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Original Research Article

Health care services satisfaction and associated factors among people living with HIV/AIDS at Kibuye referral hospital, Rwanda

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ABSTRACT

Background: Patient satisfaction surveys have gained great attention as meaningful parameters for evaluating quality improvement in healthcare organizations. At Kibuye referral hospital, healthcare utilization and health care services for people living with HIV/AIDS (PLWHA) has been low, as attested by poor adherence to medication and weakening of patients due the disease progression. The main objective of this study was to assess healthcare services satisfaction and associated factors among people living with HIV/AIDS Kibuye referral hospital, Rwanda.
Methods: An institutional-based cross-sectional design was used to select 277 study participants who were interviewed by use of a structured questionnaire, and the data analyzed quantitatively. Two focus group discussions were performed, after which the interviews were transcribed in verbatim and analyzed thematically.
Results: The overall level of PLWHA satisfaction was 95.0%. In multivariate analysis, social class and age were found to be the main predictors of PLWHA satisfaction (AOR=10.218, 95% CI=1.39, 74.88, p=0.002) and (AOR=0.39, CI=0.121 to 1.186, p=0.005), respectively. Qualitative study outcome showed that health care service delivery at Kibuye referral hospital is measured by a number of factors, including timeliness of health care service delivery, meeting needs of clients and paying attention in provision of health care services.
Conclusions: The level of patient satisfaction was found to be high. When individual was of high-class status in the society, and were above 20 years of age, his or her satisfaction increased. The study recommends that PLWAs are treated equally so as to improve service delivery, particularly among people living HIV/AIDS.

Keywords: Patient satisfaction, HIV, ART, Health care, Kibuye referral centre, Rwanda

INTRODUCTION

Patient satisfaction is a situation in which patients are happy with their healthcare, both inside and outside of the health facility.[1] In the context of research into HIV infection over the past several years, priority has centered more on adherence than on patient satisfaction with care or with physicians.[2] Globally, an estimated 33 million individuals are living with HIV/AIDS, a majority of whom are from sub-Saharan Africa, where an estimated 22.5 million people are infected.[2] The episode of HIV/AIDS as a chronic disease has changed as a result of advances in HIV treatment and utilization of antiretroviral therapy (ART) has brought about relief to patients leading to satisfaction and improvements in the health-related quality of life (QOL).[3] Therefore, accomplishing great ART adherence is key for long haul results in PLWHA.[4] It provides health care providers with insights into various healthcare episodes, including on whether instituted policies are effective or not. On the other hand, the distinguishing components impacting ART adherence may help in understanding the procedures to upgrade

ART adherence and improve health related quality of life after some time. However, ART does not completely reestablish wellbeing, and various non-irresistible maladies identified with maturing and way of life in PLWH influence respiratory, heart, and endocrine system.[5] According to Rodriguez-Penney et al the synergistic impacts of age and HIV infection on the therapeutic co-dreariness weight show that the commonness and clinical effect of co-morbidities in more established HIV-positive adolescents, and this underscores the significance need for early recognition and treatment endeavors that may improve HIV treatment results.[6] Currently, wellbeing related advantages of PLWH on ART have moved from the survival to health-related quality of life results.[7,8]

Empirical evidence have demonstrated that the growing problem in public health sector is related to low level of health care services satisfaction by PLWHAs.[9-11] Rwanda attained high rates of ART inclusion, book keeping records according to 164, 264 (78%) of PLWH in 2016 and 93% of maintenance in 2017 on treatment.[12] Thus, assigned health facilities offer complete HIV/AIDS care, treatment, advising and testing, clinical, psychosocial, healthful, lawful, monetary, family social and network support for customers.[9] A few studies have however revealed that there are differences in satisfaction and use of health care services in Rwanda.[13,14] These studies found there was low use of these services, the provided reasons included poor infrastructure, insufficient resources human, staff reliability issues, limited range of existing services, lack of technical skills by staff, drug shortages and inadequate counseling and empathy from service providers. Although the findings were useful, they focused on total patient's access to healthcare and satisfaction and not those that are specific to chronic or sensitive diseases such as HIV/AIDS. Evaluating the extent to which HIV/AIDS patients are satisfied with healthcare services is clinically significant as satisfied patients are more likely to adhere to routine clinical monitoring and use of ARVs. High service quality correlates with high customer satisfaction in a general context. This is because patient satisfaction is affected by the characteristics of the health experts and their medical services. Patient satisfaction serves as a medium between service quality and behavioral intention.[15]

In any case, it is notable that the fundamental reason for the HIV care service is to improve and fortify QOL of PLWH through total satisfaction.[9] Therefore, a health related quality of life evaluation may identify the issues affecting patients complaisance to treatments and encounters with health care providers, and may underscore the need for a multidisciplinary way to deal with HIV/AIDS. Furthermore, past scientists demonstrated that the physical and mental health related quality of life is lower among PLWH, contrasted with the all-inclusive community.[16,17] Utilization and health care services satisfaction in Rwanda might be low due to poor infrastructure, shortage of human resources; problems with staff reliability, limited range of services available, shortage of technical skills among staff, drug stock-outs and inadequate counseling and empathy from service providers.[18] The other problems consist of poor adherence to medicine with its attendant consequences, frustration and loss of trust in the health system, dropping out of care, deterioration of ones' illness and rise of drug resistant viruses.[18-20] In this context, the study sought explore health care services satisfaction by people living with HIV, associated factors in Kibuye referral hospital, western province, Rwanda where access to health care services is still low. Understanding patients, caregivers, and families from their perspective would provide opportunity to reflect on provider behavior intended to improve healthcare services, and patient outcomes.

METHODS

Study design, period and area

The study was cross-sectional, conducted from February 10 to March 15, 2020. Both quantitative and qualitative approaches were used. The quantitative approach entailed use of semi-structured questionnaire which was administered to patient living with HIV/AIDS. The qualitative approach was based on discussions among doctors and nurses on quality of health care services provided to PLWHA at Kibuye referral hospital. Kibuye referral hospital is located at Karongi district, and is the headquarter of the Western Province in Rwanda. The city lies on the eastern shores of Lake Kivu, between Gisenyi and Cyangugu, approximately 135 kilometers, west of Kigali, the capital and largest city in the country.[21] The geographical coordinates of the town are: 2°03'42.0"S, 29°20'54.0"E (Latitude:-2.061672; Longitude:29.348344).[22]

Source and study population

All patients with HIV/AIDS who had follow-up at Kibuye referral hospital were the target population. The hospital has a well-established HIV/ADS clinic in terms of the number of patients living with HIV/AIDS, supportive doctors and nurses. The number of individuals living with HIV/AIDS at the period of study was estimated to be 956.[23]

Inclusion and exclusion criteria

All patients (males and females) whose ages were greater than 18 years and above and had HIV/AIDS follow-up for more than a month at Kibuye referral hospital who consented to participate were included in the study. Patients who met the above criteria but were unavailable at the research site or were seriously sick (unable to speak) were excluded from the study.

Sample size determination and sampling procedure

In this research, the sample size for the quantitative arm was 277 respondents estimated by use of Yamane (1967)

formulae, n=N/1+N(e2), whereby: n: sample size, N: Population size, e: Level of significance which is given as 0.05.

Semi-structured in-depth interviews were conducted with key informants who were identified and interviewed. Thematic codes were generated from a subset of the transcripts, and these were modified, refined and organized during coding and analysis.

Data collection tools and procedure

Data was collected through direct face to face interviews by semi-structured questionnaires. The questionnaire was prepared in English and translated into Rwandan language for better understanding by both data collectors and respondents, and translated back to the English version to check the consistency. Tool was pretested by managing a survey of 10 service providers including doctors and nurses at the nearby Mugonero hospital. Modifications were made where necessary and with the guidance of senior researcher. The questionnaire was administered by trained research assistants after receiving consent from each study participants. Participants were recruited after consent was sought and obtained from each individual. To determine the level of satisfaction among the respondents, a scale of 5 to 1 was used: 5=strongly dissatisfied, 4=dissatisfied, 3=Neutral, 2=satisfied, 1=strongly satisfied. In this regard, responses on strongly satisfied and strongly dissatisfied were scored and qualified as patient's satisfaction or dissatisfaction while responses of neutral, dissatisfied and very dissatisfied were scored and qualified as patients who are not satisfied. A response to 36 measuring items were added and converted to give an individual level of satisfaction score from 1% to 100% for each item. Patients who scored 80% and above on 36 satisfaction measuring items were considered satisfied, and those who scored less than 80% were considered as dissatisfied.

Data were also collected on other variables including: Socio-demographic factors (Sex, age, residence, occupation, highest education level attained length of time as client on ART, type of service provided); reliability (consistent drug supply, appropriate supervision of care process, proper prescription first time around) assurance (staff are skilled, staff are respectful, fair and observe privacy and confidentiality); tangibles (Great appearance of physical facilities, equipment, personnel, clean and organized); responsiveness (staff respond in a timely manner where necessary, available equipment, useful equipment, available drugs, appropriate drugs organization) and empathy (Staff are sympathetic and understanding, attentive staff, staff provide personal care and mental support. For qualitative data, an interview guide was used. The participants were interviewed on their current needs to improve their health-related quality of life. The discussions were recorded by using a voice recorder and the interviews took between 30-40 minutes.

For FGDs, the units of analysis were the transcripts from the interview guide. Recorded data were transcribed and translated from Kinyarwanda to English. Transcripts were first read thorough several times while making notes on them. All transcripts were read through and codes generated. Responses with similar codes were re-categorized under a unifying sub-themes or theme. A matrix was created and individual matrices were reviewed until satisfaction is reached. The categories were then interpreted for their descriptive meaning. Descriptive quotes representing key themes were identified and included in the discussion. The qualitative analysis was done thematically by analyzing opinions of the concerned research participants.

Data processing and analysis

After data collection, they were checked for completeness and coded and entered into excel and transported to SPSS version 27 for data cleaning and analysis. Descriptive statistics such as tables, graphs, pie charts, and proportions were used to present the data. Bivariable and multivariable in binary logistic regression analyses were done to see the association between dependent and independent variables.

Ethical consideration

This study was conducted in accordance with the declaration of Helsinki. The consent of the respondents were sought before the administration of the questionnaire. The participants were informed that their participation was voluntarily and were free to withdraw from the study at any point without giving any reason. The findings were treated with utmost confidentiality and the study respondents were ensured that was for the purpose of this research only. The objective and result of the study explained to the subjects of research participants.

Ethical clearance was given by Mount Kenya university institutional review board. Approval to carry out the study was also from Kibuye referral hospital.

RESULTS

All the recruited patients participated in the study translating into a response rate of 100%. Findings showed that out of the total study participants, 94 (33.9%) were male, while 183 (66.1%) were female (Table 1). About 56.3% of the respondents were aged more than 18-34 years of age, 43.7% of them were 35 years and above. On marital status, 61.7% of the patients were married, while 22.8% of them were single. All respondents attained at least some formal education, with 49.5% of them having attended primary school, 34.0% completed secondary education level, while 16.5% had vocational trainings.

Findings further indicated that 24.2% of the respondents had part-time jobs 19.2% of them had permanent jobs.

Income level varied considerably among the respondents with about 33.9% of them earning between 50,000 to 100,000 Rwandese France (Rwf), and about 33% of them less than 50,000 Rwf. On social class, research findings showed that 44.0% of the respondents were in the third social class, 33.9% of them first class, 21.7% were in second class and 0.4% fourth category, respectively. Majority of the respondents (>90%) had some forms of insurance cover, with 82.7% of them covered by mutual health insurance, 9.7% RAMA insurance, while 1.1% had other types of insurance cover.

Level of health care service satisfaction amongst people living with HIV in Kibuye referral hospital

The overall PLWHA satisfaction rate was 95%. As presented in Table 2, 45% of the respondents were strongly satisfied with the equipment used at the hospital indicating that they were up-to-date. Less than half of the respondents (23%) stated otherwise. Findings also showed that prompt services were provided as they were strongly satisfied. Additionally, patients were satisfied with the fact that employees were familiar their needs, and were willing to help.

As indicated by the respondents, they got the right attention with regards to health care services and were strongly satisfied. The study findings also showed that having client's interest at heart and convenience operating hours remained important aspect in providing health care service delivery. Majority of the respondents interviewed (95%) were strongly satisfied.

Table 1: Socio-demographic and economic characteristics of the respondents.

Items		Frequency	Percentage (%)
Gender	Male	94	33.9
	Female	183	66.1
Age (Years)	18-34	160	56.3
	35 and above	117	43.7
Marital status	Single	63	22.8
	Married	171	61.7
	Divorced/widowed	43	15.5
Education	Primary	137	49.5
	Secondary/tertiary	94	34.0
	Vocational training	46	16.5
Occupation	Permanent	53	19.2
	Part-time	67	24.2
	Temporary	124	56.7
Monthly income (Rwf)	Less than 50,000	83	30.1
	Between 50,001-100,000	91	33.0
	100,001-200,000	62	22.3
	200.001-400,000	16	5.8
	Above 400,000	24	8.7
Social class	First category	94	33.9
	Secondary category	60	21.7
	Third category	122	44.0
	Fourth category	1	0.4
Insurance used	Mutual health insurance	229	82.7
	RAMA	27	9.7
	Solas /SONARWA	18	6.5
	Other types	3	1.1

Table 2: Level of health care service satisfaction amongst people living with HIV in Kibuye referral hospital.

Statement	SS=1, (%)	S=2, (%)	N=3, (%)	D=4, (%)	SD=5, (%)	Mean, (%)	S. D., (%)
Up to-date equipment	45	23	5	16	11	4.02	0.350
Visually appealing facilities	35	26	1	33	5	4.04	0.348
Facility services provided	65	35	-	-	-	3.90	0.505
Sympathetic and reassuring	71	29	-	-	-	3.84	0.489

Continued.

Statement	SS=1, (%)	S=2, (%)	N=3, (%)	D=4, (%)	SD=5, (%)	Mean, (%)	S. D., (%)
Facility provides services at promised time	92	8	-	-	-	4.12	0.500
Say exactly when services will be done	-	100	-	-	-	3.94	0.531
Prompt services from employees	72	28	-	-	-	3.97	0.415
Employees are willing to help clients	37	63	-	-	-	4.06	0.424
Prompt response to client's requests	70	30	-	-	-	3.75	0.523
Clients feel safe with employees	58	38	4	-	-	3.67	0.553
Employees well supported to work	62	38	-	-	-	3.77	0.512
Clients' individual get attention	62	36	2	-	-	3.74	0.546
Employees give personal attention	69	31	2	-	-	3.41	0.466
Employees know clients' needs	81	18	1	-	-	3.01	0.348
Have clients' interests at heart	68	29	3	-	-	3.54	0.476
Convenient operating hours	57	40	3	-	-	3.30	0.414
Total	944	572	21	49	16	-	-
Overall average	59	36	1	3	1	3.755	0.463

Key: SS-Strongly satisfied, S-Satisfied, D-Dissatisfied, SD-Strongly dissatisfied.

Overall score of health care services satisfaction and the factors influencing health care service satisfaction at Kibuye referral hospital

The overall score level of health care service was determined by use of score of responses. We evaluated the factors determining overall patient satisfaction scores at Kibuye referral hospital, it was noted that aspects of healthcare delivery and communication were key to adherence than interactions with the care givers. In rating the scores, a score 1 was given to the satisfied responds, while 0 denoted those dissatisfied. The total score was 16 according to the number of items. The mean total score was 20 translating to an overall level of satisfaction of 95% satisfaction level was 95% (Figure 1). Consequently, the average level of score assessment was (95%±5%)/ 5=20, implying that respondents who were <20 years old were likely to be dissatisfied, while those above 20 years old were satisfied with healthcare service provision.

Findings on factors influencing healthcare service satisfaction among people living with HIV/AIDS at Kibuye referral hospital in Karongi district based on bivariate analysis in Table 3. Overall, results showed that gender, education level, age of respondents, occupation, profile level of respondents of respondents and social class of respondents, were associated with PLWHA's satisfaction (χ^2=7.878, p=0.002, χ^2=5.215, p=0.005, χ^2=12.702 at p=0.002, χ^2=12.567, p=0.002, and χ^2=16.507 at p=0.001 were resp.) were associated with PLWHA's satisfaction is associated with PLWHA. Additionally, type of insurance cover was likely to influence satisfaction level. In that regard, it was also associated with PLWHA's satisfaction at χ^2=12.670, p=0.005.

Figure 1: Level of health care service satisfaction.

Table 3: Bivariate associated socio-demographic features with PLWAs' satisfaction at Kibuye referral hospital.

Variables	Description	PLWAs' satisfaction				Chi-square	P value
		Satisfied		Non satisfied			
		N	%	N	%		
Gender	Male	124	68.7	86	88.9	5.22	0.022
	Female	56	31.3	11	11.1		
Age (Years)	18-34	83	46.3	73	75.0	7.858	0.005
	35 and above	97	53.7	24	25.0		
Marital status	Single	62	34.3	49	50.0	2.607	0.272
	Married	86	47.8	32	33.3		
	Divorced/ widowed	32	17.9	16	16.7		
Education	Primary	67	37.3	75	77.1	12.567	0.002
	Secondary/ tertiary	81	44.8	11	13.7		
	Vocational training	32	17.9	11	13.7		
Occupation	Permanent	62	34.3	68	69.4	12.702	0.002
	Part-time	78	43.4	13	13.9		
	Temporary	40	22.4	16	16.7		
Monthly income (Rwf)	Less than 50,000	46	25.3	37	38.9	7.724	0.102
	50,001-100,000	73	40.3	19	19.4		
	100,001-200,000	43	23.9	19	19.4		
	200,001-400,000	5	3.0	11	11.1		
	Above 400,000	13	7.5	11	11.1		
Social class	First category	27	14.9	35	36.1	16.507	0.001
	Secondary category	75	41.8	30	30.6		
	Third category	67	37.3	11	11.1		
	Fourth category	11	6.0	21	22.2		
Type of insurance	Mutual health insurance	35	19.4	51	52.8	12.670	0.005
	RAMA	48	26.9	11	11.1		
	SORAS/SONARWA	64	35.8	24	25.0		
	Other types of insurance	32	17.9	11	11.1		

Table 4: Multivariate analysis of factors associated with PLWHA's satisfaction at Kibuye referral hospital.

Variables	Description	AOR	95% CI		P value
			Lower	Upper	
Gender	Female	0.292	0.063	1.344	0.114
	Male	Ref.			
Age group (years)	18-34	0.379	0.121	1.186	0.050
	35 and above	Ref			
Education	Primary	0.659	0.146	2.985	0.589
	Secondary/ tertiary	2.300	0.375	14.125	0.368
	Vocational training	Ref.			
Occupation	Permanent	0.447	0.108	1.855	0.267
	Part-time	1.856	0.376	9.156	0.447
	Temporary	Ref.			
Ubudehe	First category	1.444	0.189	11.032	0.723
	Secondary category	10.218	1.394	74.876	0.022
	Third category	4.991	0.617	40.380	0.132
	Fourth category	Ref.			
Type of insurance	Mutual health insurance	0.312	0.062	1.571	0.158
	RAMA	1.010	0.147	6.915	0.992
	SORAS/SONARWA	0.668	0.123	3.629	0.640
	Other types of Insurance	Ref.			

Multivariate analysis below presents analysis on association between socio-demographic factors PLWHA's satisfaction towards health care services at Kibuye referral hospital. Two variable that were observed to influence PLWHA's satisfaction were social class (AOR=10.218, CI 1.394 to 74.87, p=0.022 for the second category, and age (AOR=0.39, CI 0.121 to1.186, p=0.050 (Table 4).

Responses from key informants

The information related to qualitative data were established to support statistical data collected using questionnaire. Findings reflecting interview questions were done in the form of cote focussing on key informant interview. Therefore, the results are presented as follow.

Describing the services offered to at the health facility

The first informant; a gentleman explained the various services offered by the facility for PLWHAS. In his point of view, he stated *that "the hospital provides the necessary quality health care services including medicine, customer care, and advices and counseling to people living with HIV/AIDS*." KII 1.

Stating challenges encountered during the provision of care

When asked about the challenges they face during the provision of care. The information reflecting these questions was generated from two of the interviewees who stated that: "*We face various challenges among them insufficient consulting rooms; which impeded the level of service delivery, inadequate number of staff members, non-adherence to the scheduled appointments, and these severely affects us its terns of time and also incur the problem of high workload related to service integration*." KII 2.

Opinion on current needs to improve your health-related quality of life

When asked their opinion on what needs to be done to improve quality of their lives, the information from research participants explained that: *"There is need to increase amount of equipment like rooms and other HIV tests tools, in addition to employing experienced staffs with skills related abilities. These remain important aspect of achieving quality service delivery*" KII 3.

Further question asked on their opinion focused on factors influencing provision of health service in facility

The information collected from one of the respondents revealed that: *"Healthcare provides needs to be trained on patients-provider relationships, this can avoid biasness on the preference on delivery of the service." KII 6.*

Giving recommendations to help on the improvement of the provision of health care services

The information collected from two of key informant interviewees stated that: ***"****There is need to increase amount of equipment like rooms and other HIV tests tools, in addition to employing experienced staffs with skills related abilities. These remain important aspect of achieving quality service delivery" (KII 5).*

DISCUSSION

Overall, it is worth noting that 95% of PLWHA patients were satisfied with the service they received from Kibuye referral hospital. Additionally, the results showed that gender, education level, age of respondents, occupation, profile level of the respondents of respondents and social class of the respondents, were all associated with PLWHA's satisfaction. This was fairly good considering that a similar study done in Ethiopia also revealed that over 90% of the respondents interviewed were satisfied services provided by their facility. Similarly, a study conducted in Nepal, showed that 63% patient who visited Islamabad hospital were satisfied with how facility provided services to its patients.[25] This shows that most African have invested in healthcare infrastructure to ensure that patients receive the best of care based on their needs. It was important to incorporate KIIs perspective to strengthen past findings. Viewpoints of on KII with providers at Kibuye referral hospital suggested that the hospital provided the necessary quality health care services including medicine, customer care, and advices and counseling to people living with HIV/AIDS (KII 1). It can thus be concluded that better service delivery to PLWHA in this facility led to overall clients' satisfaction.

Although patients were generally happy with the services, few were not happy with the health provider's dictation, particularly on when services shall next be offered, such rigidity may lead poor attendance practices. This is observation is consistent with the studies conducted in Ethiopia and elsewhere where the irresponsive behaviors and absenteeism of staff led to less participation.[26] These scenarios are common in resource limited settings, and contributes to poor quality of health care h service delivery, while availability of sign and direction indicator increases patient satisfaction by 98% and in Bahirdar, Ethiopia, in which 74% of patients were reported to be dissatisfied service delivery due to the absence of sign and direction indicators.[26] The provision of sign and direction indicators in the healthcare facilities may provide a good image for customers to access easily the room they need for healthcare services.[26]

A significant gender differences were found in satisfaction with the health service delivery, as more males felt dissatisfied with the health service provision. In contrast to our finding, previous studies from Malaysia and Nigeria showed that male patients were more likely to be satisfied compared to their female counterparts.[27,28]

In the current study, it is believed that this could be due to female being patience as compared to males. Also, it could have been due to more female being responsible for service provision at Kibuye referral hospital. Previous studies showed that female patients were more satisfied with female health care providers.[29] Overall, in bivariate analysis, except for marital status and monthly income variables, gender, age, social status and education level were associated with PLWAs' satisfaction. Education status, religion, race, marital status among others, are being found to be inconsistent and contradictory in many studies.[30] Additionally, varied patent's behavior, heath care location, have been associated with patient satisfaction. The qualitative discussion showed that to improve health care related quality among patients living with HIV/AIDS at Kibuye referral hospital, there is need to increase amount of equipment like rooms and other HIV tests tools, in addition to employing experienced staffs with skills related abilities. These remain important aspect of achieving quality service delivery" (KII 2).

As observed, health care service delivery at Kibuye referral hospital can measured by different factors such as up to date equipment, visually appearing facilities, facility service provided, sympathetic and reassuring, timeliness of health care service delivery, meeting needs of clients and paying attention in provision of health care service (KII 2). Although, often overlooked, the current study contended high satisfaction rate for old people living with HIV/AIDS, unlike in children living with HIV/AIDS owing to the fact that adults are more likely to establish rapport with services providers compared to children.[31]

Results from qualitative discussion noted a number of challenges faced by health care service providers at Kibuye referral hospital, among these are insufficient consulting rooms which impeded the level of service delivery, inadequate number of staff members, non-adherence to the scheduled appointments affects service delivery and the patients incur the problem of high workload related to service integration" (KII 1). This observation is consistent with that of Schoenfelder et al who observed the determinants of patient satisfaction among 39 hospitals in an in-patient setting in Germany.[32] The study had limitation due to the methodological approach used, the sample size was small and thus the results may not be generalizable to the entire population.

CONCLUSION

The level of patient satisfaction was found to be high. Moreover, when individual was of high-class status in the society his or her satisfaction increased probably, to access other additional services elsewhere or was given more attention by the service providers. Moreover, accomplishing great ART adherence is key for long haul results in PLWH. Regardless, patients should be treated equally in order to improve the service uptake, especially among people living HIV/AIDS.

To improve the provision of health care service especially among people living with HIV/AIDS at Kibuye referral hospital, it is recommended that the management need to design appropriate communication skills among service providers, improving health of service providers, offering training facilities and encourage interaction of service providers and patients of Kibuye referral hospital. To achieve this, it highly encouraged to maximize the time spent with patients, encourage proper order of facilities and medical equipment, being flexible with visiting hours so as to offer the maximum quality of services delivery" (KII 1).

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REFERENCES

1. Atsebeha KG, Chercos DH. High antiretroviral therapy service delivery satisfaction and its' associated factors at Midre-genet hospital; Northwest Tigray, Ethiopia. BMC Health Serv Res. 2018;18(1):1-9.
2. Murray C, Ortblad K, Guinovart C, Lim S, Wolock T, Roberts D et al. Global, regional, and national incidence and mortality for HIV, tuberculosis, and malaria during 1990–2013: A systematic analysis for the global burden of disease study 2013. Lancet. 2014;384(9947):1005-70.
3. Nakagawa F, May M, Phillips A. Life expectancy living with HIV: Recent estimates and future implications. Curr Opinion Infect Diseases. 2013;26(1):17-25.
4. Jordan J, Cahn P, Goebel F, Matheron S, Bradley C, Woodcock A. Abacavir compared to protease inhibitors as part of HAART regimens for treatment of HIV infection: patient satisfaction and implications for adherence. AIDS Patient Care STDS. 2005;19(1):9-18.
5. Dawson R, Rom WN, Dheda K, Bateman ED. The new epidemic of non-Communicable disease in people living with the human immunodeficiency virus. Public Health Action. 2013;3(1):4-6.
6. Rodriguez-Penney A, Iudicello J, Riggs P, Doyle K, Ellis R, Letendre SL et al. Co-morbidities in persons infected with HIV: Increased burden with older age and negative effects on health-related quality of life. AIDS Patient Care and STDs. 2013;27(1):5-16.
7. Call S. Health-related quality of life and virologic outcomes in an HIV clinic. Quality Life Res. 2012;9(9):977-85.

8. Miners A, Sabin C, Mocroft A, Youle M, Fisher M, Johnson M. Health related quality of life in individuals infected with HIV in the era of HAART. HIV Clin Trials. 2011;2(6):484-92.
9. Bhatia M, Munjal S. Prevalence of depression in people living with HIV/AIDS undergoing ART and factors associated with it. J Clin Diagnostic Res. 2014;8(10):WC01-4.
10. Pan American Health Organization. Health in the Americas. Regional outlook and country profiles. Washington: PAHO. 2012. Available at: www.paho.org/salud-en-las-americas-2012/index.php?option=com_content&view=article&id=33&Itemid=143&lang=en. Accessed on 3 July 2021.
11. Eshetu A, Gobena T, Mengeste B, Semahegn A. Quality of clinical care for people living with HIV/AIDS in DilChora Referral Hospital, Dire Dawa, East Ethiopia. Pharma Innov. 2013;2005:1-9.
12. Nsanzimana S, Remera E, Ribakare M, Burns T, Dludlu S, Mills E et al. Phased implementation of spaced clinic visits for stable HIV-positive patients in Rwanda to support treats all. J Int AIDS Society. 2017;20(S4):21635.
13. Rusanganwa V, Gahutu JB, Hurtig AK, Evander M. Physicians' satisfaction with clinical referral laboratories in Rwanda. Glob Health Action. 2020;13(1):1834965.
14. Lannes L, Meessen B, Soucat A, Basinga P. Can performance-based financing help reaching the poor with maternal and child health services? Experience of rural Rwanda. Int J Health Plann Manag. 2016;31(3):309-48.
15. Ndirima Z, Neuhann F, Beiersmann C. Listening to their voices: understanding rural women's perceptions of good delivery care at the Mibilizi District Hospital in Rwanda. BMC Women's Health. 2018;18:38.
16. Bing E, Hays R, Jacobson L, Chen B, Gange S, Kass N et al. Health-related quality of life among people with HIV disease: Results from the multicenter AIDS cohort study. Quality Life Res. 2014;9(1):55-63.
17. Mrus J, Leonard A, Yi MS, Sherman SN, Fultz SL, Justice AC et al. Health-related quality of life in veterans and nonveterans with HIV/AIDS. J General Internal Med. 2016;21(S5):S39-47.
18. MOH. Annual health statistics booklet 2015. Kigali, Rwanda: Ministry of Health. 2015.
19. Flannelly LT, Inouye J. Relationships of religion, health status, and socioeconomic status to the quality of life of individuals who are HIV positive. Issues mental health nursing. 2001;22(3):253-72.
20. William J. Clinton Foundation (WJCF). Republic of Rwanda HIV and AIDS Treatment and Care Plan. Little Rock, Arkansas. 2005.
21. Olapade OJ, Omitoyin BO. Fish species composition in Lake Kivu, Rwanda, East Africa. Aqua docs. 2010;284-9.
22. Yamane T. Statistics, An Introductory Analysis, 2nd Ed., New York: Harper and Row. 1967.
23. Webster TR, Mantopoulos J, Jackson E. A brief questionnaire for assessing patient healthcare experiences in low-income settings. Int J Qual Health Care. 2011;23(3):258-68.
24. Andaleeb SS, Siddiqui N, Khandakar S. Patient satisfaction with health services in Bangladesh. Health Policy Plan. 2007;22(4):263-73.
25. World Health Organization. Key facts on global HIV and AIDS epidemics: 2011 report on global HIV/AIDS response. 2012. Available at: https://www.unaids.org/sites/default/files/media_asset/20121120_UNAIDS_Global_Report_2012_with_annexes_en_1.pdf. Accessed on 3 July 2021.
26. UNAIDS Global Report 2012. Available at: https://www.unaids.org/sites/default/files/media_asset/20121120_UNAIDS_Global_Report_2012_with_annexes_en_1.pdf. Accessed on 02 December 2020.
27. Tumlinson K, Gichane MW, Curtis SL. Understanding healthcare provider absenteeism in Kenya: a qualitative analysis. BMC Health Serv Res. 2019;19:660.
28. Ganasegeran K, Perianayagam W, Abdul Manaf R, Ali Jadoo SA, Al-Dubai SAR. Patient satisfaction in Malaysia's busiest outpatient medical care. Sci World J. 2015;2015:1-6.
29. Bener A, Ghuloum S. Gender difference on patients' satisfaction and expectation towards mental health care. Niger J Clin Pract. 2013;16:285.
30. Derose KP, Hays RD, McCaffrey DF, Baker DW. Does physician gender affect satisfaction of men and women visiting the emergency department? J Gen Intern Med. 2001;16:218-26.
31. Batbaatar E, Dorjdagva J, Luvsannyam A, Savino MM, Amenta P. Determinants of patient satisfaction: a systematic review. Perspect Public Health. 2007;137(2):89-101.
32. Madhulatha G, Manasa P, Jaya Krishna B, Harshavardhan T. Evaluation of contentedness of patients over the services provided by comprehensive oral health care system. Int J Curr Res. 2017;9(9):57674-7.
33. Schoenfelder T, Klewer J, Kugler J. Determinants of patient satisfaction: a study among 39 hospitals in an in-patient setting in Germany. Int J Qual Health Care. 2011;2(5):503-9.

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