Socio-Demographic Factors and Health Seeking Behaviour of Clients: a Retrospective Analysis of HIV Data in Rural Ghana

Presented at 1st International Online BioMedical Conference

ORIGINAL

Abstract

Background: HIV/AIDS care, treatment and prevention is critical in controlling the HIV menace in Ghana. This study investigated the socio-demographic factors and health seeking pattern of HIV clients in rural Ghana.

Methods: This was a retrospective longitudinal study that analysed secondary data from 102 HIV clients in Talensi District Hospital collected between February and April, 2015 in rural Ghana. HIV data was analysed descriptively using Epi Info 7.

Results: The analysis revealed that more females, 69.6% (71/102) and married couples, 51.9% (53/102) were infected than their male, 30.3% (31/102) and single, 19.6% (20/102) counterparts respectively. Most of the clients had primary/no education, 87.3% (89/102) whilst 12.7% (13/102) of the clients had secondary/higher education. 68.6% (70/102) of clients became aware of their status through diagnostic HIV testing with only 2% (2/102) of clients who became aware of their status by walk in voluntary counselling and testing. Majority of the clients had medical insurance, 76.4 % (78/102) with 22.6% (23/102) of clients who made payment out of their pocket for treatment. Majority of the clients came from neighbouring districts, 62.7% (64/102) to seek care although such services were rendered at their respective districts.

Conclusion: This study has provided evidence on the need for health facilities in rural Ghana to intensify education on HIV preventive methods to rural communities as well as discourage the stigmatization of people living with HIV/AIDS. It is also important to educate people in rural communities on the availability of voluntary counselling and testing centres and encourage them to know their status.

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Keywords

Hiv; Hiv/Aids; Vct;
Data Analysis; Talensi District Hospital.

Background

Human Immunodeficiency Virus (HIV)/Acquired Immunodeficiency Syndrome (AIDS) pandemic is a threat to human livelihood and existence especially in Sub-Saharan Africa where it continues to be a major public health issue [1, 2, 3]. It has been observed that HIV/AIDS continues to be a major cause of death in Sub-Saharan Africa with about 25 million People Living with HIV/AIDS (PLWHA) [4, 5, 6]. Several factors have been implicated in driving this pandemic, low HIV counselling and testing, HIV/AIDS-related stigma as well as low acceptability of evidence based preventive measures account for the HIV/AIDS pandemic in Sub-Saharan Africa [7, 8, 9, 10, 11, 12].

The situation in Ghana is not different as factors such as stigma, sexual promiscuity, low HIV testing as well as low acceptability of evidence based preventive methods such as condom usage have largely been blamed for the prevalence of HIV in Ghana [13]. Additionally, inadequate sex education, socio-cultural practices and the poor health system are major causes of HIV prevalence in Ghana [14, 15]. Although HIV prevalence is low in Ghana, HIV is firmly established within our communities with a national HIV prevalence rate estimated at 1.5 per cent in 2011 with an estimated 225,478 persons, made up of 100,336 men and 125,141 women living with HIV and AIDS [16]. HIV prevalence in Ghana has consistently been over 1% among pregnant women. In 2010 for instance, the estimated adult national HIV prevalence rate was also 1.5%. HIV prevalence rate in the 10 regions of Ghana in 2011 ranged from 0.3% in the Northern Region to 4.7% in the Central Region [16]. Though HIV prevalence in Ghana is declining among the youth over the past few years the gain was reversed in the 2011 survey report. Prevalence among young persons aged between 15-24 years which was used as a proxy for new infections was 1.7 per cent as against 1.5 per cent in 2010 [16]. Interventions in Ghana such as the provision of An-

tiretroviral (ARVs) drugs, Prevention of Maternal To Child Transmission (PMTCT), HIV counselling and testing, education on evidence based preventive methods as well as infection prevention and control measures have contributed to the decline of HIV prevalence over the past years [17, 18].

The Talensi District in the Upper east region is not different as the prevalence of HIV/AIDS in the district led to the formation of the only Antiretroviral Therapy (ART) centre in the district in the Tongo Health Centre (now Talensi district hospital) in April, 2011. The ART centre was formed to provide HIV services including PMTCT to clients in the Talensi district and beyond. HIV services rendered to clients are provided in line with national standard treatment guidelines. However, since the inception of ART services in the Talensi District, no analysis of existing HIV data has been made to assess the socio-demographic factors and health seeking behaviour among HIV clients. Such analysis is important as it will inform policy and practice to improve treatment and care of People Living With HIV/AIDS (PLWHA) in the Talensi district and beyond.

Methods

Study design and Setting

This was a retrospective longitudinal analysis of a HIV secondary data in the ART centre in the Talensi district hospital between April 2011 to April 2015. A records review guide was developed and used to collect data on clients' socio-demographic characteristics, referral type to ART centre and funding type of treatment cost. A total of 102 records of HIV clients were reviewed. The study was conducted in April, 2015 in the Talensi district hospital in the Talensi district, which is one of thirteen districts in the Upper east region of Ghana. The district has a population of 85,164 which shares boundaries with Nabdam district to the North, Bolgatanga municipa-

lity to the West, East Mamprusi district to the South East, West Mamprusi district to the South West and Bawku West to the East [19, 20].

Data analysis

Data was analyzed using Epi Info 7 statistical software after data was cleaned. Results of socio-demographic characteristics, referral type of clients to HIV centre and funding type for treatment cost were presented in descriptive statistics. Socio-demographic characteristics include; gender, age group, marital status, occupation, educational level, religion and residence by district. These analysis provided descriptive statistics of clients on ART and those not on ART with respect to each socio-demographic variable. Various referral types of clients to seek treatment at ART centre of the hospital were: clients who were referred on the basis of diagnostic HIV testing, transfer in on ART, PMTCT, old patients of the facility and walk in VCT clients. Additionally, funding type for treatment cost were analysed based on number of clients who were medically insured, clients who paid out of pocket and those who were employee sponsored. Geographical distribution of clients by district was also presented.

Ethics

Approval was given by the Upper east regional health directorate and the Talensi district health directorate. Additionally, approval was also given by the Talensi district hospital. Clients' records were treated with full confidentiality and anonymity.

Results

Table 1 presents a summary of socio-demographic characteristics of HIV clients at the Talensi District Hospital. Of the 91.2% (93/102) clients on ARVs, more females, 69.9% (65/93) were on ARV than their male counterparts, 30.1% (28/93). Most of the clients seeking treatment at the ART centre of

Table 1. Socio-demographic characteristics of HIV clients (n=102).

Variable	ART	No ART
	n (%)	n (%)
Gender		
Female	65(69.9)	6(66.7)
Male	28(30.1)	3(33.3)
Age(Years)		
<9	5(5.4)	4(44.4)
9-17	1(1.1)	0(0.0)
18-26	19(20.4)	2(22.2)
27-35	33(35.5)	2(22.2)
36-44	21(22.6)	0(0.0)
37-48	6(6.5)	1(11.1)
≥49	8(8.6)	0 (0.0)
Marital status		
Married	51(54.8)	2(22.2)
Single	16(17.20)	4(44.4)
Divorced	8(8.6)	1(11.1)
Separated	1(1.1)	0(0.0)
Widow(er)	17(18.3)	2(22.2)
Cohabiting	0(0.0)	0(0.0)
Occupation		
Employed	69(74.2)	4(44.4)
Unemployed	18(19.40)	1(11.1)
student	1(1.1)	1(11.1)
Not applicable	5(5.4)	3(33.3)
Educational level		
Tertiary	0(0.0)	0(0.0)
SHS	3(3.2)	0(0.0)
JHS	9(9.7)	1(11.1)
Primary	20(21.5)	2(22.2)
Nil	61(65.6)	6(66.7)
Religion		
Christian	55(59.1)	6(66.7)
Muslim	9(9.7)	0(0.0)
Traditional	29(31.2)	3(3.3)
Total	93(100)	9(100)
n=number, %= percentage, ART= Antiretroviral Therapy		

the Talensi District Hospital were referred to the unit for management on account of diagnostic testing for HIV, 68.6% (70/102). This was followed by old patients of the facility, 11.8% (12/102) who were later diagnosed of HIV and clients on Prevention of Mother To Child Transmission (PMTCT) of HIV, 9.8% (10/102) respectively. However, only 2% (2/102) walked into the ART centre on account of VCT (**Table 2**). Funding of treatment cost for clients was mainly due to medical insurance (National health insurance scheme), 76.4% (78/102) followed by clients who paid out from their pocket, 22.6% (23/102) as shown in **Table 3**. **Table 4** showed that 37.3% (38/102) of clients were resident in the Talensi district. However, most of the clients were resident in the other neighboring districts, 62.7% (64/102).

Table 2. Referral type of clients to ART centre of Talensi District Hospital (n=102).

Referral type	Number (n)	No Percentage (%)
Diagnostic HIV testing	70	68.6
Walk-in VCT site	2	2.0
PMTCT Programme	10	9.8
Old patient	12	11.8
Transfer in on ART	8	7.8
Total	102	100

Table 3. Funding type for treatment cost for HIV clients (n=102).

Funding type	Number (n)	Percentage (%)
Medical Insurance	78	76.4
Patient out of pocket	23	22.6
Employee sponsored	1	1.0

Table 4. Geographical distribution by District of HIV clients (n=102).

District	Number (n)	No Percentage (%)
Talensi district	38	37.3
Other districts	64	62.7
Other districts= Nabdam, Bolgatanga municipality, Bawku west, Builsa North, Kassena Nankana east, Kassena Nankana west		

Discussion

The study revealed that more females were infected with HIV than their male counterparts. This is probably because men tend to be more promiscuous and unfaithful than their female colleagues, thus one infected man is likely to have four or more sexual partners increasing the risk of infecting more females. This results was found to be consistent with studies by Rubaihayo and colleagues [21]. The findings in this study also reaffirms the argument that females are more at risk of acquiring HIV than their male peers [21]. The study also reported that more married couples had the disease than clients that were single. This may be due to infidelity on the part of some couples making them more prone to HIV infection. This agrees with a study in rural Malawi that revealed that marriages account for most HIV infections [22]. The educational level of clients had some differences with regards to the number of HIV clients at the facility. It was observed that as the educational level of clients increases, fewer HIV clients were reported. This may be because people who are educated are more likely to be well informed of the disease and adopt to evidence based preventive lifestyle methods. This finding is in line with many other studies that found education to be associated with lower prevalence of HIV infection [23, 24, 25].

Most of the clients who were referred to the ART centre of the hospital were as a result of diagnostic HIV testing which was carried out whilst clients who walked in for VCT for HIV were the lowest. Findings of low number of clients who walked in for VCT may be as result of lack of knowledge about the availability of VCT services for HIV in the Talensi district. It could also be attributed to stigma, preventing persons from seeking to know their HIV status. Additionally, only 37.3% (38/102) of clients who accessed HIV services were residents of the Talensi district whilst 62.7% (64/102) of clients were residents of neighbouring districts in the Upper East Region. Having more clients acces-

sing HIV services from neighbouring districts either than the Talensi district reinforces the argument that HIV-related stigma and discrimination may be the reason of some clients not seeking care at their respective districts despite the existence of such services there. This is probably because such clients do not want to be identified as having HIV infection in their district due to stigma, thus they seek for care in other districts where they were more likely not to be identified.

Funding for cost of treatment for majority of clients was through medical insurance (National health insurance scheme), this was followed by out of pocket payment. Medical insurance as a main source of funding for HIV clients was not surprising as most Ghanaian populace are medically insured [26]. Also, although ARVs are provided free for treatment of HIV, other adjuvant drugs or laboratory tests are paid out of patient pocket if a client has no medical insurance. Hence, the finding of 22.6% (23/102) of people having to pay out of their pocket is worrying as some clients may not be receiving adjuvant drugs if they don't have the money.

Conclusion

This retrospective longitudinal analysis of HIV secondary data of Talensi District Hospital has revealed that most of the clients were either females or married couples, and most of the clients had no education. Most clients became aware of their status as a result of diagnostic HIV testing, and funding for clients for treatment cost was mainly by medical insurance. The study did also observe that most of the clients that accessed the service came from neighbouring districts although they had HIV services in their respective districts. The study finding reaffirms the need for the district hospital and the Talensi district health directorate to intensify on the education of evidence based preventive methods against HIV infection among community members. Education should also focus on the need for community

members to know their status through voluntary HIV counselling and testing. Education should also be geared towards stopping HIV-related stigma and discrimination as it poses a major challenge in the management of HIV. However, the study had a limitation as it was limited to only records on HIV data in the Talensi district hospital. Further research is needed to explore the awareness and uptake of VCT services, and HIV-related stigma in the Talensi district.

Disclosure

The Author has no competing interest.

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