



## Stigmatization of People Living with HIV/AIDS in Ndokwa West Local Government Area of Delta State, Nigeria

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### **Authors' contributions**

*This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.*

### **Article Information**

DOI: 10.9734/ISRR/2020/v9i1130104

*Editor(s):*

(1) Dr. Kailash Gupta, Division of AIDS, NIAID, NIH, USA.

*Reviewers:*

(1) Tabe Franklin Nyenty, University of Yaounde, Cameroon.

(2) Ibrahim El-Zraigat, The University of Jordan, Jordan.

Complete Peer review History: <http://www.sdiarticle4.com/review-history/53738>

**Original Research Article**

**Received 25 October 2019**  
**Accepted 31 December 2019**  
**Published 28 January 2020**

### **ABSTRACT**

**Background:** HIV/AIDS related stigmatization has been reported to be traced to several factors. Little or no knowledge on the illness, misapprehensions, as well as chauvinism against sufferers, to mention just a few.

**Aim:** In this study, the stigmatization of people living with HIV/AIDS in Ndokwa West Local Government Area (NWLGA) of Delta State, Nigeria, was investigated.

**Methods:** A total of 300 individuals comprising of, or related to HIV/AIDS sufferers were ethically recruited from the ten (10) communities in NWLGA using a well-structured and validated questionnaire. The data obtained from their responses were carefully analyzed and expressed in simple percentage.

**Results:** The results showed that about 61 (20.5%) subjects were individuals who resided in urban community and 237 (79.5%) of them in the rural settings. The results on the stigmatization against HIV/AIDS patients due to prejudice revealed that 100 (33.6%) of the respondents strongly disagreed that HIV/AIDS sufferers in the community should be disliked, while 128 (43%) of them

disagree with about 50 (16.8%) agreeing and 20 (6.7%) of the respondents strongly agreeing. Furthermore, stigmatization attributable to stereotyping showed that 68 (22.8%) of the respondents strongly disagreed to that everyone infected with HIV/AIDS have high level of sexual promiscuity; were as, about 114 (38.3%) disagreed to that notion with 57 (19.1%) agreeing and 59 (19.8%) strongly agreeing to it. Moreover, HIV/AIDS stigmatization due to discrimination revealed that 66 (22.1%) of the respondents strongly disagreed on never hiring an HIV/AIDS sufferer as a worker. About 98 (32.9%) disagreed on this notion, while 106 (35.6%) of the respondents agreed and 74 (24.8%) strongly disagreeing. Respondents further added that PLWHA should not be employed in any institution or organization and that they should never rent accommodation to them.

**Conclusion:** Based on the results, stigmatization level of PLWHA was society and awareness dependent.

**Recommendations:** To cope with the associated menace of HIV/AIDS stigmatization, it is recommended that society be encouraged to evolve strategies, programs and governmental policies, geared towards enlightening and sensitizing the public on the non-transmissibility of HIV/AIDS through contact with sufferers as erroneously believed.

*Keywords: HIV; AIDS; prevalence; stigmatization.*

## 1. INTRODUCTION

The discovery of the Human Immunodeficiency Virus (HIV) dates back to 1983 [1]. HIV is known to attack and destroy immune system, and if improperly treated results in Acquired Immune Deficiency Syndrome (AIDS) and other opportunistic infections which ultimately causes death if left untreated [2].

Like in the cases of mental illness and tuberculosis, HIV/AIDS sufferers are stigmatized. That is; other people see them in a negative way and this socially worsens their health problem and stops them from getting the help they need [3].

Since the onset of AIDS epidemic, HIV/AIDS sufferers have often faced stigmatized. This has greatly fuelled the rate of transmission, increasing the negative also, its associated negative impact. HIV/AIDS related stigmatization continues to be manifest worldwide across religious and ethnic borderlines, and has created major limitations in the prevention and treatment of the disease [4].

The United Nations Secretary-General Ban Ki-Moon in 2008 pointed out that “stigma remains the single most important barrier to public action. It is a main reason why too many people are afraid to see a doctor to determine whether they have the disease or to seek treatment if so [4,5]. It helps make AIDS the silent killer, because people fear the social disgrace of speaking about it, or taking easily available precautions. Stigma is a chief reason why the AIDS epidemic

continues to devastate societies around the world”.

Misapprehensions, ignorance on HIV transmission modes, inadequate treatment facilities, reckless media reporting on disease epidemic, incurability of the disease, prejudice fear and improper societal sensitivity to issues of sexuality, disease death and drug use on the disease are the hallmarks that underpin and associate with HIV/AIDS discrimination [6]. According to Alonzo et al., [7], HIV-related stigma is fuelled by public perception, and such attitudinal behaviour as stigmatization of sufferers either because the disease (i) may result in deviant behaviour; (ii) is seen solely as the sufferer's responsibility (iii) is taught by religious faiths to be immorality (iv) is erroneously believed to be contagious by merely hugging its sufferer (v) is linked with undesirable/mysterious form of death [7].

HIV/AIDS stigmatization poses a major challenge to preventive public health efforts by contributing to underreporting of cases [8]. Stigma inhibits early detection which is key to preventing the spread of HIV [9]. PLWHA may be covertly linked with defamed conducts irrespective of their mode of contacting it. They may also face stigmatization, barred, abandoned, relegated, sanctioned, harassed, or worst still, face violence due to the infection. Stigma is often rooted in social attitudes [7]. Several studies have shown stigma and discrimination as twin evils that affect HIV testing [10], disclosure of serostatus [11], retention and adherence to treatment [12]. In essence, stigmatization of PLWHA is motivated

through prejudice, discrimination and stereotyping.

The associated of these with HIV and AIDS is implicative that PLWHA and their associates/relatives are less likely to be cared for and/or supported. Such relatives as their spouses, caregivers and loved ones suffer stigmatization and discrimination as well [13]. This needlessly improves the personal suffering associated with it.

The stigma associated with HIV/AIDS as a manifestation of stigma has also been reported as 'internalized', preventing people living with HIV/AIDS co-operating while treatment lasts [14]. Such stigma may have a powerful psychological influence on HIV/AIDS sufferers while adjusting to societal status quo, thus increasing their vulnerability to depression due to isolation.

Be it on local, community, national or international scale, effective management of HIV/AIDS stigmatization may help reduce embargoes to concerted actions. These efforts will not assist nations in reaching key targets for sustainable goal of combating HIV/AIDS and other diseases), it will also promote fundamental human rights, plus foster respect for PLWHA, reducing transmission of the virus as well [15]. Thus, providing succour for marginalized groups, PLWHA, and their associates, as well as healthcare providers themselves.

According to the Nigerian HIV and AIDS Indicator and Impact Survey (NAIIS) report 2018, the current national prevalence of HIV is estimated at 1.4% (15-49 years), with an estimated 1.9 million PLWHA in Nigeria. This report borders across age and indicates 12% of PLWHA are between the ages of 0-14 years while 75% are between 15-49 years and 13% are 50 years and above in Nigeria [16,17]. Adolescents (10-19 years) account for 8% of persons living with HIV. Furthermore, NAISS report indicated that Delta State is categorized to have a medium prevalence rate of 1.9% with 83,300 PLWHA. Bravo et al., [18] observed that in Nigeria HIV disease has been diagnosed across the 774 local government areas (LGAs) [18]. Thus, HIV/AIDS burden in Delta State is likely to spread across LGAs of the State, including Ndokwa West. For this course was this study carried out.

## 1.1 Aim of Study

Current study investigated the stigmatization of PLWHA in Ndokwa West Local Government Area of Delta State, Nigeria. Specifically, the study;

- i. Determined if community stigmatization of PLWHA in Ndokwa West Local Government Area is as a result of prejudice.
- ii. Examined if community stigmatization of PLWHA in Ndokwa West Local Government Area is due to stereotype or negative beliefs.

## 2. MATERIALS AND METHODS

### 2.1 Research Design

The study utilized both quantitative and comparative descriptive survey design. The choice of design is guided by its ease of access to various characteristics of the population of interest, thus aiding in the drawing of a representative sample that will enable one to assess the levels of community stigmatization of PLWHA in Ndokwa West Local Government Area of Delta State. The design was chosen because the study involves collecting and analysing data from people within the sample considered representative of the entire population. It is quantitative because collected data was analysed using statistical techniques and descriptive statistics due to the apparently descriptive nature of the study.

### 2.2 Study Area

Ndokwa West Local Government of Delta State, Nigeria was the study area. The said area reportedly had a population of 149,325 (as per 2006 National Census figure) with a currently projected population of 204,089 in 2017 as contained in Delta State Statistical Yearbook based on World Bank annual growth rate of 2.619%. It has a land area of 941 km<sup>2</sup> with headquarter at Kwale (Utagba-Ogbe) and dominantly inhabited by Ukwuani ethnic nationality. The Local Government is made up of six major clans namely Ogume, Onicha-Ukwuani, Utagba-Ogbe, Abbi, Emu and Utagba-Uno clans with each clan having some autonomous or semi-autonomous communities (31 altogether). Here, the occupation of the people is predominantly small scale farming with other occupations like business ventures (buying and

selling) and artisanship (offering of professional skills and services).

In the study area, HIV Counselling and Testing (HCT) was conducted in all the Primary Healthcare Centres in collaboration with State Action Committee on AIDS and Catholic Relief Services (CRS) governmental and non-governmental organizations respectively. While the former consistently supply HIV test kits, supplies from the latter are irregular and periodic. Recently, Association for Reproductive and Family Health (ARFH), recently supplied HIV test kits for HIV testing in the study area; the exercise is designated to last from August 2019 to January 2020, subject to extension. Other HIV tests include testing of internally displaced persons during flooding, though, ad-hoc. Furthermore, General Hospital and BREMA Hospital, latter being a private health outfit, both in Kwale doubles as referral, HIV Counselling and Testing Centres in the Local Government. For proper notification, documentation and Analysis, test results are sent State Action Committee on AIDS (SACA). However, Reproductive and Family Health (ARFH) takes charge of data collected on their behalf.

### 2.3 Population of Study

The study was undertaken in ten (10) randomly selected communities from the six (6) major clans of Ndokwa West Local Government Area of Delta State. Most importantly, to avoid any form of bias, all six clans were canvassed without exception. The study communities are predominantly rural with the exception of Kwale the Local Government Headquarter which could be regarded urban.

### 2.4 Sample and Sampling Technique

Using the number of communities in each clan as a proportion of the whole (30 altogether) a fair estimate of the number of communities to be canvassed was deduced. Ogume clan had  $(7/30) \times 10 = 2$  communities, Onicha-Ukwuani clan had  $(5/30) \times 10 = 2$  communities, whereas, Utagba-Uno clan was grouped into six to be  $(6/30) \times 10 = 2$  communities. Emu clan had  $(3/30) \times 10 = 1$  community, while Utagba-Ogbe was  $(6/30) \times 10 = 2$  communities, and Abbi  $(3/30) \times 10 = 1$  community. Altogether, the ten (10) communities randomly selected constitute the sample area where respondents were interviewed. Using the number of selected communities in each clan, questionnaire was allocated proportionately to the number of communities in each.

### 2.5 Determination of Sample Size

The sample size was determined by using a sample size calculator on the internet developed by Creative Research System, 2012.

In this regard, at a confidence level of 95% and a  $\pm 10$  confidence interval, a projected local government population of 209,504 persons was entered into the calculator. Sample size needed for this study returned 96 respondents (at least). However, 300 respondents were used for reason of getting wider coverage.

### 2.6 Selection Criteria

The target population would be people or individuals domiciled in Ndokwa West Local Government Area aged 15 years and above with or without formal education, married or otherwise, employed by type or not employed.

### 2.7 Resources and Sources

Study adopted the use of a questionnaire and titled it; "A questionnaire assessing the community stigmatization of PLWHA in Ndokwa West Local Government Area of Delta State". The instrument was cautiously structured and validated before use. It was written in plain English, void of unnecessary grammar, and was divided into four sections (A to D).

Section A contained the Socio-Demographic data of respondents such as age, sex, marital status, employment type, highest level of educational attainment etc. and these helped to determine if there is any relationship between demographic characteristics and community stigmatization of PLWHA in Ndokwa West Local Government Area of Delta State. Section B held questions for data on HIV/AIDS stigmatization attributable to Prejudice in study communities. The section dealt with issues of prejudice such as people's dislike, hatred, avoidance and exclusion for PLWHA on one hand and relative care or harassment on the other. Whereas; section C elicited data on HIV/AIDS stigmatization, stereotyping and beliefs traceable only to the sampled communities; that is, stigmatizing beliefs such as promiscuity, secretiveness to willingness of people living with HIV to transmit the virus. Lastly, Section D held questions on HIV/AIDS stigmatization attributable to discriminatory attitudes in the study area. This range from employment, education issues to inter/extra-personal relationships by virtue of

association or socialization with people living with HIV. The issue of children living with HIV/AIDS was also assessed in the study.

### 2.8 Data Collection Methods

Data was collected through survey method. By this, questionnaires were administered to members of Ndokwa West Local Government Area to facilitate the collection of primary data. Direct interview was also granted to complete the forms where eligible respondents lacked expected literacy. Also, direct observation was used in guiding respondents on how to fill the forms or questionnaire to enhance data collection.

### 2.9 Analytical Approach

Data collected from the field were presented with frequency tables. The two sections of the questionnaire were analysed using IBM Statistical Package for the Social Sciences (SPSS) version 20; a modern computer based statistical tool widely employed by researchers to handle research and statistical based problems.

## 3. RESULTS

Results from current study are presented in graphs and tables below.

## 4. DISCUSSION

HIV stigma has an important role in the spread of the AIDS epidemic. It profoundly affects the lives of individuals living with HIV/AIDS. For instance, the fear of being identified as having HIV may

discourage a person from getting tested, accessing medical services, and obtaining medications. Thus, this study was designed to examine HIV-related stigma and the stigmatization of PLWHA in Ndokwa West Local Government Area of Delta State, Nigeria.

The study was structured to encompass ten (10) communities which were; Emu-ebendo, Igbe-ogume, Ike-onitcha, Inam abbi, Ogbe-ogume, Ogo-ikilibi, Ugiliamai, Umusadege-ogbe, Umusam-ogbe and Utagba-uno; all in Ndokwa West Local Government Area of Delta State, Nigeria. For each community, 29 (9.7%) subjects were sampled from Emu-ebendo and Utaga respectively, while 30(10.1%) were from Igbe-Ogume, Ike-onitcha, Inam abbi, Ogbe-ogume, Ogo-ikilibi, Ugiliamai, Umusadege-ogbe, umusam-ogbe respectively. The socio-demographic characteristics of sampled participants (Fig. 1) include 186 (62.4%) males and 112% females, which accounted for 37.6% of all sampled respondents. Of the total respondents, about 91 (30.5%) were married, 181 (60.7%) single, while 12 (4.0%) and 13 (4.4%) were respectively divorced or widow/widower, this bring to beer, a total of two hundred and ninety eight (298) participants with 61 (20.5%) and 237 (79.5%) of them residing in urban and rural communities respectively. Again, a clear look at Table 1 revealed that of the sampled respondents, 54 (18.1%) were farmers by occupation with 49 (16.6%), 35 (11.7%), 51 (17.1%), 43 (14.4%) and 27 (9.1%) being Teachers, Health Workers, Traders, Artisans and Clergy respectively. About 19 (6.4%) and 17 (5.7%) were also Students and Civil Servants respectively.

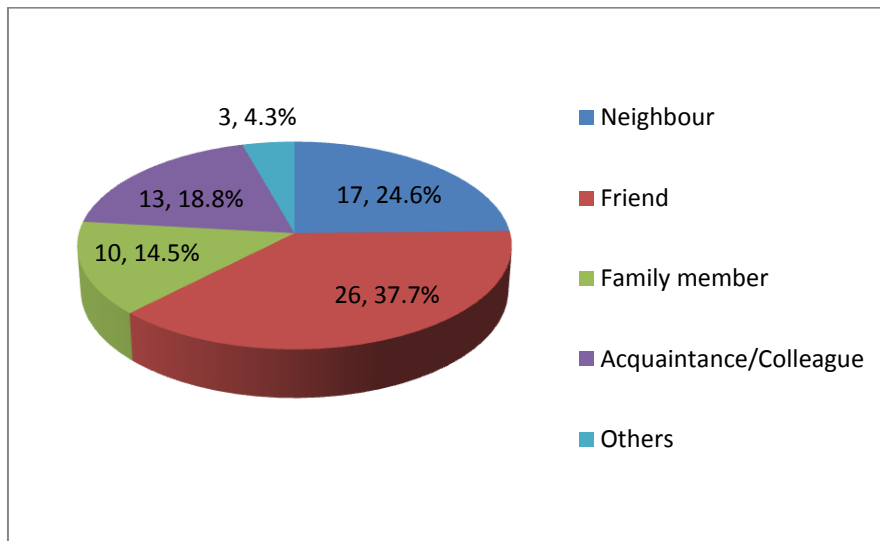


Fig. 1. Relationship of respondents with the person living with HIV/AIDS

**Table 1. Socio-demographic characteristics of respondents in sampled communities**

Variables	Attributes	Frequency	Percentage
Name of Community	Emu-ebendo	29	9.7
	Igbe-ogume	30	10.1
	Ike-onitcha	30	10.1
	Inam abbi	30	10.1
	Ogbe-ogume	30	10.1
	Ogo-ikilibi	30	10.1
	Ugiliamai	30	10.1
	Umusadege-ogbe	30	10.1
	Umusam-ogbe	30	10.1
	Utagba-uno	29	9.7
Type of Community	Urban	61	20.5
	Rural	237	79.5
Age (Years)	15 – 24	32	10.7
	25 – 49	192	64.4
	50 and above	74	24.8
Sex	Male	186	62.4
	Female	112	37.6
Marital Status	Single	91	30.5
	Married	181	60.7
	Divorced	12	4.0
	Widower/Widow	13	4.4
	Others	1	0.3
Educational Qualification	None	2	0.7
	Primary	25	8.4
	Secondary	125	41.9
	Tertiary	145	48.7
	Others	1	0.3
Occupation	Farmer	54	18.1
	Teacher	49	16.4
	Health worker	35	11.7
	Business/Trader	51	17.1
	Artisan	43	14.4
	Clergy	27	9.1
	Student	19	6.4
	Civil Servant (exclude Teacher/Health Worker)	17	5.7
	Others	3	1.0
Religion	Christianity	260	87.2
	Islam	7	2.3
	Traditional	27	9.1

From above table, 61 (about 20.5%) of participants were individuals who resided in urban community, with majority 237(79.5%) being in rural centres. 32 (10.7%) of them were of the age range of between 15-24 years, while 192 (64.4%) were between 25-49 years. Seventy four [74 (24.8%)] of them were at age 50 (years) and above with most being males, and accounted for 186(62.4%) of the sampled subjects. Ninety-one (30.5%) were single, majority 18(60.7%) were married, 12(4%) were divorced, 13(4.4%) were widower/widow, 1(0.3%) had other marital status. Two (0.7%) had no educational qualification, 25(8.4%) had primary education, 125(41.9%) had secondary education, 145(48.7%) had tertiary education, 1(0.3%) had other educational qualification. Fifty-four (18.1%) were farmers, 49(16.4%) were teachers, 35(11.7%) were health workers, 51(17.1%) were into business people/traders, 43(14.4%) were artisans, 27(9.1%) were clergy, 19(6.4%) were students, 17(5.7%) were civil servants, 3(1%) had other occupations. Majority 260(87.2%) were Christians, 7(2.3%) were Muslims, 27(9.1%) were traditionalist, 4(1.3%) practiced other religion

**Table 2. HIV status of respondents**

Variables	Attributes	Frequency (n)	Percentage (%)
Have you ever been tested for HIV	Yes	173	58.1
	No	125	41.9
Do you know anyone living with HIV/AIDS	Yes	69	23.2
	No	229	76.8
Is any of your family members living with HIV/AIDS	Yes	16	5.4
	No	282	94.6
If yes, for how long	Less than one year	7	41.2
	1 - 3years	7	41.2
	Greater than 3 years	3	17.6
Do you know any HIV/AIDS patients who has been stigmatized or discriminated against in your community	Yes	50	16.8
	No	248	83.2

*Above Table shows the HIV status of respondents or their loved ones. From the table, it is seen from the responses gotten from participants that 173 (58.1%) of them have been tested for HIV, of which about 125(41.9%) of them have not. It is also observed from the data that about 69 (23.2%) of respondents were directly and/or indirectly familiar with someone living with HIV/AIDS, even though most of the sampled respondents 229(76.8%) were not. Again from the data, about 16 (5.4%) of respondents had one (or more) close relative who have been diagnosed positive for HIV/AIDS, with majority 282(96.6%) having non in their family*

In a 2013 study on stigmatization of people living with HIV/AIDS, it was estimated that about 35 million people worldwide are living with HIV, with Sub-Saharan Africa being the region most affected by the pandemic, holding more than two-thirds of all infected people (UNAID, 2013). Ethiopia has not escaped the burden with an estimated adult prevalence of 1.5%, large numbers of people living with HIV, and millions of children orphaned due to AIDS (Central Statistical Agency, 2011). Ethiopia has nine regional states and two city administrations. In 2010, the single point estimate of the country indicated that adult HIV prevalence in Oromia regional state was 1.6, which was slightly higher than the national single point estimate and the total PLWHA (people living with HIV/AIDS) in the region was estimated at 287,301 persons (Federal Democratic Republic of Ethiopia, 2012).

Apart from HIV/AIDS, Stigma has been associated with a number of diseases such as leprosy, urinary incontinence, and mental illness; nevertheless, most of the existing studies and commentaries have noted that stigma remains a major fact of life for people living with HIV/ AIDS in sub-Saharan Africa and referred it as “central to the global AIDS challenge as the disease itself” (Horizons, 2012).

HIV/AIDS-related stigma is a complex concept that refers to prejudice, discounting, discrediting, and discrimination directed at persons perceived

to have AIDS or HIV. As a result, the global commission on HIV/AIDS urged that member countries should take immediate steps to cancel punitive laws, prohibit stigma and discrimination [19,20,21] and work toward zero stigma and discrimination. A recent systematic review found that over the last decade, evidence-based effective programming to reduce stigmatizing and discriminatory attitudes has expanded substantially [22]. However, almost no country has prioritized activities to reduce or eliminate them in their national AIDS plans or program. HIV stigma continues to have an extremely important role in the AIDS epidemic, not only because of its effects on HIV-infected individuals but also because of the ways in which it might be contributing to the spread of the epidemic [23].

A closer look at Table 2 shows the HIV status of respondents or their loved ones. From the table, it is seen from the responses gotten from participants that 173 (58.1%) of them have been tested for HIV, of which about 125(41.9%) of them have not. It is also observed from the data that about 69 (23.2%) of respondents were directly and/or indirectly familiar with someone living with HIV/AIDS, even though most of the sampled respondents 229(76.8%) were not. Again from the data, about 16 (5.4%) of respondents had one (or more) close relative who have been diagnosed positive for HIV/AIDS, with majority 282(96.6%) having non in their

**Table 3. HIV/AIDS stigmatization attributable to prejudice**

	<b>SD</b>	<b>D</b>	<b>A</b>	<b>SA</b>	<b>Mean</b>	<b>St.D</b>
I dislike anybody diagnosed with HIV/AIDS in my community and it is ok to dislike them	100 (33.6)	128 (43.0)	50 (16.8)	20 (6.7)	1.97	0.88
I hate PLWHA and it is ok to do so	97 (32.6)	137 (46.0)	48 (16.1)	16 (5.4)	1.94	0.84
Because of my dislike for People Living with HIV, I would be worried if my co-worker has AIDS	85 (28.5)	138 (46.3)	54 (18.1)	21 (7.0)	2.04	0.87
I hate people living with HIV so I cannot sit close to them during community meetings	65 (21.8)	163 (54.7)	51 (17.1)	19 (6.4)	2.08	0.80
I could not be friends with someone who has AIDS due to my dislike for People living with HIV	69 (23.2)	157 (52.7)	51 (17.1)	21 (7.0)	2.08	0.82
I dislike all my neighbours living with HIV/AIDS and it is ok to dislike them	68 (22.8)	162 (54.4)	52 (17.4)	16 (5.4)	2.05	0.79
I am of the opinion that People living with HIV should be excluded from all social gatherings in my community	126 (42.3)	113 (37.9)	44 (14.8)	15 (5.0)	1.83	0.86
I am afraid to have contact with a person whom I know is infected with HIV and AIDS and it is good to be afraid of making contact	40 (13.4)	148 (49.7)	93 (31.2)	17 (5.7)	2.29	0.77
I would not be bothered if someone I am living with is infected with HIV and AIDS, and it is ok not to be bothered.	42 (14.1)	112 (37.6)	86 (28.9)	58 (19.5)	2.54	0.96
I would be willing to care for a relative with HIV and AIDS	24 (8.1)	69 (23.2)	125 (41.9)	80 (26.8)	2.88	0.90
I support the verbal insult and harassment of people living with HIV in my community and it is ok to support these actions	107 (35.9)	134 (45.0)	39 (13.1)	18 (6.0)	1.89	0.85

*SD = Strongly Disagree, D = Disagree, A = Agree, SA = Strongly Agree and St. D = Standard Deviation*



**Table 4. HIV/AIDS stigmatization attributable to stereotyping**

	<b>SD</b>	<b>D</b>	<b>A</b>	<b>SA</b>	<b>Mean</b>	<b>St.D</b>
Everyone infected with HIV and AIDS are promiscuous people	68 (22.8)	114 (38.3)	57 (19.1)	59 (19.8)	2.36	1.04
Most people living with HIV and AIDS got what they deserve because they refused to use condom	57 (19.1)	112 (37.6)	99 (33.2)	30 (10.1)	2.34	0.90
People with HIV and AIDS have only themselves to blame	49 (16.4)	122 (40.9)	107 (35.9)	20 (6.7)	2.33	0.83
My support for a person living with HIV and AIDS depends on how the person was infected	40 (13.4)	107 (35.9)	100 (33.6)	51 (17.1)	2.54	0.93
I would willing get close to an uninfected person that a person infected with HIV and AIDS	32 (10.7)	113 (37.9)	120 (40.3)	33 (11.1)	2.52	0.83
People living with HIV and AIDS are usually difficulty to related with	27 (9.1)	99 (33.2)	137 (46.0)	35 (11.7)	2.60	0.81
People living with HIV and AIDS are secretive of their status, thus can infect others with the virus	16 (5.4)	62 (20.8)	124 (41.6)	96 (32.2)	3.01	0.86
I am always careful of people living with HIV and AIDS because they are always transmitting the virus.	23 (7.7)	96 (32.2)	120 (40.3)	59 (19.8)	2.72	0.87

*SD = Strongly Disagree, D = Disagree, A = Agree, SA = Strongly Agree and St. D = Standard Deviation*

**Table 5. HIV/AIDS stigmatization attributable to discriminatory attitudes**

	<b>SD</b>	<b>D</b>	<b>A</b>	<b>SA</b>	<b>Mean</b>	<b>St.D</b>
I would never hire an HIV/AIDS infected person to work for me and it is ok not to hire them	66 (22.1)	98 (32.9)	106 (35.6)	28 (9.4)	2.32	0.92
People living with HIV and AIDS should not be employed to work in institutions and organisations	74 (24.8)	113 (37.9)	89 (29.9)	22 (7.4)	2.20	0.90
I would never rent accommodation to an HIV/AIDS infected person and it is ok not to accommodate them	67 (22.5)	158 (53.0)	53 (17.8)	20 (6.7)	2.09	0.82
It does not bother me if my friend is an HIV/AIDS person	58 (19.5)	125 (41.9)	94 (31.5)	21 (7.0)	2.26	0.85
People Living with HIV and AIDS should not be allowed into social gatherings in the community	94 (31.5)	146 (49.0)	40 (13.4)	18 (6.0)	1.94	0.83
People living with HIV and AIDS should not be allowed into religious gatherings.	105 (35.2)	140 (47.0)	34 (11.4)	19 (6.4)	1.89	0.84

	<b>SD</b>	<b>D</b>	<b>A</b>	<b>SA</b>	<b>Mean</b>	<b>St.D</b>
A child diagnosed with HIV/AIDS should be isolated in a separate classroom in the school	72 (24.2)	158 (53.0)	40 (13.4)	28 (9.4)	2.08	0.86
Children diagnosed with HIV/AIDS should not be allowed to play with other children.	68 (22.8)	154 (51.7)	50 (16.8)	26 (8.7)	2.11	0.86
I cannot relate with a family member living with HIV/AIDS	61 (20.5)	157 (52.7)	62 (20.8)	18 (6.0)	2.12	0.80
I would be worried for my health if a co-workers had HIV/AIDS	35 (11.7)	99 (33.2)	134 (45.0)	30 (10.1)	2.53	0.83
I cannot embrace someone living with HIV/AIDS	42 (14.1)	148 (49.7)	81 (27.2)	27 (9.1)	2.31	0.82
I would limit my contact with a person if I Know he/She is infected with HIV/AIDS	38 (12.8)	95 (31.9)	141 (47.3)	24 (8.1)	2.51	0.82
PLWHA should be physically assaulted because they deserve it	103 (34.6)	138 (46.3)	43 (14.4)	14 (4.7)	1.89	0.82
I cannot eat together with an HIV/AIDS infected patients	79 (26.5)	84 (28.2)	109 (36.6)	26 (8.7)	2.28	0.95

*SD = Strongly Disagree, D = Disagree, A = Agree, SA = Strongly Agree and St. D = Standard Deviation*

family. It is also noticed that about 7 (41.2%) of the sampled subjects had loved ones (family members) who had lived with HIV/AIDS between 1-3 years at least, with about 3 (17.6%) of them reporting over (>) 3 years of existence of HIV in their family member. It is also seen that about 50 (16.8%) of sampled participants opined that they know PLWHA who have been stigmatized and/or discriminated against in their community, with about 248(83.2%) reporting contrary. The implication of this is that prevalence level of discrimination against PLWHA in the sampled community is minimal compared to those that were not stigmatized. In a similar study conducted in Jimma town, Ethiopia, the mean score of experienced HIV stigma was lower than the rest of stigma domains, which may be due to the fact that the majority of the clients were from the urban setting providing relatively better access to various media that develop the positive attitude toward PLWHA among public [24]. The magnitude of experienced HIV stigma was slightly lower than finding of the study conducted in Malawi (43.0%) and Kenya (22.8%) [19]. Out of the 18 experiences of discrimination, gossip, verbal insult, psychological pressure or manipulation, and harassment were the most prevalent (58.5%, 39.9%, 20.8% and 11.3%, respectively). These scores were slightly higher than those found in a study conducted by Muoghalu and Jegede (gossip: 37.6%, manipulation and psychological pressure: 33.9%, harassment and threats: 24.6%) [20]. The variations may be due to the difference in the study period and study setting.

Umpteenth time, stigmatization of PLWHA has been associated with numerous diseases. Some studies have showed that aspects of stigmas have been reported as factors constituting a serious obstacle for HIV counselling and testing (VCT) service utilization and HIV prevention, and PLWHA tend to experience self- and anticipated stigmas due to their weak appearance caused by HIV-related complication, particularly during life before receiving ART [20]. The different aspects are all interrelated and may have an impact on the self-efficacy of the affected person, his or her participation in the community, personal well-being, and self-esteem. The PLWHA experience unemployment rates three times higher than national unemployment rates in different countries, and the reason for unemployment includes stigma. The PLWHA in Ethiopia experience stigmatization through gossip, verbal insult, isolation, and rejection according to a

stigma index survey conducted by networks of positive people (NEP+) [23].

Fig. 1 of the result for this study presents the relationship of respondents with the person living with HIV/AIDS. From the figure (pie chart), it is noticed that about 17(24.6%) of respondents posited that they had HIV/AIDS sufferer as their direct neighbour, with about 26 (37.7%) reported to be friends of actual respondent, while about 10 (14.5%) of the reported person were family members of respondents, and 13(18.8%) shown to be acquaintance/colleague of respondents. Indeed, only about 3 (4.3%) showed direct relationships with people living with HIV/AIDS.

Again, Table 3 of this study shows HIV/AIDS stigmatization prejudice. From the table, a total of 100 (33.6%) respondents strongly disagreed that HIV/AIDS sufferer in their communities should be disliked, while about 128 (43%) of them disagreed on this question, with about 50(16.8%) agreeing, and 20 (6.7%) of them strongly agreeing to this. This gave an average of 1.97 and 97 (32.6%) strongly disagreed response respectively that they hate PLWHA and it is ok to do so. The implication of this is that People Living with HIV would likely be worried as they are most probably hated as such, cannot sit close to them during community meetings.

From all social gatherings in sampled communities, 113(37.9%) disagreed, 44(14.8%) agreed, 15(5%) strongly disagreed, with a mean of 1.83, forty (13.4%) strongly disagreed that they were afraid to have contact with a person whom they know is infected with HIV and AIDS and it is good to be afraid of making contact, 148(49.7%) disagreed, 93(31.2%) agreed, 17(5.7%) strongly agreed, with a mean of 2.29, 42 (14.1%) strongly disagreed that they would not be bothered if someone they were living with is infected with HIV and AIDS, and it is ok not to be bothered, 112 (37.6%) disagreed, 86(28.9%) agreed, 58(19.5%) strongly agreed with a mean of  $2.54 \pm 0.96$ , 24 (8.1%) strongly disagreed that they would be willing to care for a relative with HIV and AIDS, 69(23.2%) disagreed with a mean of 2.88, one hundred and seven (35.9%) strongly disagreed that they support the verbal insult and harassment of people living with HIV in their community and it is ok to support these actions, 134(45%) disagreed, 39(13.1%) agreed, 18(6%) strongly agreed with a mean of  $1.89 \pm 0.85$ .

The knowledge of stigmatization as it relates to HIV/AIDS sufferers was moderately adequate in this study which is similar to another South African study, and a Nigerian study which also reported satisfactory knowledge of HIV/AIDS amongst the participating HCWs in SSA [25]. On the question, 'if mosquitoes can transmit HIV', 91.6% (306) of our participants answered correctly that mosquitoes cannot transmit HIV which is in agreement with similar reports of 94% from Nigeria. In this KEH study there was a weak correlation between knowledge and comfort levels. This is reflected in the fact that HCW's who have higher levels of knowledge about HIV/AIDS and its transmission scored higher in questions about comfort levels in rendering care to PLWHA. Our results differ somewhat from the Nigerian study where HCW discomfort with taking care of PLWHA was attributed to the pervasive fear of HIV/AIDS in the community where HCWs live [25]. By contrast, a Chinese study did not show any correlation between knowledge of HIV/AIDS and comfort levels. This fear of occupational exposure to HIV/AIDS was also confirmed by another South African study on rural nurses, where 58.6% of the respondents were found to be worried about occupational exposure. The fear of occupational exposure to HIV/AIDS is probably one of the reasons behind the relatively low comfort levels of HCW in performing invasive surgeries on patients (53.3%) at KEH. This may be related to the perception that PLWHA deserve their illness, as they are seen as promiscuous men and women. Women are particularly stigmatized as outright prostitutes in some cases with 54.5% of participants in this study responding affirmatively to the question that "women prostitutes are responsible for the spread of HIV in our community" ( $p \leq 0.0001$ ), and that promiscuous men and women are the ones who spread HIV within our community. This observation is supported by recent reports of young girls who may travel with mini-bus taxi drivers in South Africa and are alleged to engage in transactional sex with them leading to stigmatization [26].

Also noticeable from this study (Table 4) is HIV/AIDS stigmatization attributable to stereotyping. By this, about 68 (22.8%) respondents strongly disagree that everyone infected with HIV / AIDS have high level of sexual promiscuity. Whereas, about 114 (38.3%) disagreed to this notion, with 57 (19.1%) agreeing and 59 (19.8%) strongly agreeing to it. On the average, a mean value of 2.36 strongly disagreed that most people living with HIV and

AIDS got what they deserve because they refused to use condom, were as, 49 (16.4%) strongly disagreed that people with HIV and AIDS have only themselves to blame, with 122 (40.9%) disagreeing and 107(35.9%) agreeing respectively. From this observation, it can be argued that exposure to HIV/AIDS resulting from promiscuity may be responsible for the low levels of comfort stigmatization against PLWHA. This may be related to the perception that HIV/AIDS sufferers deserve to suffer the condition because of their promiscuity. Also, women are particularly out-rightly stigmatized than men, with 54.5% participants from current study affirming that "women prostitutes are responsible for the spread of HIV in the community", and that promiscuous individuals responsible for the spread of the disease within the community. This observation concurs with that of a recent report of young girls who travel with mini-bus taxi drivers in South Africa to engage in transactional [24]. Current finding also aligns with results from an Indian study where about 44% respondents posited that only men who patronize sex workers worry about HIV, with 43% responses showing that women sex workers to be worried about the disease [23].

Report from Table 5 of this study shows HIV/AIDS stigmatization due to discriminatory attitudes. From the table, about 66 (22.1%) of the responses proved to strongly disagree on never hiring an HIV/AIDS sufferer as a worker in their firm, positing that it is an abnormal thing to do. However, about 98 (32.9%) disagreed on this, while a total of 106(35.6%) agreed and 74 (24.8%) strongly disagreed. Respondents further added that people living with HIV and AIDS should not be employed to work in institutions and organizations, and would never rent accommodation to HIV/AIDS infected individuals. It does not bother them if their friend is an HIV/AIDS person, adding that they should not be allowed into social gatherings in the community, but should be isolated in a separate room if need be. Also, about 158(53%) disagreed on this, while 40 (13.4%) agreed and 28(9.4%) strongly agreed that children diagnosed with HIV/AIDS should not be allowed to play with other children, 154(51.7%) disagreed, 50(16.8%) agreed, 26(8.7%) strongly agreed with a mean of  $2.11 \pm 0.86$ , sixty-one (20.5%) strongly disagreed that they cannot relate with a family member living with HIV/AIDS, 157(52.7%) disagreed, 62(20.8%) agreed, 18(6%) strongly disagreed with a mean of  $2.12 \pm 0.80$ , thirty-five (11.7%) strongly disagreed that they would be worried for

their health if a co-workers had HIV/AIDS, 99(33.2%) disagreed, 134(45%) agreed, 30(10.1%) strongly agreed with a mean of  $2.53 \pm 0.83$ , forty-two (14.1%) strongly disagreed that they cannot embrace HIV/AIDS seropositive individual, 148(49.7%) disagreed, 81(27.2%) agreed, 27(9.1%) strongly agreed with a mean of  $2.31 \pm 0.82$ , thirty-eight (12.8%) strongly disagreed that they would limit their contact with a person if they knew he/she is infected with HIV/AIDS, 95(31.9%) disagreed, 141(47.3%) agreed, 24(8.1%) strongly agreed with a mean of  $2.51 \pm 0.82$ , one hundred and three (34.6%) strongly disagreed that PLWHA should be physically assaulted because they deserve it, 138(46.3%) disagreed, 43(14.4%) agreed, 14(4.7%) strongly agreed with a mean of  $1.89 \pm 0.82$ , seventy-nine (26.5%) strongly disagreed that they cannot eat together with an HIV/AIDS infected patients, 84(28.2%) disagreed, 109(36.6%) agreed, 26(8.7%) strongly agreed with a mean of  $2.28 \pm 0.95$ .

## 5. CONCLUSION

To cope with the associated menace of HIV/AIDS stigmatization, society must evolve strategies to encourage programs and governmental policies, geared towards enlightening and sensitizing the public on the non-transmutability of HIV/AIDS through contact with sufferers as erroneously believed. In this study for instance, the mentality that HIV/AIDS patients need not be incorporated into the society at large must also be dealt with. From this study, current study also prove that being single in marital status can significantly trace to level of experienced to HIV/AIDS stigmatization, with lower educational level correlating positively with level of experience in HIV/AIDS stigmatization. This finding disagrees with results from a previous study conducted in Canada where participants argued that with high school education or greater, HIV/AIDS stigmatization levels was decreased.

## CONSENT

It is not applicable.

## ETHICAL APPROVAL

Ethical approval was sourced from the Research and Ethics committee of the College of Health Sciences, Novena University, Ogume, Delta State.

## COMPETING INTERESTS

Authors have declared that no competing interests exist.

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*Peer-review history:*  
The peer review history for this paper can be accessed here:  
<http://www.sdiarticle4.com/review-history/53738>