Western Ethiopia.

Research Methodology

Study setting and period

A facility-based cross sectional study was done among PLHIV in Western Ethiopia. The study was carried out at ART clinic of Nekemte specialized hospital from 5th March to 15th April 2020. Nekemte town is a capital city of East Wollega Zone which is 321 km away from capital city of Ethiopia, Addis Ababa. Nekemte specialized hospital is a public hospital which provide integrated services such as comprehensive HIV Testing and Counseling (HTC), Prevention Mother to Child Transmission (PMTCT), and ART services.

Sample size estimation and sampling technique

Sample size was estimated using single population proportion formula with the assumption of 95% confidence level, 4% margin of error and taking 17.5% proportion of disclosure deficit [10], and 10% none response rate. Finally 346 sample size was estimated. By adding 10%, the final sample size was 380.

The study participants were selected via systematic random sampling methods. For the selection process, a list of ART clients was obtained from the daily appointment schedule as sampling frame, excluding their personal identifiers. All participants were contacted in the private room after they finished their ART services.

Data collection procedures

Data collection was performed by using semi-structured pre-tested

questionnaire which was developed by principal investigator from previous studies [19] and guided by existing ideas within HBM [20], and its dimensions [21,22]. The tool was first prepared in English and then translated into the local language Afan Oromo. Data quality was sustained by giving intensive training for data collectors and supervisors. To ensure validity and reliability of the tool, the pre-test was done on 10% of ART users at Gida Ayana district hospital. Based on those results and feedbacks, some questions were amended. Data collection was performed through face-to-face interview and chart review. Collected data was overseen by supervisor for completeness and consistency on daily basis.

Ethical considerations

Ethical clearance was obtained from ethical review committee of college of Medicine and Health Sciences, University of Gondar (Reference Number SOM/1739/12/2019). Official permission was obtained from Nekemte specialized hospital administrative body. An information sheet was provided to study participants prior to obtaining written informed consent in local language. The participants were offered the opportunity to ask questions and informed that their participation was voluntary and they could decline or withdraw to participate at any time. The consent process undertaken in separate private room by data collectors after PLHIV finished their routine ART services. Anonymously collected data were stored in secured and password-protected computer to insure confidentiality.

Operational definitions

Disclosure deficit: Act of denying to reveals once HIV positive sero-status to sexual partner(s), families, and others in their social networks [4].

Delayed ART initiation: Failure to start ART within 7 days of confirmed HIV positive diagnosis [23].

Social support: Any help/attention obtained from family, neighbors, and social, which was measured and graded based on Explanation of the Oslo-3 Social Support Scale (OSS-3) [24]

Traditional healing: Health practices, approaches, knowledge and beliefs incorporating plant, animal and mineral-based medicines, spiritual therapies, manual techniques and exercises, applied singularly or in combination to treat, diagnose and prevent illnesses or maintain well-being [25].

Measures

Outcome variables (Disclosure deficits): Participants asked if they had revealed or discussed with their sexual partner(s), families or relatives about their HIV positive sero-status and cross-checked with chart record.

Explanatory factors: Using the HBM dimensions, potential predictors of disclosure deficit focused on (a) modifying and enabling factors; (b) perceptions regarding disclosure deficit; (C) perceived level of social support; (d) level of knowledge on disclosure consequences and (e) perceived stigma. The Modifying and enabling factor dimension included was (i) socio-demographic characteristics (age, sex, religion, occupation, residence and educational level) and (ii) behavioral factors (delayed ART initiation and practicing traditional medicine).

Personal perceptions of PLHIV were measured using 25 questions as existing HBM guidance [21]. Perception regarding (a) disclosure deficit susceptibility (6 items), (b) severity (5 items), (c) disclosure benefits (5 items); disclosure barriers (5 items) and self-efficacy to disclose (4 items) were measured by five point Likert scales (strongly disagree = 1, disagree = 2, neutral = 3, agree = 4 and strongly agree 5). Knowledge regarding HIV disclosure outcome among PLHIV was measured using 19 questions (yes/no). Finally the HBM dimensions and level of knowledge dichotomized as perceived or not perceived and informed or not informed respectively based on greater and less than pooled mean respectively. The definition and application of HBM and level of knowledge to disclosure deficit depicted (Table 1).

Expected social support of PLHIV was measured using 3 questions which holds 14 possible answers based on Explanation of the Oslo-3 Social Support Scale graded as poor [3-8], medium [9-11] and strong [12-14] social support [24].

Perceive/anticipated stigma among PLHIV was measured using 12 questions as per Oslo stigma scale which lastly dichotomized as perceived or not perceived stigma for greater and less than pooled mean respectively.

Statistical Analysis

All HBM perception, knowledge related to HIV status disclosure and perceived stigma were included in a principal component analysis (PCA) and summarized using Kaiser’s varimax rotation methods to a fixed number of factors. Eigenvalues were checked, with values greater than one essential to retain using PCA. Numbers of retained items were checked on scree plot mean. Factor structure assumptions were checked via Kaiser-Meyer-Olkin (KMO) sampling adequacy test with threshold of 0.6 set for adequacy, Bartlett’s test of sphericity checked that correlation matrix was not identity matrix at p-value of <0.05 and Cronbach’s alpha >0.7 was accepted to test internal consistency of the questions. Each of five HBM (disclosure deficit susceptibility, severity, disclosure benefits, disclosure barriers and self-efficacy to disclose), knowledge regarding HIV sero-status disclosure and perception stigma PCA summed score were subsequently categorized into binary outcome (perceived or not perceived the constructs) [25,26]. Difference between disclosed and fail to disclose PLHIV were described in related to socio-demographic, behavioral and perception factors. Observed difference was assessed using the Pearson chi-square for categorical variables. Variables that were considered as potential risk factors from bivariable analyses at p-value of <0.2 were fitted for final multivariable model to control cofounding. Strength of association between disclosure deficit and independent variables was expressed in odds ratio (OR) with 95% confidence interval (CI).

Results

Socio-demographic characteristics of respondents

A total of 380 PLHIV were participated in the study. The mean age of participants was 31 (S-8.9) years. More than half were females (53%), married (52%) and protestant religion followers (55%). Less than half of respondents attended formal education to secondary school and above (49%), urban dwellers (84%); (62%) of participants were practiced traditional medication and about (36%) of participants were delayed to start ART (Table 2).

Health believe characteristics related to disclosure deficits

Majority of study participants had knowledge on positive consequences of HIV status disclosure (62%) and around two-thirds (60%) of respondents perceived to loss family care if HIV was not disclosed as perceived susceptibility. (58%) of them reported that as such social life will be difficult unless HIV status is disclosed which show perceived severity of disclosure deficit, (59%) of participants perceived benefit of disclosing HIV sero-status and that they expect smooth interaction with their families and neighbors after disclosure. And (47%) of respondents perceived personal and social barriers to disclose HIV sero-status. More than half (53%) of them reported that they were ready to disclose their HIV sero-status as perceived self-efficacy; less than half (40%) of study participants reported that they fear to disclose due to social negative attitude toward PLHIV as perceived stigma, and two third (63%) of

respondents reported that they can get practical help easily from three and more neighbors as medium or strong social support (Table 3).

Disclosure deficits

In a total of 380 study participants enrolled, one in four (25%) of them not disclosed their HIV sero-status to anyone else [95% CI: [27-29]]. Among those who failed to disclose, 54% had no information or knowledge on positive consequences of HIV positive status disclosure

Factors associated with disclosure deficit among PLHIV on antiretroviral therapy

From binary logistic analysis variables such as delayed ART start, gender, educational level, occupation, residence, using traditional medicine, level of knowledge, perceived susceptibility, perceived severity, perceived benefit, perceived barriers, perceived self-efficacy, perceived social support and perceived stigma were incorporated into multivariable analysis at p-value of <0.2. In multivariable analysis delayed to start ART, educational level, Using traditional medicine, level of knowledge, perceived severity, perceived barriers, perceived social support and perceived stigma were remain significantly associated with disclosure deficit at p-value of <0.05 (Table 4).

Discussion

This study examined the HIV-positive status disclosure deficit and effect of HBM as behavioral factors among people living with HIV/AIDS following ART clinic at Nekemte specialized hospital, Western Ethiopia. In this study one fourth 95(25%) of total respondents have experienced disclosure deficit. This high level of disclosure deficit warrants that many HIV positive individuals may interact with other health individuals in unsafe way and the probability that HIV will infect others is increasing. It needs to be processed that disclosure is considered a way to open up the HIV epidemic; hence, it is a pivotal step toward ending stigma and discrimination against HIV/AIDS. This means that it should be poignantly and robustly be encouraged.

When compared to elsewhere study findings, rate of disclose deficit in current study is similar with findings of study conducted in different parts of Ethiopia [27–29], Thailand [14], Tanzania [30,31], and South Africa [20]. However, the current study’s finding is higher than findings from studies conducted in China [11], South Africa [16], India [32], and Kwanza Tanzania [33]. When compared to Kilimanjaro [34], and Malaysia [35] study findings, current study revealed lower rate of disclosure deficit. The possible reason for dissimilarity might be due to different study period, study population difference in socio-cultural background and different sample size.

Practice of the disclosure deficit of positive HIV status is a stressful decision outcome. People living with HIV had terror or fear of the community reactions towards them after their disclosure. As a result, to make smooth the disclosure process for better consequences for individuals and their close groups, scanning of factors that hinders the decision to disclose is very essential ideas in supporting the action of disclosure in multi dimensions. Accordingly, this study identified different factors such as: Delayed ART use, educational status, practicing traditional healers, level of knowledge of PLHIV, level of expected social support, expected social stigma and perceiving negative behave

Table 1. Level of knowledge, concepts and applications of HBM to disclosure deficit and their definitions.

Concepts	Definitions	Applications to disclosure deficit
Perceived Susceptibility	Individual’s belief of the chances of spreading the illness condition	Perceived chance of infecting others due to lack of disclose
Perceived Severity	Individual’s belief of how serious a condition and its consequences are.	Perceived seriousness of social life with disclosure deficit
Perceived Benefit	Individual’s belief in the efficacy of the recommended health behavior in reducing the risk of the condition	Perceived benefit with sero-status disclosure
Perceived Barrier	Individual’s beliefs in the tangible and psychological costs of the recommended health behavior	Perceived barriers to disclose HIV positive sero-status
Self-Efficacy	Confidence in one’s ability to successfully perform the health behavior in question	Confidence in one’s ability to disclose the HIV positive sero-status
Informed	Individual’s having information/knowledge on how to disclose and whom to disclose and its positive health impact	Accept HIV sero-status disclosure and being commitment to kind of advice provided by providers.

Table 2. Socio-demographic characteristics of PLHIV attending ART services at Nekemte Specialized Hospital East Wollega, Western Ethiopia, March 5 to April 15, 2020 (n=380).

Types of variables	Frequency	Percent (%)
Age		
18 – 25	100	26.31
26 – 32	107	28.16
≥33	173	45.53
Gender		
Female	200	52.63
Male	180	47.37
Marital status		
Single	73	19.21
Married	197	51.84
Divorced/Widowed	110	28.94
Level of Education		
Read & Write	192	50.53
Secondary school	67	17.63
College & above	121	31.84
Occupational status		
Unemployed	190	50
Gov't employed	71	18.68
Self-employed	119	31.32
Religion		
Protestant	208	54.74
Orthodox	134	35.26
Muslim	34	8.95
Other **	4	1.05
Residence		
Urban	320	84.21
Rural	60	15.79
Delayed to initiate ART		
Yes	136	35.79
No	244	64.21
Traditional healing practiced		
Yes	236	62.11
No	144	37.89

Table 3. Health Believe Characteristics of PLHIV attending ART services at Nekemte Specialized Hospital East Wollega, Western Ethiopia, March 5 to April 15, 2020 (n=380).

Variables	Frequency	Percent (%)
Knowledge related to Disclosure		
Informed	236	62.11
Not informed	144	37.89
Perceived susceptibility to disclosure deficit		
Yes	230	60.53
No	150	39.47
Perceived severity of disclosure deficit		
Yes	219	57.63
No	161	42.37
Perceived Benefits of disclosure		
Yes	224	58.95
No	156	41.05
Perceived Barriers of disclosure		
Yes	180	47.37
No	200	52.63
Having Self-efficacy for disclosure		
Yes	202	53.16
No	178	46.84
Perceived Stigma to disclosure		

Yes	151	39.74
No	229	60.26
Expected social support		
Poor	141	37.11
Medium	158	41.58
Strong	81	21.32

Table 4. Bivariable and multivariable analysis results for HIV sero status disclosure deficits among PLHIV on ART at Nekemte Specialized Hospital, Western Ethiopia March 5 to April 15, 2020.

Variables	Category	Fail to Disclose		Bivariable		Multivariable					
		Yes	No	COR	95% CI	AOR	95% CI	P-value			
Delayed to start ART	Yes	54	82	3.26	2.01, 5.27	3.2	1.98, 5.35	0.001			
	No	41	203	1:00							
	Male	33	142	1:00							
Gender	Female	62	143	1.86	1.15, 3.02	1.68	0.94, 2.98	0.074			
	read & write	58	134	1.66	0.97, 2.84				1.92	1.06, 3.46	0.029
Educational level	Secondary school	12	55	0.83	0.39, 1.79	1.04	0.47, 2.32	0.912			
	Collage & above	25	96	1:00							
Occupation	Gov't employed	15	56	1.01	0.48, 2.07	0.76	0.35, 1.67	0.506			
	Unemployed	55	135	1.53	0.89, 2.63				1.31	0.69, 2.50	0.403
Residence	Self-employed	25	94	1:00		1.37	0.72, 2.61	0.33			
	Rural	20	40	1.63	0.90, 2.96						
	Urban	75	245	1:00							
Use Traditional healing	Yes	70	166	2.01	1.20, 3.35	1.96	1.08, 3.57	0.027			
	No	25	119	1:00							
Knowledge on disclosure	Informed	44	192	1:00		2.31	1.35, 3.96	0.002			
	Not informed	51	93	2.39	1.49, 3.84						
Perceived susceptibility	Yes	44	186	1:00		1.34	0.77, 2.34	0.297			
	No	51	99	2.17	1.35, 3.48						
Perceived severity	Yes	39	180	1:00		1.84	1.06, 3.21	0.03			
	No	56	105	2.46	1.53, 3.95						
Perceived benefit	Yes	47	177	1:00		1.11	0.65, 1.91	0.686			
	No	48	108	1.67	1.04, 2.67						
Perceived barriers	Yes	66	114	3.41	2.07, 5.61	2.97	1.68, 5.24	0.001			
	No	29	171	1:00							
Perceived self-efficacy	Yes	42	160	1:00		1.32	0.75, 2.34	0.98			
	No	53	125	1.61	1.01, 2.57						
Perceived social support	Poor	51	90	4.02	1.90, 8.48	4.37	1.94, 9.85	0.001			
	Medium	34	124	1.94	0.90, 4.17				3.89	1.65, 9.16	0.002
	Strong	10	71	1:00							
Perceived stigma	Yes	59	92	3.43	2.12, 5.57	2.44	1.42, 4.19	0.001			
	No	36	193	1:00							

towards consequences of disclosure had statistically significant associations with positive HIV disclosure deficit.

In current study, odds of disclosure deficit were three folds higher in subjects

with delayed ART initiation than those who initiated ART as early as possible. Delayed ART initiation has both medical and societal consequences; one who deny early ART initiation fear social stigma and less to be openly discuss their HIV sero-status [36], and HIV related stress undermines trust of PLHIV on ART benefit; fear of helplessness as if they disclose HIV positive sero-status [37]. Delayed to start medication need to get attention from providers as of its potential consequences may be medically or socially problematic.

People living with HIV who had lower educational status experienced odds of disclosure deficit two folds higher than PLHIV with college and above educational level. Education has potential role in peoples' behavioral change and to make correct decision; current finding is contradict with study conducted in China in which participants who had higher educational levels less likely disclosed their HIV sero-status [11]. Educated individuals can have information pertaining to HIV from different sources and more understand the impact of HIV sero-status disclosure to themselves and partners. During counseling for further HIV sero-status disclosure; provider need to give great concern to HIV patient with lower level of educational status.

Using traditional healing was one of the predictors of HIV disclosure deficit. The current study reported that being traditional healing users were more likely not disclosed their HIV status. Local availability and cultural acceptability of traditional medicines make it more preferable by PLHIV. Beside, those who use traditional medicines believe as it will cure HIV and no more necessary to reveal this HIV sero-status to other else. The possible reason was that traditional practices hinders disclose incase fear of loss social acceptance; this result is supported with other studies [38,39] were social concerns had significant relationship with HIV disclosure. Thus, the issue of sero-status disclosure needs to be emphasizing social challenges and cultural sensitivity.

Additionally lack of knowledge or information on benefits of HIV sero-status disclose is found to be nearly two folds more likely not disclosed than their counterparts. Having Poor information about positive consequence of disclosure such as HIV transmission reduction and facilitating help that HIV infected individuals can get from their friends, families and societies. Lack this ideas may enforce them to prefer hiding to discuss openly; this finding is supported with study conducted in Madagascar and New England [40,41]. To educate PLHIV how to disclose and its purpose has a positive impact on their life; thus comparable information needed to be provided along routine activities.

For once health outcome different internal and external perceptions play a significant role. In current study PLHIV who did not perceived severity of disclosure deficit on their health and social circuit were nearly two folds more likely experienced odds of disclosure deficit than their friends. Lack of forecasting negative impact of disclosure deficit on health related issues ought to expose individuals to develop risky health; this outcome is in line to finding from South African's study. Participants who perceived sort of barriers to disclose their HIV sero-status more likely experienced odds of disclosure deficit than who did not perceived barriers; most of the time PLHIV see themselves as socially not acceptable pertaining to their HIV/AIDS and fear for losing of help; this result supported by finding of study from different settings [42–45]. Identifying sources of barriers and acting on how to overcome it highly suggested to facilitating and getting full benefit from HIV sero-status disclosure.

Human being live social life interactively helping one another; in current study subjects who were perceived poor/medium social support more likely experienced odds of disclosure deficit when compared to those who perceived strong social support. Social concern is one of core concept to encourage or discourage once HIV sero-status disclosure; in our case PLHIV deny to disclose HIV positive status due to they may have few people to their side in case they need help [14,16,38,44]. Disclosure and social concept are linked; misunderstanding from different society towards PLHIV and their social life needs more and more concern from respective bodies.

Odds of disclosure deficit were more likely reported by PLHIV who were

perceived stigma than their counterparts. Fear of social discrimination as being HIV patient is among reducible social factor; this finding depicted in other studies [46,47].

Limitation of the Study

The study was cross-sectional rather than longitudinal and therefore difficult to capture potentially changing behavioral characteristics of PLWH in this setting. Self-reported data are not easy to validate, and may be influenced by socially desirable response. However, we tried to minimize by training interviewers to build strong rapport and care was taken to ask question without bias.

Conclusion

In current study, we measured the high proportion of disclosure deficit; suggesting sizeable number of PLHIV on ART are perceived fear from social and cultural pressures or did not understand benefit of HIV sero-status disclosure. PLHIV who perceived poor social support and stigma were more likely reveals disclosure deficit which suggest further counsel and health education needs to be given for HIV infected individuals.

Recommendations

This study recommends better psychosocial support for newly diagnosed HIV positive people in order to inspire HIV sero-status disclosure. Provider in collaboration with peer counselors and anti-HIV associations should strength coverage of ART and reinforce tailored counseling of HIV sero-status disclosure in HIV/AIDS care unit.

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Declarations

Authors' contributions

All authors have contributed to conception, design the study, perform the data analysis, coordinate the data collection, draft the manuscript, and revised the manuscript.

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Availability of data and materials

All datasets used and analyzed during current study are included in this research paper and available at the hand of corresponding author.

Ethics approval and consent to participate

Ethical approval was obtained from University of Gondar Institutional Review Board (IRB), Permission letter obtained from Nekemte Hospital administrative body and written informed consent was obtained from all study participants prior to data collection.

Consent for publication

NA

Competing Interest

The authors declare that they have no competing interests.

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