

Socio-economic status and discrimination against people living with HIV/AIDS in selected local government areas of Lagos state, Nigeria¹

Nwanna, Chinwe Rosabelle

Department of Sociology, University of Lagos, Akoka, Yaba, Lagos, Nigeria

chironwa@yahoo.com, cnwanna@unilag.edu.ng

+234 803 403 4559; +234 702 628 7269

Abstract

The main thrust of the study was to explore the correlation between socio-economic status and discrimination among people living with HIV/AIDS (PLWHA) and non-infected people in two local government areas (LGAs) of Lagos state: Lagos Mainland, an urban setting, and Epe, a rural one. Multistage and systematic sampling techniques were used in 40 enumeration areas (25 in Lagos Mainland and 15 in Epe) to obtain a sample of 160 non-infected respondents and a purposive sample of 80 PLWHA. Interviews and focus group discussions were conducted from September 2005 to April 2006. Data were analyzed using the Statistical Package for Social Sciences (SPSS) while hypotheses were tested by multivariate logistic regression analysis. The results showed that many non-infected respondents exhibited discriminatory attitudes in different situations involving potential contacts with the PLWHA. The study also indicated that significant proportions of PLWHA experienced rejection, abandonment, eviction, isolation and alienation within their families and communities. It was revealed that education, place of residence, gender, and marital status were significant predictors of discrimination. Contrary to our argument that women were more vulnerable to discrimination than men, the reverse was the case in this study. Widowed/separated/divorced PLWHA suffered more discrimination than those in other categories of marital status. Empowerment of PLWHA, intensive mass HIV education and enforcement of national and international legal instruments were recommended among others.

Key words: HIV-related discrimination, Epe Local Government Area, Lagos Mainland Local Government Area, PLWHA, Socio-economic status

Résumé

La poussée principale de l'étude devait explorer la corrélation entre le statut socio-économique et la discrimination parmi les gens vivant avec VIH/SIDA (PLWHA) et a non-infecté les gens dans deux régions de collectivité locale (LGAs)

1. This work is an extract from my doctoral dissertation on "Socio-economic status and discrimination against people living with HIV/AIDS in Lagos State, Nigeria" at the University of Lagos. I wish to thank my supervisors, Professor Felicia A.D. Oyekanmi and Professor 'Lai Olurode, for their support.

d'état de Lagos : le Territoire continental de Lagos, un cadre urbain et Epe, un rural. Les techniques d'échantillonnage à plusieurs étages et systématiques ont été utilisées dans 40 régions d'énumération (25 dans le Territoire continental Lagos et 15 dans Epe) pour obtenir un échantillon de 1600 défendeurs non-infectés et d'un échantillon délibéré de 80 PLWHA. Les interviews et les discussions de groupe de foyer ont été accomplis du septembre de 2005 à l'avril de 2006. Les données ont été analysées en utilisant le Paquet Statistique des Sciences humaines (SPSS) pendant que les hypothèses ont été évaluées par l'analyse de rétrogradation logistique multivariée. Les résultats ont montré que beaucoup de défendeurs non-infectés ont exposé des attitudes discriminatoires dans de différentes situations impliquant des contacts potentiels avec le PLWHA. L'étude a aussi indiqué que les dimensions significatives de PLWHA ont connu le refus, l'abandon, l'expulsion, l'isolement et l'aliénation dans leurs familles et communautés. L'étude a révélé que l'éducation, l'endroit de résidence, genre et situation de famille était des prophètes significatifs de discrimination. Contrairement à notre argument que les femmes étaient plus vulnérables à la discrimination que les hommes, le contraire était le cas dans cette étude. PLWHA veufs/séparés/divorcés a subi plus de discrimination que ceux dans d'autres catégories de situation de famille. Empowerment de PLWHA, la masse Intensive VIH l'éducation et la mise en vigueur d'instruments juridiques nationaux et internationaux ont été recommandés parmi d'autres.

Mots clés: discrimination liée au VIH, Epe zone d'administration locale, Lagos Mainland zone d'administration locale, les PVVIH, le statut socio-économique

Introduction and statement of problem

In Nigeria, an estimated 3.1% of adults aged 15-49 years were living with HIV/AIDS by the end of 2007 (UNAIDS, 2008). Approximately 170,000 people died from the disease in 2007, culminating in a drop of the average life expectancy from 53.8 years for women and 52.6 years for men in 1991 to 46 for women and 47 for men in 2007 respectively (WHO, 2008). People living with the infection not only suffer health and demographic consequences but also experience social discrimination (Federal Ministry of Health (FMOH), 2003; National Population Commission (NPC) and ORCID/Macro, 2004). Discrimination ravages the social fabrics of the society and translates into human

rights violations (Parker and Aggleton, 2002). The fear of discrimination has constrained individuals living with HIV/AIDS from living normal lives or openly declaring their HIV status (FMOH, 2003). It has also brought about conditions of stress, low self-esteem, suicide, job losses, unemployment, and dislocation among people living with HIV/AIDS (PLWHA). However, not every person living with the disease suffers discrimination. Arachu and Farmer (2005) argue that social inequalities in the society determine, in large part, who suffers from HIV-related discrimination. Despite the increasing awareness that the impact of discrimination must be addressed in policies and programmes aimed at reducing HIV/AIDS, efforts are impeded by the dearth of information

on the phenomenon. Most literature relating to HIV-discrimination focuses mainly on policy and regulatory concerns. Little attention has been focused on the influence of the socio-economic status of the PLWHA and of the non-infected people on discrimination against those living with the infection. Adebajo *et al.*, (2003); FMOH (2003); NP and OR/Macro (2004); Reis *et al.*, (2005) and Adeokun *et al.*, (2006) have carried out researches on people's knowledge, attitudes and behaviour towards PLWHA in different situations. They have generated a wealth of information which is often not situated in social inequalities. This has hindered the advancement of a theoretical understanding of HIV-related discrimination. Furthermore, a study on human rights of PLWHA in 2004 revealed that HIV-related discrimination was pervasive in Lagos State. To improve our understanding of the phenomenon, therefore, requires an understanding of how social inequalities foster discrimination. In view of the above, the study set out to explore the correlation between socio-economic status and discrimination among PLWHA and non-infected people in two local government areas (LGAs) of Lagos state: Lagos Mainland, an urban setting, and Epe, a rural one.

Objectives of the study

The study's main objective was to investigate the relationship between the socio-economic status of non-infected people and of PLWHA and discriminatory attitudes directed at people living with HIV/AIDS in Lagos state. Other specific objectives were to:

1. Examine the relationship between education and discrimination against PLWHA.
2. Assess the relationship between gender and HIV-related discrimination
3. Ascertain the role of place of residence in social discrimination directed at the PLWHA
4. Examine the relationship between marital status of PLWHA and vulnerability to discrimination.

Significance of the study

The study has the potential to assist policy makers in the formulation of policies that would minimize the psychological trauma of PLWHA and the protection of their human rights. It would provide critical information for the design of strategies and programmes to mitigate social inequalities in the society and subsequently overcome the effects of discrimination. The strategies and programmes would also help to reduce violence against PLWHA. This empirical research on AIDS-discriminatory practices has the potential to fill important gaps in current knowledge in the areas of theoretical and methodological issues. Furthermore, if social discrimination directed at PLWHA were addressed with the aid of sociological knowledge, it would help to elicit support for families and those concerned with caring and support for those infected.

Finally, the study would provide more avenues for further studies in this area.

Review of relevant studies

Earlier works on discrimination were x-rayed globally before zeroing-in on Nigeria, starting from Europe, USA, the

Asia-Pacific region, Sub-Sahara Africa then to Nigeria. Many studies have revealed that misconceptions about forms of casual social contact were widespread. Marquet *et al.*, (1995) reported a survey of knowledge, attitudes, behaviours and practices conducted in France, *Les Comportements sexuels en France*. They found that 41% of men and 40% of women would refuse to leave their children or grandchildren in the company of an HIV-positive person. While 9% of respondents would agree to the isolation of PLWHA and 10% would not agree to have an AIDS-patient centre next door. Their findings suggest that men are more likely than women to isolate PLWHA. Herek and Capitanio (1999) found that 13% of their respondents believed HIV could be contracted through kissing on the cheek. Misconceptions about other forms of casual social contact was widespread; 50% of the respondents believed it could be contracted from sharing a drinking glass, 41% from public toilet, 54% from coughing and sneezing and 29% from blood donation. Another finding underscored the capacity of discrimination to extend to the economic realm. Around 30% of the surveyed respondents said they would avoid shopping at a neighbourhood grocery known to be owned by a person with AIDS (Herek *et al.*, 2002). About 22% to 30% reported that they would feel somewhat or very uncomfortable having their son or daughter go to school with a child with AIDS or working in an office with a PLWHA.

Ambati *et al.*, (1997) revealed that social reactions to PLWHA had been overwhelmingly negative in India. In another study, Bharat and Aggleton

(1999) showed that social discrimination was prevalent in every sphere of society in the home, the community, the workplace and the health care sector; and widows were particularly vulnerable. The Asia-Pacific Network of People Living with HIV/AIDS (APN+) (2004) documented social discrimination faced by PLWHA in the region using 50 PLWHA from India, Indonesia, Philippines and Thailand via 760 structured in-depth interviews, the findings confirmed observations made in various countries. For example, instances of social discrimination were common and widespread, even in Thailand long noted for her progress in responding to HIV pandemic. The different levels of discrimination experienced in various countries were not remarkable but the experiences between the sexes were significantly different, with women bearing the brunt of AIDS-related discrimination. Women were twice more likely than men to have changed their places of residence due to their HIV+ status. Many widows lived in very destitute conditions with no sustainable source of income even for food. Women were twice as likely as men to have been threatened with physical violence or to have been physically assaulted because of their HIV status. After diagnosis, 14% of the APN+ sample revealed that they were excluded from common household activities such as cooking, sharing food, using eating implements and even sleeping in the same room with others. In addition, women (18%) were more likely than men (11%) to experience discrimination from their families, especially from in-laws.

In Sub-Saharan Africa, Anarfi (1995)

surveyed 141 AIDS patients and 122 relatives of the patients from three areas of Ghana viz Agomanya in the Eastern region with a very high HIV prevalence rate, Tamale in the Northern region with a very low prevalence rate and Accra, the national capital. Using purposive interviews the study revealed that eight wives were taking care of their sick husbands while no husband was taking care of a sick wife. A young woman of 20 years was isolated and abandoned by the whole family except her mother. She was excluded from the use of drinking and eating utensils and from the public toilet in the village. Another patient was isolated in her room and food was passed to her under the door. In all the three areas, cases of abandonment and denial of shelter to the AIDS patient were reported. All the abandoned cases in Tamale were women. Hutchinson *et al.*, (2003) reported that Horizons Project conducted an exploratory phase of a workplace intervention study in South Africa and found that the main manifestations of HIV-related discrimination were social isolation and public ridicule. Participants reported the existence of more discrimination in the general community than the work place.

In Nigeria, recent national studies revealed a high degree of stigma and discrimination against PLWHA (FMOH, 2003; NP and OR/Macro, 2004). Only 24% and 16% of the respondents were willing to share meals with infected persons and buy food from an infected shopkeeper respectively (FMOH, 2003). Adeokun *et al.*, (2006) validated this result when they conducted an HIV surveillance project in four major markets in two cities in Oyo

state (Ogbomoso and Ibadan). Over 1,000 volunteer market agents were recruited for the project in August 2003 to interview market men and women. The baseline data showed that those who would share rooms with PLWHA were only 16% among Ogbomoso respondents and 35% in Ibadan. The national surveys also demonstrated that gender, education and place of residence were associated with discrimination. The 2003 NDHS indicated that only 20% of women compared to 28% of men would buy fresh vegetables from a shopkeeper with AIDS (NP and OR/Macro, 2004). The 2003 National HIV/AIDS and Reproductive Health Survey (NARHS) supported the NDHS results. About 13% of females against 19% of males would buy food from a PLWHA (FMOH, 2003). The results of the 2003 NARHS further revealed that 18.2% of respondents with no formal education compared to 25.8% of respondents with secondary education and 45.4% of those with higher education were willing to share meals with PLWHA (FMOH, 2003). In other words, majority of the respondents with no formal education exhibited discriminatory attributes towards PLWHA. The study also found that 13.5% of those with low education compared to 29.6% of the respondents with higher education were willing to buy food from PLWHA who was a shopkeeper. The 2003 NDHS also revealed that 18.6% respondents with no education would buy fresh vegetables from shopkeepers living with HIV/AIDS while 22.0% of respondents with primary education would do the same. Similarly, 26.9% of respondents with secondary education and 58.1% of

respondents who had higher education would patronize shopkeepers living with HIV/AIDS.

Gap in literature

There is limited empirical evidence on HIV/AIDS-related discrimination in Nigeria. The association between socio-economic status and discrimination in Nigeria has not yet been fully established though national studies have indicated some relationships between certain socio-demographic characteristics and discrimination (FMOH, 2003; NP□ and OR□/Macro, 2004) but did not use rigorous statistical methods to test the relationships. These studies analyzed people's behaviours towards PLWHA without investigating the relationship between socio-economic status and discrimination experienced by PLWHA. Similarly, in other countries where studies have been conducted, most of them focused on perpetrators rather than the targets i.e. the PLWHA. Empirical research on the relationship between socio-economic status and discrimination experienced by PLWHA is very important. Reis *et al.*, (2005), after studying the attitudes and behaviours of health workers towards the PLWHA in Nigeria, recommended that the feelings and experiences of PLWHA should be studied. Furthermore, studies focusing on PLWHA in Nigeria only adopted focus group discussions or in-depth interviews that provided only qualitative data. However, these have limitations since qualitative analysis cannot give precise statistical measurements on the extent and gravity of social discrimination against PLWHA hence, quantitative data are required. To fill this gap in knowledge therefore, focus group discussions (FGDs) and

face-to-face interviews were used to collect both qualitative and quantitative data from the PLWHA and non-infected people. The survey went a step further to examine the relationship between gender, education, place of residence and marital status of PLWHA and discrimination.

In view of the above, the following hypotheses were formulated:

- H₁: The higher the level of education of the non-infected people the lower the level of discriminatory attitudes towards PLWHA.
- H₂: The higher the educational level of PLWHA the lower the level of discrimination against them.
- H₃: Women are more likely to exhibit discriminatory attitudes towards PLWHA than men.
- H₄: Women are more vulnerable to HIV/AIDS-related discrimination than men.
- H₅: Urban dwellers are more likely to accept PLWHA than rural dwellers.
- H₆: Urban PLWHA are less likely than rural PLWHA to be confronted with discrimination.
- H₇: Married PLWHA are more vulnerable to social discrimination than other categories.

Theoretical discourse

Four theoretical expositions germane to the study were examined i.e. theory of spoilt identity, power, fear and cultural perspectives. Theory of spoilt identity by Goffman (1963) advances that anyone who exhibits a gap between what he/she ought to be, "virtual social identity" and what he/she actually is, "actual social identity" (Ritzer, 1996) has spoilt his/her identity and therefore is vulnerable to discrimi-

nation. This socially constructed identification lays the foundation for discrimination against PLWHA. This theory has been criticized by Foucault (1976) and Bourdieu (1979) for focusing solely on individual attributes rather than social processes, especially relations of power. Foucault (1978) uses the concept of power to explicate discrimination. To him, power is linked to knowledge. He observes that through knowledge of sexuality, societies have come to exercise more power over sex. Power and knowledge nexus created a series of binary identifications: the good and the bad, the normal and the deviant, morality and immorality. Through this process, homosexuality came to be criminalized and condemned because it was seen as the very negation of masculinity and equated with an equally marginalized femininity (Altman, 1972). By this construction, homosexuality became a threat in most social relations. This social construct of homosexuality illustrates the extent to which the society uses power to regulate the experience of subjectivity in the wider population. When AIDS was discovered among the homosexuals in the United States of America, it was followed by another epidemic, social discrimination. Foucault opines that stigma and discrimination are deployed by concrete and identifiable social actors seeking to legitimize their own dominant status within the existing structures of social inequality. Fear perspective posits that information about how painful some terminal illnesses are can generate the fear of dying (Rachman, 1990). HIV/AIDS is identified with evil and equated with death. Fear of contagion and death can

provoke discrimination. Desclaux, (2003) espouses that the attribution of a “foreign” origin to HIV infection, the near-universal representation of others as dangerous and the belief that it is a divine punishment for breaking taboos are conducive to discrimination. Due to its links with sex and blood which carry high symbolic charges, HIV/AIDS lends itself to these interpretations, thus legitimizing the rejection and condemnation it generates. Each perspective had some explanatory components therefore an eclectic paradigm was adopted to explain the relationship between SES and discriminatory attitudes. The origin of AIDS which was associated with homosexuality and other high risk groups; social inequalities in the society; myths and misconceptions about HIV/AIDS; fear of contagion and death; all have provoked discrimination against PLWHA.

The schema below presents eight boxes that demonstrate the relationship between socio-economic status and discrimination; the variables relating to the non-infected people are on the left while those of the PLWHA are placed on the right. This conceptual framework adapted a Weberian model of social inequality (Weber, 1978). In every society, there are structural inequalities with divergent vested interests and values presented in Box 1 (Figure 1 below). These structural inequalities in turn lead to status differentials. In this case, the population of the study is dichotomized into – the non-infected people in Box 2 and the persons living with HIV/AIDS (PLWHA) in Box 3 characterised by their socio-economic status and social contexts where discrimination is perpetrated. Such

social contexts include place of residence (i.e. urban or rural area), the family, community, educational sector, hospital/clinic and the workplace. Status differentials result in variations in privileges and opportunities (Boxes 4 and 5). For the non-infected people, they have differentials in privileges and opportunities in accessing factual information about HIV/AIDS (Box 4). Media messages about HIV/AIDS and visible signs of AIDS (Box 3) affect people's cultural values and beliefs which in turn

could affect the way people perceive PLWHA. Erroneous beliefs and lack of adequate knowledge of HIV/AIDS in Box 4 could lead to misperceptions of the pandemic and myths about how the virus is transmitted or prevented. Differentials in privileges and opportunities for the PLWHA manifest in their access to treatment, love, care and support from their families, communities, hospitals, workplace and educational sector (see Box 5).

CONCEPTUAL FRAMEWORK

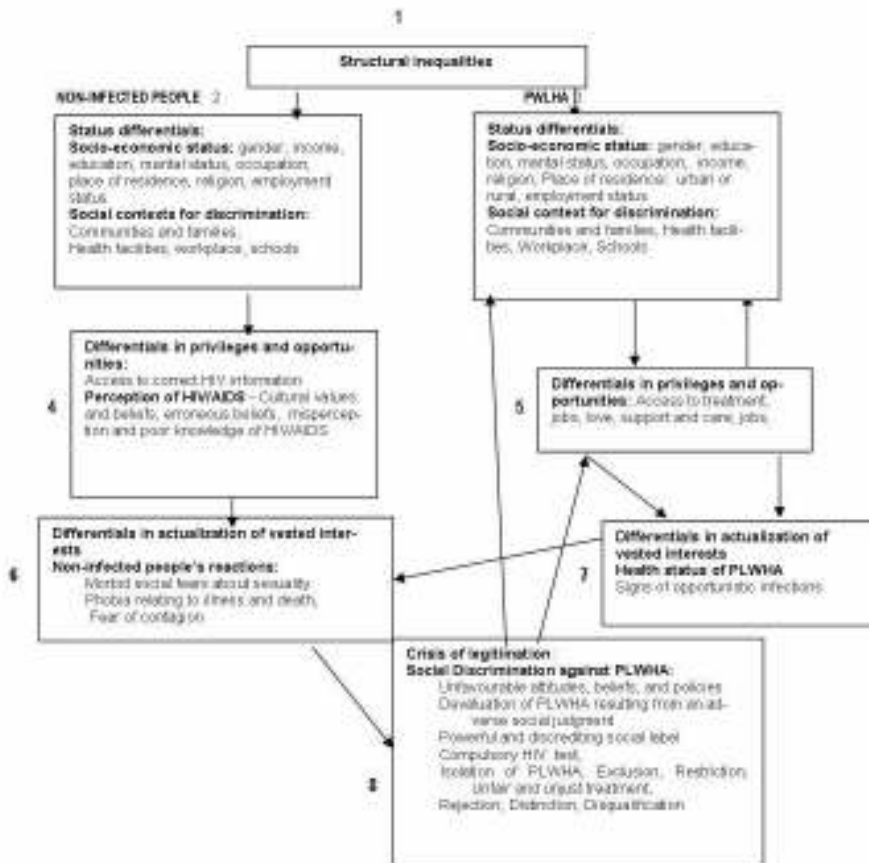


Figure 1 □ Conceptualization of the relationship between socio-economic status and discrimination

Differentials in privileges and opportunities culminate in the actualization of vested interests. In Box 6, differentials in the actualization of vested interests for the non-infected people are depicted by their reactions to the information they receive or strategies they adopt to escape being infected. Projection of the fatality of the disease induces fears into people. People then develop fears about sexuality, illness, contagion and death. For the PLWHA, their vested interest is to get cured and be restored to the status of good health (Box 7). Health status is measured by manifestations of the physical signs of AIDS which are repulsive e.g. extreme wasting (excessive emaciation), skin rashes, diarrhoea, periodic fever, persistent cough and swelling of lymph nodes. These clinical manifestations also induce fears among the non-infected people (Box 6). The fears expressed by the non-infected people may lead to social discrimination which can be regarded as crisis of legitimation (Box 8). Legitimation in the sense that non-infected people have obligations to provide treatment, support, love and care for the PLWHA as family members, community members, employers and colleagues, health care providers and teachers and schoolmates. Legitimation crisis, therefore, will mean the adoption of strategies by the non-infected people to exclude PLWHA from themselves, preventing the PLWHA from having access to valued resources. This in turn affects the PLWHA (Box 3) who are characterized by their socio-economic status, privileges and opportunities available to them (Box 5) and health status (Box 7). HIV-related discrimination or crisis of

legitimation is manifested in unfavourable attitudes, beliefs, laws, policies, and administrative procedures, which are often justified as necessary to protect the "general population" (Richard *et al.*, 2002).

The study settings

The study was conducted in two local government areas (LGAs) of Lagos State namely Epe and Lagos Mainland. Epe LGA, a riverine area, had a population of 101,464 with 95 localities by the time of the 1991 census (NP, 1997) which has increased to 181, 409 by the 2006 census (Federal Government Printer [FGP], 2007). It includes a number of isolated villages or settlements predominantly occupied by the Ijebus, a Yoruba sub-ethnic group. The people are predominantly farmers, polygynous, and Muslims. The LGA was chosen because of her high HIV prevalence rate (6.9%) in 1999 (NIMR, 2000) although 2003 estimate was 4.2% (FMOH, 2004)). Factors identified as driving the HIV infection include poverty, promiscuity, low economic status of women, early marriages that lead to early separation, polygyny, changing spouses, skin scarification (FHI, 2001) and fishing. The LGA has 17 health facilities (COMPASS, 2005). Lagos Mainland LGA, on the other hand, had 17 localities with a population of 273,079 by the 1991 census (NP, 1997) and has risen to 317,720 as at March 2006 (FGP, 2007). Lagos Mainland LGA was selected because of her urbanized status and the presence of Nigeria Institute of Medical Research, Yaba, Lagos, one of the popular centres for the National Antiretroviral Therapy Programme in Nigeria that would assist in

accessing the PLWHA. The LGA stands out because of many features such as the Nigerian Railway headquarters at Iddo, tertiary institutions, military bases and military referral hospitals, motor parks for luxurious buses that harbour long-distance drivers, travellers, students, urchins, area boys, *alaye boys*, drug users, female sex workers and youths. Other predisposing activities to the risk of HIV/AIDS include ear, nose and eyelid piercing, nail cutting and circumcision with unsterilized instruments. Situated in the LGA, are 10 health facilities (OMPASS, 2005). Her HIV prevalence rate is not stated but it is estimated to fall within the range in Lagos metropolis i.e. between 1.7% in Lagos Island LGA and 7.7% in Ikeja LGA, the state capital (FMOH, 2004).

Research designs and methods

A combination of research designs was adopted viz cross-sectional, correlational and comparative research designs. Correlational design demonstrated co-variation between the dependent and independent variables through logistic regression analysis while comparative method compared data between and within the two LGAs and the two sub populations under study.

Methodology

Operationalization of key terms

HIV-related discrimination: HIV/AIDS-related discrimination is defined as any measure entailing any arbitrary distinction among persons depending on their confirmed or suspected HIV sero-status or state of health (UNAIDS, 1996). In this study, it was described as

negative attitudes, beliefs, attributes, behaviours, activities and experiences that occurred in social interactions. Key variables utilized as measures of social discrimination were unwillingness to share the same toilets with PLWHA and friends not visiting PLWHA at home. Others are rejection by family, abandonment by family, eviction by family, sharing eating utensils with others, people still buying and selling to PLWHA, willingness to share eating utensils with PLWHA, still buy goods from PLWHA and willingness to vote for a person who is known to be living with HIV and who aspires to occupy a political office.

Socio-economic status: This is often conceptualized as a fundamental factor of inequalities. It refers to the position of an individual on a socio-economic scale that measures such factors as education, income, type of occupation; place of residence, and in some populations, ethnicity and religion (Mosby, 2008). It is correlated with wealth and income but can also be derived from achieved characteristics such as educational attainment and occupational prestige, and from ascribed characteristics such as race, ethnicity, gender and family pedigree. Hence, it is a multi-dimensional concept. It is often used as a means of predicting behavior (Hirsch, et al., 2002). It was operationally defined in this study as: education, place of residence, employment status, income, gender, age, ethnicity, marital status, type of dwellings and type of toilet facilities.

Operationalization of key variables

From the above definitions, two types of variables were used in the study: the dependent and independent variables. For the non-infected sample, the inde-

pendent variables were: Educational level of the respondents, Place of residence, Gender and Income. Similar independent variables were used for the PLWHA including marital status. The dependent variables were: Unwillingness to share toilets with the PLWHA within the family and the community and for the PLWHA, whether their friends still visited them within the family and the community. Unwillingness to share same toilets was adopted as dependent variable for the non-infected respondents because it was about the most frequently reported discriminatory attitude towards the PLWHA within the community. Also toilets cannot constitute a medium for the spread of HIV infection not even in the case of any other STIs. Anyone who refuses to use the same toilets with a PLWHA is exhibiting the highest level of discriminatory attitude. Social visits by friends were selected as a measure of social discrimination against PLWHA because it was the commonest act of isolation one could extend to PLWHA.

Gender – This connotes cultural, social and psychological differences between males and females while sex refers to physical differences of the body. In this study, gender denotes (1) male or (2) female.

Income – Refers to the total amount of money collected monthly from respondents' main occupation. Among the PLWHA respondents, it was categorized as (1) no income, (2) less than N10,000, (3) N10,001 – N20,000 and (4) N20,001 and above. Among the non-infected respondents, it was categorized as (1) No income and less than N10,000, (2) N10,001 – N20,000, (3) N20,001 – N30,000, (4) N30,001 –

N40,000 and (5) N40,001 and above. Very few respondents were found in the last categories of the two samples hence the ranges were designed for meaningful analyses.

Level of education – This refers to the highest level of formal education acquired. It was operationalized as (1) no formal education or none, (2) primary education, (3) secondary education and (4) tertiary education for the non-infected sample. Three categories were designed for the PLWHA. No Formal and primary education were merged to form the first category then secondary education as second one and tertiary education as the third category.

Marital status of PLWHA – This was operationalized as (1) Unmarried; (2) married; (3) Divorced/separated/widowed. The third category was lumped together in order to obtain meaningful and reliable analysis. They refer to those who were once in a marital union.

Place of residence – It means the location where the study was conducted and where the respondents lived at the time of study. It was measured by Epe LGA and Lagos Mainland LGA. Epe LGA was described as a relatively rural LGA because some areas like Epe town were semi-urban. On the contrary, Lagos Mainland LGA was described as highly urbanized because majority of the localities were essentially urban.

Social visits by friends –The PLWHA respondents were asked if their friends were still visiting them. The responses were 'none', 'some' and 'all'. However, 'none' and 'some' responses were merged as discrimination making the response a dichoto-

mous outcome variable. If no friend was visiting or some friends had stopped visiting the PLWHA, discrimination had occurred.

Unwillingness to share same toilets –The discrimination question was ‘would you be willing to share the same toilets with PLWHA?’ The response was dichotomous: ‘Yes’ which denoted willingness or non-discriminatory attitude or behaviour and ‘No’ which was unwillingness or discrimination.

Data collection: The study populations were “non-infected” people and people living with HIV/AIDS (PLWHA) i.e. any body that has been diagnosed HIV positive. Non infectivity of those regarded as “non-infected” was based on their judgment. While some of them had gone for the tests and tested negative others had not even gone for such tests. Multistage and systematic sampling techniques were used in 40 enumeration areas (25 in Lagos Mainland and 15 in Epe) to obtain a sample of 1,611 non-infected respondents which was proportionally computed based on the 1991 census ratios of urban to rural dwellers (93.4% urban to 6.7% rural) and males to females aged 18 years and above (54% of men to 46% of women) in Lagos State. Hence, there were 870 men (783 urban and 87 rural) and 741 women (667 urban and 74 rural) resulting in 161 respondents from Epe LGA and 1,450 from Lagos Mainland LGA that were surveyed. The 1991 census data were used because the current 2006 census figures were not available at the date of the study. The sample size of PLWHA - 100 was determined purposely. The sensitivity of HIV/AIDS and the difficulty of identifying PLWHA informed the number. However, a pur-

posive sample of 80 PLWHA was eventually interviewed. Thirty PLWHA respondents from Epe LGA were investigated instead of fifty. Among these thirty, twenty were identified in Epe General Hospital (nineteen women and one man). The remaining ten (four men and six women) who lived in Epe LGA at the time of the study were identified at NIMR, Yaba, when they came for treatment. The Medical Director of Epe General Hospital reported that when people tested positive to HIV and were referred to NIMR for confirmatory tests or advised to get back to join others in the support group, they absconded from the hospital. They lost track of them. A method of snowball was also utilised to identify PLWHA. An NGO, Health Matters Incorporation, based in Ebute Metta, assisted in identifying one PLWHA who was resident in Lagos Mainland LGA and who identified about two PLWHA who in turn invited others and so on. Eight of the Lagos Mainland LGA respondents were so identified and interviewed in researcher’s office. Data were collected from September 2005 to April 2006 through interviews and focus group discussions. Two modules of interview schedules complemented with two FGD guides were developed. Items in module 1 for non-infected sample:

Avoidant behaviours: Respondents were asked to predict their own behaviours in different situations involving potential contact with a PLWHA. The questions were: Whether they would: Be willing to take care of a close friend or relative who developed AIDS; Buy goods from a neighbour trader who is living with AIDS; Share toilets,

cutlery, rooms with a PLWHA; Marry a PLWHA; and vote for a PLWHA into a political office. For each situation, respondents were offered two response alternatives that represented an avoidant response e.g. Yes and No.

Items in module 2 for PLWHA sample: The PLWHA were asked whether they had been: Rejected by family members; Abandoned; Kicked out of their homes by family members; Still used the same eating, cooking utensils and toilet facilities with family members; Isolated in separate rooms; Kicked out by landlords; Changed places of residence; If they had changed, they should provide reasons for the changes; Whether their friends still visited them; Still welcome in friends' homes and for traders and business people, if people who knew about their HIV+ status still transacted business with them.

Ethical considerations: For ethical appropriateness, the research protocol was assessed and approved by the Institutional Review Board (IRB) of the Nigerian Institute of Medical Research (NIMR), Yaba, Lagos and respondents' oral informed consent was obtained. For the PLWHA respondents, only those who obliged to be interviewed and gave their full consent were surveyed. They were not coerced in any way and were reassured that the principle of confidentiality would be applied as regards to the information given. For anonymity, they were interviewed in NIMR staff's offices and also in the researcher's office. For the non-infected respondents, those who refused to grant us audience were replaced by respondents in the same selected houses whose characteristics

matched those of the selected respondents.

Data analysis: Data were analyzed using Statistical Package for Social Sciences (SPSS) and multivariate logistic regression analysis. Multivariate logistic regression was applied in testing the research hypotheses. In SPSS operation, if the significance value is small enough (conventionally must be less than 0.05), the null hypothesis is rejected while the research hypothesis is accepted. Furthermore, multicollinearity was assessed to ensure that no independent or predictor variables were dependent on one another as some of them could correlate. The results showed no collinearity within the data and hence all the predictors were included in the logistic regression models without much bias.

Limitations of the study

Every research project experiences one form of fieldwork problem or the other particularly those that are as sensitive as this study. We encountered many challenges on the field but only the major ones are discussed below:

1. Some places could not be accessed in Epe LGA due to logistic problems and obsolete 1991 census EA maps. The 2006 census EA maps were not available at the time of the study.
2. Identifying PLWHA in Epe was also problematic. Only 30 PLWHA respondents were studied in Epe LGA instead of 50. Out of the twenty PLWHA identified by the health facility in Epe, nineteen were females, while only one was male (see the explanation in the subsection of data collection above). This

made it impossible to conduct focus group discussion (FGD) for men living with HIV/AIDS in Epe LGA.

3. There was a high level of denial of the existence of HIV infection. Some people shied away from the issue and refused to be interviewed (see sub-section of ethical consideration above on how the problem was resolved.
4. About 18.8% did not divulge information on their incomes.
5. HIV status of those regarded as "non-infected" was based on respondents' judgment. While some of them had known their status others had not even gone for the tests.

However, with the resilience of the researchers, these problems were resolved as they arose.

Results of the study

Socio-economic profile of the respondents

In Table 1 below is the socio-economic profile of the respondents: non-infected ones on the left (1A) and those of the PLWHA on the right (1B). Among the non-infected sample, a total of 873 (54.2%) men and 738 (45.8%) women were studied. Their ages ranged from 18 to 82 years with the mean age of 29.4 years. There was a preponderance of never married people among the respondents representing 63.1%. About one-third were married. Majority of the respondents were highly educated. Those who had obtained tertiary education represented 47.1% while those with secondary education were 45.1. More than one-third (37.9%) were unemployed while 30.2% were self employed. Almost two-thirds of non-infected respondents earned less

than N20,000 per month with a mean income of N14,555.94. About 18.8% did not offer any information about their incomes.

Among the 80 PLWHA surveyed, 30 (37.5%) were men while 50 (62.5%) were women (Table 1, part (B) below). The data showed that more women than men acceded to the interviews. It was the intent of this study to investigate equal number of males and females but as a result of the problems stated in section of the research design and methods above, 5 (16.7%) males and 25 (83.3%) females who lived in Epe LGA were investigated while 25 of each sex were studied in Lagos Mainland LGA (Table 1, part B). Of the 78 people living with HIV/AIDS (PLWHA) who obliged to provide their ages, more than two-fifths were found in the age group 30 – 39 years and the mean age was 36.26 years. A significant proportion (27.5%) of the PLWHA was divorced, separated and widowed. This proportion is higher than the proportion (3.8%) of the non-infected respondents who were in similar status (Table 1, part (B) below). About 40% were married and 32.5% were single. About 43.8% had secondary education and 36.3% had post secondary education. Those who had primary and no formal education were 20%. Thirty-four of the total PLWHA respondents, representing 42.4%, were unemployed and 57.6% were employed. The average income of the PLWHA was N9,198.55. The proportion (11.3%) who received above-N20,001 monthly was lower than that of the non-infected respondents (16.3%) who earned about the same amount. This could be attributed to loss of livelihood on the grounds of HIV status. Most of the respondents therefore belong to the lower income group.

Table 1 (A) Distribution of socio-economic profile of Non-infected respondents
(B) Distribution of socio-economic profile of PLWHA respondents

A			B		
NON-INFECTED RESPONDENTS			PLWHA RESPONDENTS		
CHARACTERISTICS	N = 1,611	%	CHARACTERISTICS	N = 80	%
Gender			Gender		
Male	873	54.2	Male	30	37.5
Female	738	45.8	Female	50	62.5
Age groups			Age groups		
1. 18-19	141	9.0	1. 18 – 19	2	2.6
2. 20-29	830	52.8	2. 20 – 29	16	20.5
3. 30-39	373	23.7	3. 30 – 39	34	43.6
4. 40-49	145	9.2	4. 40 – 49	22	28.2
5. 50-59	58	3.7	5. 50 and above	4	5.1
6. 60-100	24	1.5	Missing value	2	2.0
Missing value	40	2.5			
Marital status			Marital status		
1. Never married (single)	1016	63.1	1. Never married	26	32.5
2. Married	531	33.0	2. Married	32	40.0
3. Divorced/separated/	62	3.8	3. Divorced/separated/	22	27.5
Missing value	2	0.1	-	-	-
Level of education			Level of education		
0 None	24	1.5	0 None/ Primary	16	20.0
1. Primary	96	6.0	1 Secondary	35	43.8
2. Secondary	726	45.1	2 Tertiary	29	36.3
3. Tertiary	759	47.1			
Missing value	6	0.4			
Employment status			Employment status		
1. Unemployed	611	37.9	1 Unemployed	34	42.4
2. Self- employed	487	30.2	2 Self- employed	33	41.3
3. Paid employment	474	29.4	3 Paid employment	13	16.3
Missing value	39	2.4			
Monthly total income			Monthly total income		
1.No income/Less than	804	49.9	1 No income	35	42.4
2. N10,001 – N20,000	241	15.0	2 Less than 10,000	19	23.8
3. N20,001 – N30,000	90	5.6	3 N10,001 – 20,000	7	8.8
4. N30,001 – N40,000	53	3.3	4 N20,001 and above	9	11.3
5. N40,001 +	120	7.4	Missing value	10	13.3
Missing value	303	18.8			

Forms of non-infected respondents' discriminatory attitudes towards PLWHA

Non-infected respondents' attitudes towards the PLWHA in the family and community were examined in this section. More respondents (43.0%) would not want to use the same toilets with PLWHA (Table 2 below). Similarly, 60.7% of the respondents would not share cutlery with persons with HIV/AIDS. These negative attitudes and behaviours observed in this study extend to economic and political spheres. Around 38.9% of the respondents would decline to purchase goods from PLWHA. This may be attributed to the misconceptions about HIV/AIDS and ignorance of its modes of transmission. There are no distinctions between the responses of the interviewed respondents and the FGD respondents. For example, while some of the male FGD participants from Lagos Mainland LGA would buy non-perishable items from the PLWHA others would not patronize them irrespective of the type of items sold. One of the discussants said: *"I can't buy anything from the person because the person has HIV"*. Another said: *"To be candid, if the person is selling edible food, I would not buy, but I can buy tinned or canned products but things that are exposed like gari etc I can't buy"*. One of the respondents exclaimed in Pidgin English: *"No, I fit catch the thing from food"*. Female discussants were resolute in their determination to boycott PLWHA irrespective of what they sell. One participant exclaimed: *"WHAT? I won't go near the person no matter what he's selling"; 'even if they are selling "m" (children)'*. One respondent from Epe LGA

explained her decision this way:

Some people are very wicked; it is not that if one buys the food, one would contract HIV from there but some people would infuse their blood fluids into the stuff with the intention of spreading the virus and infecting people.

This respondent perceived that HIV could be transmitted through blood stained food. These findings support the results of Herek et al., (2002) which revealed that 30% of the surveyed respondents said they would avoid shopping at a neighbourhood grocery known to be owned by a person with AIDS. Another possible explanation to the negative attitudes of the respondents is phobia about contagion. They therefore, considered any involvement with PLWHA a risky venture. *"It's too risky; Fear of infection from wicked PLWHA"*. The proportion of the respondents who opposed this view and would not mind purchasing from the PLWHA was 61.1%. They claimed that they would patronize the PLWHA out of love, and because they knew that HIV infection could be contracted only through blood contact. Moreover, they also knew that the PLWHA needed financial assistance. On the political sphere, it was observed that discrimination could affect PLWHA's citizenship rights. If a PLWHA were to contest for any political position, 37.8% of the respondents would not cast their votes for such a person because they believed that his life span had been shortened by the disease and that he would infect others. They explained that it was risky exposing the general population to such a person. Some other views are highlighted here:

“No, politicians are promiscuous; he could infect other people with it. It is too risky, the person may spread it”. On the other hand, 62.2% would support the PLWHA. Some of these respondents

opined that HIV status had no association with performance and secondly, the PLWHA could formulate policies that could improve the lives of the other PLWHA.

Table 2 Distribution of forms of non-infected respondents' discriminatory attitudes towards PLWHA

Forms of non-infected respondent's discriminatory attitudes	Total	
	N	%
Will you share same toilets with PLWHA?		
1. Yes	909	57.0
2. No	686	43.0
Total	1595	100.0
Will you share eating utensils with PLWHA?		
1. Yes	626	39.3
2. No	968	60.7
Total	1594	100.0
Continue to buy from PLWHA		
1. Yes	963	61.1
2. No	614	38.9
Total	1577	100.0
If you know a person who is HIV+ and who aspires to occupy a political office will you vote for him/her?		
1. Yes	988	62.2
2. No	601	37.8
Total	1589	100.0

Forms of discrimination experienced by PLWHA

Knowledge of HIV status of PLWHA by their family and community members may influence their attitudes and behaviours towards the PLWHA. The study, therefore, attempted to find out whether the PLWHA disclosed their status to the members of their families and communities and if they did, to examine their initial reactions. It was revealed that six respondents did not tell anyone for fear of discrimination, rejection, abandonment or ridicule

while another six respondents informed only their friends. Many of the PLWHA (22.5%) disclosed their sero-positive status to their spouses, mothers (13.8%) and a group of relations (13.8%). Their relations' initial reactions to the news of HIV-positive status ranged from acceptance, shock, disbelief, indifference, sympathy, empathy to rage. Some of the respondents who were initially accepted by their relations later experienced rejection and abandonment.

Table 3 Distribution of forms of discrimination experienced by the PLWHA respondents within the family and community

Forms of discrimination	N	%
Ever been rejected by family?		
Yes	11	15.9
No	58	84.1
Total	69	100.0
Ever been abandoned by family?		
Yes	9	13.0
No	60	87.0
Total	69	100.0
Ever been evicted by family?		
Yes	5	7.4
No	63	92.6
Total	68	100.0
Still shared eating utensils with others?		
Yes	60	83.3
No	12	16.7
Total	72	100.0
Friends still visited		
None	4	5.8
Some	29	42.0
All	36	52.2
Total	69	100.0
For traders: People still buy from and sell to you		
Yes	13	72.2
No	5	27.8
Total	18	100.0

The PLWHA were asked whether they had ever been rejected, abandoned or excluded from social activities. Table 3 above demonstrates that 15.0% of the respondents reported they were rejected by their families. Similarly, 13.0% were abandoned by their families. A 36-year-old male respondent was rejected and abandoned by the wife. At the time of this study they were still separated. Another male FGD

respondent in Lagos Mainland LGA was abandoned by his wife when she learnt of his sero-positive status. His wife abandoned him and fled with their children.

Hmm, mine is a long story but I'd make it short. My land lady was the one that referred me to the hospital where I was diagnosed because I was sick. When the results came out and I was posi-

tive; I told her. I also told her that I was told to bring my wife for testing but that I didn't know how to tell her. She now suggested we should tell her it was typhoid test. When I told my wife, she insisted that it had to be at our usual family clinic instead of the landlady's. After much dragging, my wife agreed with us. It was when she got to the hospital ward that the nurse told her it was HIV/AIDS test. My wife immediately started crying; the test results came out and she was negative. After that, she packed her load and my children and ran to the village where she told everybody that I had AIDS and that if she should die, they should know what killed her. Her father being an illiterate supported her. I was devastated with her departure, betrayal and absence of my kids. I wasn't eating well because I couldn't cook. I don't know how to cook so I started wasting. To cut the long story short. I told my pastor and employers. They helped me and I started getting better. I was summoned to the village and when I got there I was confronted with my wife's accusations. I asked them if I looked like someone that had AIDS and they said no. I now told them that it was malaria and typhoid that my wife said was AIDS. Finally, my wife returned home after they'd spoken to her and she is still negative. No problems since then.

A female FGD participant from Lagos Mainland LGA had a similar experience when her fiancé was informed about

her HIV+ status. She recounted her experience thus:

My problem is this when I went to the hospital; they told me to tell my fiancé about my status. I told them if I tell him he's going to run away, they told me not to worry that they would know how to table the matter to him. They told him and he ran away. I was in the hospital for about 7 days, he keeps calling people to come and see me but he would not come and even when I was discharged I called him to come and pick me instead he said I should remain in the hospital for some days. I believe he told his parents and by the time I got home, he was not sleeping at home anymore. He was not coming home and when he comes, he comes with somebody and they will quickly pack his things and go. He could not even look at me. I felt rejected and bad. Since then I don't think I can love anyone again except God because I felt maybe that's the end of the world but by the time I came here I met various people here.

One 22 year-old student with HIV/AIDS reported that she was rejected by other members of her family, except her mother. Another female PLWHA, 28-year-old Igbo woman shared her test result with her spouse because she trusted him. Of course, he did not betray her trust in him initially because he was indifferent. However, he later abandoned her as he thought she would develop all the repulsive signs of AIDS and die eventually (she explained). She recounted her ordeal:

When I told him he did not say

anything. Later he rejected and abandoned me. I left the house to live with my sister who has been very supportive. Now he wants to come back because I have not yet died and because I am not lean or sick or have rashes.

All the PLWHA evicted from home by their families were from Lagos Mainland LGA only. A 40-year-old married woman who claimed to have been infected by her husband. "I got it through my husband" was ejected from her husband's house and was living with her son at the time of the study. "I live alone now with my son". A 34-year-old divorcee testified that she was rejected and evicted from the family house after the demise of her father who had been supportive:

My husband has divorced me, my family rejected me. It was only my father who supported me. As soon as my father died last year (2004) my brothers evicted me from our family house. The case is in court now. I will fight them until I get my own share of the house.

These three evidences demonstrated manifestations of power, dominance and oppression within the family and community. It is significant to note that 16.7% of the respondents had separate personal cutlery. On social visits, three respondents (5.8%) reported that all their friends kept away from them (Table 3 above). It is worthy to note that 42.0% of the respondents stated that some of their friends were not visiting them. These demonstrated that 47.8% had experienced total or partial discrimination from friends in the form of social distance. It signifies a high level of social discrimination in the commu-

nity. The discrimination extended to commercial activities as out of 18 respondents who were traders, 27.8% of them reported that people were not buying or selling commodities to them (see Table 3). To buttress this point, a female trader and an FGD participant in Epe LGA reported that people in her community ridiculed and isolated her. They avoided buying goods from her:

When I discovered my status, I was troubled and disturbed, but was assured by my sister that all will be well. However, people in the community plagued me. They avoid having any form of contact with me. I don't have money or work to feed or take care of myself.

Tests of associations between socio-economic status of the respondents and discrimination

To test the associations between socio-economic status of the respondents and discrimination, the research hypotheses were tested by the use of models of multivariate logistic regression analysis.

Tests of hypotheses

H_0 : *The higher the level of education of the non-infected people the lower the level of discriminatory attitudes towards PLWHA.*

Part A of Table 4 below demonstrated that the odds ratio (OR) value for the respondents without formal education was 4.497. This implied that respondents with no formal education were four times more likely to discrimination against PLWHA than those with tertiary education which was held constant as a reference category (R□). This OR of 4.497 declined to 2.301 for those who

had acquired primary education. It further declined to 1.752 for respondents with secondary education, i.e. the higher the level of education the lower the level of discrimination. The ORs of the predictors (no education and primary) were significant ($p < 0.05$ and $p < 0.01$ respectively) while that of secondary education category was highly significant ($p < 0.001$) as demonstrated in the same Table 4 below. Respondents with primary education were twice more likely than those with tertiary education to avoid PLWHA. Similarly, those with secondary education were more likely than higher educated people to isolate PLWHA. In conclusion therefore, there was a significant inverse relationship between the two variables; the higher the level of education, the lower the likelihood to discriminate against PLWHA. The research hypothesis was upheld to be true. There is a significant relationship between educational level of non-infected people and their attitudes towards the PLWHA.

H₂: The higher the educational level of PLWHA the lower the level of discrimination against them.

In part B of the Table 4 below, there was no significant relationship between level of education of PLWHA and discrimination. The null hypothesis was therefore accepted. The implication here is that all PLWHA are affected irrespective of their educational qualification. Their educational level does not insulate them from discrimination.

H₃: Women are more likely to exhibit discriminatory attitudes towards PLWHA than men.

Table 4 further indicates that 46.6% of women in non-infected sample com-

pared with 40.0% of the men were disinclined to share the same toilets with PLWHA. This indicates that women are more likely than men. The χ^2 value of 7.22 was significant ($p < 0.01$). The predictive power of gender was significant ($p < 0.05$) in part A, Table 4 above. The OR of male gender (0.751) is less than OR (1.000) of the female gender (reference category, R \square). Gender and discriminatory attitudes are, therefore, related: women are more likely than men to exclude PLWHA from using the common toilets with them. The research hypothesis was upheld that women were more discriminatory than men.

H₄: Women are more vulnerable to HIV/AIDS-related discrimination than men.

Among the PLWHA in part B of Table 4, the finding indicated that OR of 0.000 for the women was significant. It shows that gender contributes significantly to the model but it is less than OR of the men (1.000) indicating that men are more likely than women to be discriminated against, surprising as it may be. In this case the research hypothesis was refuted.

H₅: Urban dwellers are more likely to accept PLWHA than rural dwellers.

The Logistic regression for Epe LGA respondents was highly significant ($p < 0.001$) with OR of 3.699 and a small SE (0.245). Epe LGA respondents were three times more likely than respondents from Lagos Mainland LGA to isolate PLWHA. The research hypothesis was, therefore, accepted. Urban dwellers are more likely to accept PLWHA than rural dwellers.

Table 4 (A) Logistic regression models predicting the probability of exhibiting discriminatory attitudes towards the PLWHA by whether they would share same toilets with PLWHA

A			
NON-INFECTED RESPONDENTS			
Respondents' characteristics	Regression coefficient	Std Error (S.E)	Odds ratios
Sex			
Male	-0.286	0.126	0.751*
Female (Reference category R ₀)	0.000		1.000
Place of residence			
Epe	1.308	0.245	3.699***
Lagos Mainland (R ₀)	0.000		1.000
Age			
18-29	0.523	0.351	1.687
30-49	0.115	0.313	1.122
50-100 (R ₀)	0.000		1.000
Marital status			
Single	-0.312	0.372	0.732
Married	0.154	0.339	1.166
Divorced/separated/ Widowed (R ₀)	0.000		1.000
Level of education			
None	1.504	0.634	4.497*
Primary	0.833	0.317	2.301**
Secondary	0.561	0.138	1.752***
Tertiary (R ₀)	0.000		1.000
Employment status			
Unemployed	-0.289	0.204	0.749
Self employed	0.128	0.170	1.136
Paid employment (R ₀)	0.000		1.000
Income			
No income/Less than N10,000	0.729	0.303	2.074*
N10,001 – N20,000	0.473	0.274	1.605
20,001 – N30,000	0.340	0.327	1.405
30,001 – N40,000	0.265	0.375	1.303
N40,001 + (R ₀)	0.000		1.000
Ethnic groups			
Hausa	-0.363	0.567	0.696
Igbo	0.056	0.200	1.057

Yoruba	0.082	0.179	1.086
Others (R ²)	0.000		1.000
Constant	-1.715	0.794	0.180

(A) For non-infected sample - 2 Log likelihood = 1586.344; Model $\chi^2 = 113.788$; Selected cases = 1244, *p<0.05; **p<0.01; ***p<0.001

Table 4 (B) Logistic regression model predicting the likelihood of experiencing social discrimination within the families/communities by whether their friends still visited them

B			
PLWHA RESPONDENTS			
Respondents' characteristics	Regression coefficient	Std Error (S.E)	Odds ratios
Sex			
Female	-11.877	4.268	0.000*
Male (R ²)	0.000		1.000
Place of residence			
Epe	8.468	3.480	4757.889*
Lagos Mainland(R ²)	0.000		1.000
Age			
18-29	0.628	1.782	1.874
30-39	-2.626	1.592	0.072
40+ (R ²)	0.000		1.000
Marital status			
Never married	-5.634	2.371	0.004**
Married	-2.258	1.473	0.105
Separated/divorced/widowed (R ²)	0.000		1.000
Level of education			
None/primary	-3.074	2.199	0.046
Secondary	-1.812	1.748	0.163
Tertiary (R ²)	0.000		1.000
Employment status			
Unemployed	1.885	3.575	6.584
Self employed	7.696	3.210	2200.324
Paid employment (R ²)	0.000		1.000
Income			
No income	-	-	-
Less than N10,000	-5.248	3.452	0.005**
N10,001 – N20,000	-1.828	3.278	0.161

N20,001 + (R□)	0.000		1.000
Ethnicity			
Hausa	-5.824	4.344	0.003**
Igbo	-4.415	2.718	0.012*
Yoruba	2.822	1.807	16.818
Others (R□)	0.000		1.000
□onstant	18.312	7.893	9E+007

(B) For PLWHA sample -2 Log likelihood = 32.752; Model $\chi^2 = 45.405$; Number of cases = 57; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

H₆: Urban PLWHA are less likely than rural PLWHA to be confronted with discrimination.

The multivariate logistic regression results in part B of Table 4 above showed that place of residence contributed significantly to this form of discrimination. The OR (4,757.889) for the Epe LGA was significant ($p < 0.05$). The research hypothesis was accepted. It depicts that Epe LGA PLWHA are more vulnerable to alienation by their friends than the PLWHA from Lagos Mainland LGA.

H₇: Married PLWHA are more vulnerable to social discrimination than other categories.

Marital status of the PLWHA was found to influence discrimination by multivariate logistic regression analysis. The OR of never married PLWHA was 0.004 ($p < 0.05$). This OR was lower than the OR (1.000) of the reference category (divorced/separated/widowed) PLWHA respondents (see part B, Table 4 above). This difference implies that unmarried PLWHA are less likely to experience discrimination than the divorced/separated/widowed PLWHA. Divorced, separated and widowed PLWHA were therefore, more likely than unmarried PLWHA to suffer discrimination.

Discussion of the findings and their implications

The study found that there was a significant inverse relationship between education and discriminatory attitudes of the non-infected respondents. This is probably because educated people are likely to be more enlightened, have more access to correct information about HIV/AIDS and are more likely to reside in urban centres than uneducated and non-literate people. They may be tolerant of PLWHA. It validates earlier studies (FMOH, 2003; NP□ and OR□/Macro, 2004).

Among the non-infected respondents, women were found to be more likely than men to exhibit discriminatory attitudes. The finding is consistent with earlier studies where men showed less discriminatory attitudes than women (FMOH, 2003; NP□ and OR□/Macro, 2004) but refutes that of Marquet *et al.*, (1995) which revealed that more men than women discriminated against PLWHA. In spite of the natural caring role of women, they tend to display more discriminatory attitudes towards the PLWHA than men. It is also evident from the focus group discussions. This may be attributed to the anatomy of the female reproductive

organs via which the women believe they could contact sexually transmitted infections easily from toilets seats, therefore, they will not like to share toilets with PLWHA. In the main thesis from where this paper was extracted, many non-infected respondents perceived that HIV infection could be contracted from toilet seats. The female respondents therefore require an intensive HIV education particularly about its modes of transmission.

Male PLWHA were found to be more vulnerable to discrimination than female ones. This is surprising because the general assumption is that gender-based discrimination would exacerbate HIV-related discrimination against female PLWHA. This result refutes the findings of earlier studies such as those of Herek *et al.*, (2002) and APN+ (2004) which concluded that women were more vulnerable to discrimination than men. Perhaps, this is an indication that men's issues have been neglected for long. Men may be blamed for the transmission because of assumptions about their preference or need for multiple sexual partners. The results in the main thesis showed that the non-infected respondents associated HIV/AIDS with sexual promiscuity. This may explain men's vulnerability to more discrimination. This finding needs to be explored further. In spite of the lack of statistical significance, sociologically, women are likely to be more susceptible to discrimination because of their relative powerlessness compared to men and in the light of Foucault's power theory.

The study revealed that non-infected respondents from Epe LGA were more likely than Lagos Mainland

LGA respondents to isolate PLWHA. This may be attributed to the literacy level which is likely to be lower in rural areas than in urban centres. Secondly, there could be more enlightened population and more publicity about the awareness of HIV/AIDS in urban centres than in rural areas. Studies have shown that discrimination is pervasive in rural communities (FMOH, 2003; NP and OR/Macro, 2004). Closely knit communities leave little room for privacy. This discriminatory attitude is attributable to lack of adequate knowledge of HIV infection, myths and misinformation associated with it, and the phobia about contagion and death. This implies that culturally acceptable programmes are required to help sensitize and enlighten the rural populace on the HIV pandemic and also protect the rights of rural PLWHA.

Epe LGA PLWHA were found to experience discrimination more than Lagos Mainland LGA respondents. This could be attributed to anonymity and individualism in the urban centres and probably because in rural areas there is a high level of familiarity. Information on neighbours is easier to get in rural settings than in urban settings. It could also be because some PLWHA have spoken out in public.

The findings indicated that widowed, separated and divorced PLWHA were more vulnerable to discrimination than single PLWHA in the family and community. This is consistent with the studies of Marquet *et al.*, (1999) and APN+ (2004). Widows are generally more vulnerable than other women. They are more susceptible to being accused of infecting their spouses or being responsible for the death of their

husbands in whatever way caused. On the other hand, widowhood for men does not bear such deleterious consequences. Men are not required to acquit themselves of guilt when their wives die. Divorced or separated people particularly women are also vulnerable. They are a marginalized group in the society. However, discrimination against widowed or separated or divorced PLWHA in this study may be attributed to misperception of HIV/AIDS. The study found that the HIV infection was equated with sex and immorality, so these PLWHA might have been assumed to have contracted HIV/AIDS by promiscuous and immoral behaviours such as indulging in extra-marital sex. For example, the belief by some respondents that only promiscuous people contract HIV/AIDS reinforces negative beliefs supportive of discrimination.

Conclusion

This study set out to establish the relationship between socio-economic status and discrimination directed at PLWHA in Lagos state. Literature review indicated that HIV-related discrimination as experienced by the PLWHA was universal but had not been studied extensively in Nigeria. The study adopted a conceptual framework which demonstrated that discrimination was a social process of inequality. Through the method of triangulation and a combination of correlational and comparative research designs which allowed for both specificity and comparability, the survey investigated both the potential perpetrators and sufferers of discrimination in two LGAs. The study has been able to establish that there

were statistically significant differences between these two groups of respondents in the study areas and that discrimination was a manifestation of power, inequality, dominance, oppression and exclusion. The study identified that certain categories of people were more likely than others to discriminate against PLWHA e.g. women, rural and low educated people while men, rural and widowed/separated/divorced PLWHA were more vulnerable to discrimination than others. The study also demonstrated that discriminatory attitudes could affect PLWHA's political rights since 37.8% of the non-infected respondents would be unwilling to vote for a person known to be living with HIV/AIDS into a political office.

Recommendations

Based on the findings the following are recommended:

- There is a need to empower divorced, separated, widowed, Epe LGA and male PLWHA through life-skill training, counselling, and education so that they can litigate when faced with discrimination. More PLWHA should be trained extensively and engaged in public education as educators and advocates. They should also be involved as HIV policy makers at every level of decision making and engaged in equal partnerships with policy-makers. They should also be encouraged to be active in the communities because it will give a face to the epidemic and thus facilitate greater involvement of people living with HIV/AIDS.
- There is a need for an intensive HIV education for the women and Epe LGA people particularly on

its modes of transmission and prevention as well as factors of discrimination to create awareness and facilitate understanding of the linkages. Culturally acceptable programmes are required to help sensitize and enlighten women and Epe LGA populace on the HIV pandemic and also protect the rights of rural PLWHA.

- PLWHA's families should be encouraged and supported in order to carry out their natural caring roles without discriminating against their relations living with the disease.
- Formal education has an inverse correlation with HIV-related discriminatory attitudes. There is need for all and sundry to be educated. For the young ones, the Universal Basic Education provides free education up to secondary school level in Lagos state although many heads of schools still impose heavy development levies. The Lagos state government, therefore, should legislate against this extortion syndrome. For the non-literate adults and the young ones who cannot attend morning sessions, there are continuing education centres where they can learn in the evenings.
- The right not to be subjected to discrimination is enshrined in the 1999 Constitution of the Federal Government of Nigeria and many international legal instruments. It is also contained in the 2003 HIV policy. Only a few of the international laws have been domesticated such as CEDAW. These laws can provide powerful means of mitigating the effects of discrimination and stigma. The gov-

ernment therefore should domesticate and enforce these legal instruments.

- Government should develop anti-discrimination legislation based on HIV status; monitor its implementation to protect PLWHA. It should also be able to challenge breaches to anti-discrimination legislation if and when they occur, with the help of supportive human rights lawyers.

Suggestions for further studies

Future surveys should expand the scope of the coverage both in terms of the sample size particularly PLWHA sample size and the ecological areas to be studied. The finding that men were more vulnerable to discrimination than women is an important one that requires exploration. Future studies should also consider the migration status of the respondents.

References

- Adebajo, S. B.; Bambgola, A. O. and Oyediran, M. A. (2003) "Attitudes of Health Care Providers to persons living with HIV/AIDS in Lagos State, Nigeria" in Okonofua, F.E. (Ed.) *African Journal of Reproductive Health*, 7 (1): 103 – 112.
- Adeokun, L; Okonkwo, P and Ladipo, O. A. (2006) "The stigmatization of people living with HIV/AIDS" in Adeyi, O.; Kanki, P; Odutolu, O. and Idoko, J. A. (Eds) *AIDS in Nigeria: A nation on the threshold*, USA: Harvard Centre for Population and Development Studies: 213 – 233
- Altman, D. (1972) *Homosexual: Oppression and Liberation*. Sydney: Angus and Robertson.
- Ambati, B. K.; Ambati, J. and Rao, A. M.

- (1997) "Dynamics of knowledge and attitudes about AIDS among the educated in southern India", *AIDS Care*, 9 (3): 319-330
- Anarfi, J. K. (1995) "The condition and care of AIDS sufferers in Ghana: AIDS sufferers and their relations" in Orubuloye I. O.; □aldwell J. □.; □aldwell, P. and Jain, .S. (1995) *Health Transition Review: The Third World AIDS Epidemic*, Australia: Health Transition □entre, Supplement to Vol. 5 253 – 263
- Arachu, □. and Farmer, P. (2005) "Understanding and Addressing AIDS-Related Stigma: From Anthropological Theory to □linical Practice in Haiti", *American Journal of Public Health*. 2005 January; 95(1): 53–59.
- Asia Pacific Network of People Living with HIV/AIDS (2004) "AIDS-related Discrimination and Human Rights", APN+ Position Paper I
- Bharat, S. and Aggleton, P. (1999) "Facing the challenge: Household responses to HIV/AIDS in Mumbai, India", *AIDS Care* 1999; 11: 31-44.
- Bourdieu, P. (1979) *La distinction: Critique sociale du jugement* [*Distinction: A Social Critique of the Judgment of Taste*]. Paris: France: Minuit
- ommunity Participation for Action in the Social Sectors (□OMPASS), (2005) "Lagos State Profile" paper presented at the ARV □ommittee Meeting May 10, 2004
- Desclaux, A. (2003) "Stigmatization and discrimination: What does a cultural approach have to offer?" in UNES□O, *A cultural approach to HIV/AIDS prevention and care: HIV/AIDS stigma and discrimination: An Anthropological approach*, Proceedings of the round table held on 29 November 2002 at UNES□O, Paris: Studies and Reports, special Serie, Issue No. 20, Division of □ultural Policies and Intercultural Dialogue, UNES□O, 2003
- Family Health International (FHI), (2001) *In-depth Assessment Report*, Lagos: FHI
- Federal Government Printer (FGP), (2007) "Legal Notice on publication of the details of the breakdown of the national and state provisional totals 2006 census" *Federal Republic of Nigeria Official Gazette*, No. 24, Vol. 94, Lagos: 15th May 2007: B175 – 198
- Federal Ministry of Health (Nigeria), (2003) *National HIV/AIDS and Reproductive Health Survey (NARHS)*, 2003, Abuja, Nigeria: FMOH
- Federal Ministry of Health (Nigeria), (2004) *Technical Report on 2003 National HIV Sero-prevalence Sentinel Survey*, Abuja, Nigeria: FMOH
- Foucault, M. (1976) *Histoire de la sexualité* [*The History of Sexuality*] Paris: Gallimard.
- Foucault, M. (1978) *The History of Sexuality: Volume □*. New York: Vintage Books
- Gerth, H. and Mills, □. (Eds. and Trans.) (1958). *From Max Weber: Essays in Sociology*. New York: Oxford University Press.
- Goffman, .E. (1963) *Stigma: Notes on the management of spoiled identity*, Englewood □liffs: N.J., Prentice-Hall
- Herek, G. M. and □apitanio, J. P. (1999) "AIDS stigma and sexual prejudice" *American Behavioural Scientist*, 1999; 42(7): 1126-43.
- Herek, G. M.; □apitanio, J. P. and Widaman, K. F. (2002) "HIV-related stigma and knowledge in the United States: prevalence and trends, 1991-1999", *American Journal of Public Health*, 2002; 92 (3): 371-377.
- Hirsch, E.D.; Kett, J. F. and Trefil, J. (2002) *The New Dictionary of Cultural Literacy*, New York: Houghton Mifflin □ompany, 3rd edition.
- Hutchinson, S.; Pulerwitz, J.; Esu-Williams, E. and Stewart, R. (2003) "HIV/AIDS Workplace programs: Mobilizing managers. □rafting policies, educating workers", *Horizons Report: Operations research on HIV/AIDS*, the Population

- ouncil Inc.
- Marquet, J.; Hubert, M. and ampenhoudt, L. (1995) "Public Awareness of AIDS: Discrimination and the Effects of Mistrust", in Fitzsimons, D; Hardy, V. and Tolley, K. (Eds.) *Socio-economic impact of AIDS in Europe*, London: National AIDS Trust, 1995, 219-233 and 226-228, supra, note.
- Mosby, S. (2008) *Mosby's Medical Dictionary*: St. Louis, Elsevier, 8th edition.
- National Population ommission (1997) '99 Census '9 national summary: 774 Local Government Areas, Abuja: NP
- National Population ommission, (NP) (Nigeria) and OR/Macro (2004) *Nigeria Demographic and Health Survey 2003, (NDHS2003)* alverton, Maryland: NP and OR/Macro
- Nigerian Institute of Medical Research (NIMR) (2000) *HIV/AIDS in Nigeria: Technical Report (Survey of Health and Laboratory Facilities) (1989-1999)*, National HIV/AIDS Database Project, Lagos: Federal Ministry of Science and Technology, 1st edition
- Parker, R. and Aggleton, P. (2002) *HIV and AIDS-related stigma and discrimination: A conceptual framework and implications for action*, Brazilian Interdisciplinary AIDS Association, Thomas oran Research Institute.
- Rachman, S. J. (1990) *Fear and courage*, New York: W. H. Freeman and ompany, Second edition.
- Richard, P.; Aggleton, P.; Attawell, K.; Pulerwitz, J. and Brown, L. (2002) *HIV/AIDS-related stigma and discrimination: A Conceptual Framework and an Agenda for Action*, New York: Horizons Programme, Agency for International Development.
- Reis, .; Heisler, M.; Amowitz, L. L.; Moreland, R. S.; Mafeni, O.; Anyamele, . and Iacopino, V. (2005) "The Discriminatory Attitudes and Practices by Health Workers towards Patients with HIV", *PLoS Medicine*, 2005 August; 2(8): 261.
- Ritzer, G. (1996) *Sociological theory*, New York: The McGraw-Hill ompanies Inc. 4th edition
- UNAIDS (1996) *Protocol for the Identification of Discrimination against People Living with HIV*, Geneva: UNAIDS, 1996, at 5.
- UNAIDS (2008) *2008 Report on the global AIDS epidemic*, Geneva: UNAIDS: 30
- Weber, M. (1978) *Economy and society*, Berkeley: University of alifornia Press
- WHO (2008) *WHO African Region: Nigeria*, Geneva, WHO.