

## ORIGINAL ARTICLE

# Stigma and discrimination associated with HIV/AIDS in health care settings: a comparative study in two hospitals of different categories in Douala-Cameroon

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The response to the human immunodeficiency virus epidemic faces many challenges with stigma and discrimination being two of them. The aim of this study is to determine the extent of effects of stigmatization and discrimination against people living with HIV/AIDS, and the influence of the type of hospital structure, in the manifestations of stigma and discrimination. A prospective cross sectional study was conducted among a total of 400 patients, using a pre-tested questionnaire. An observation form was also filled to evaluate attitudes and behaviour of health care providers towards patients. Chi-Square test and Fisher test were used to test association between two variables, then multi logistic regression tests were done to check predictive factors of discrimination. The level of significance was chosen at  $p < 0.05$ . Among the participants, 104 (26%) patients reported having been victims of discrimination. Laquintinie hospital of Douala has a risk factor for blames and maltreatment ( $p = 0.0060$ ) and ( $p = 0.0091$ ) respectively. Also 152 (76.1%) patients of Laquintinie vs 103 (51.5%) of Nylon have been victims of stigmatization. The stigmatizing elements were: the name of the treatment center ( $p < 0.0001$ ) and the unconfidential manner of handling medical files ( $p = 0.0527$ ). Among the 400 patients, fifty nine (14.8%) avoided going to the hospital because of past experience of stigma and discrimination. Patients encounter several difficulties and those related to stigma and discrimination experienced in a hospital milieu can particularly constitute obstacles to better health seeking and therapeutic adherence. The human immunodeficiency virus infection response strategy should address stigma and discrimination by reviewing the management of treatment centers, elaborating relevant public health policies and training of healthcare practitioner.

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**Keywords:** HIV/AIDS; Stigma; Discrimination; Laquintinie; Nylon; Douala

## INTRODUCTION

The response to the human immunodeficiency virus (HIV) epidemic is gradually improving as a result of universal access to antiretroviral (ARV) (Oku *et al.*, 2013). The quality and life expectancy of people infected has extended significantly, although many challenges remain, notably that of stigma and discrimination (S & D) (Vanden Driessche *et al.*, 2009).

The Joint United Nations Programme on HIV/AIDS (UNAIDS) defines stigma as a “process of devaluation of people either living with or associated with HIV and AIDS”. Discrimination follows stigma and is the unfair and unjust treatment of an individual based on his or her real or perceived HIV status” (Vanden Driessche *et al.*, 2009). AIDS-related S & D refers to prejudice, negative attitudes, abuse and maltreatment directed at people living with HIV and AIDS (Lifson *et al.*, 2013).

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Since the beginning of the epidemic, S & D have been identified as the main obstacles in the way of

effective responses to HIV (Mashimo *et al.*, 2001). S & D associated with HIV is a complex social process which interacts with and reinforces existing S & D associated with gender, race and poverty (Vanden Driessche *et al.*, 2009). Numerous studies have documented attitudes of healthcare providers toward people living with HIV (PLHIV) (Chan *et al.*, 2008, Kremer *et al.*, 2006, Oku *et al.*, 2013, Vanden Driessche *et al.*, 2009). Although the literature characterizes the attitudes and behaviour of healthcare providers as positive and respectful, many studies also report poor communication between patients and healthcare providers (Chan *et al.*, 2008, Kremer *et al.*, 2006), which functions as a major barrier in providing proper care for these patients (Tawfik and Kinoti, 2001).

Efforts to reduce S & D associated with HIV/AIDS will not only help countries achieving the key targets for universal access and Millennium Development Goal 6, they will also protect and promote human rights, promote respect for PLHIV and other interested groups and reduce HIV transmission. Reducing stigma and discrimination related to HIV/AIDS among health care providers will be useful not only for marginalized PLHIV and their partners, but also for health professional groups themselves, whose activities will be facilitated through easier collaboration with patients. Studies indicate that health care providers delay access to health care services in an attitude of S & D (Pruss-Ustun *et al.*, 2005, Oyeyemi *et al.*, 2006).

Stigma associated with HIV in Africa has been documented to be a barrier to disclosure of HIV status (Lifson *et al.*, 2013). Attitudes involved are shame, blame and judgment among others. In a study conducted in Kenya, 43% of the study population recognizes this obstacle (Feyissa *et al.*, 2012). A recent study in Cameroon showed that, 23% of victims have lost their jobs because of S & D (Yang *et al.*, 2007). Another study conducted in Buea in Cameroon, which is one of the first in a hospital setting, showed that the major problems faced by the PLHIV with regard to S & D were gossiping and verbal abuse through insults and derogatory language. This was felt by about half of the interviewees

(Nguyen *et al.*, 2009). The aim of this study is to determine the extent of effects of stigmatization and discrimination against people living with HIV/AIDS and the influence of the type of hospital structure in the manifestations of stigma and discrimination.

## **MATERIALS AND METHODS**

### **Study design and context**

This cross-sectional and prospective study was conducted from January to April 2013. With the advent of HIV infection in Cameroon in the early 2000s, the government organized a response to the pandemic, with the establishment of centers to care for those infected. Authorized treatment centers (ATC) of Central Hospital of Yaoundé and Douala Laquintinie hospital were thus created. These centers are mainly characterized by their geographical location and their specificity marked by isolation and orientation reserved for the reception of patients infected with HIV. Over the years, several other centers called units of care have emerged particularly in district hospitals. Unlike older support units, these new centers have no specific geographical location and are actually virtual structures. Thus, support for PLHIV is provided by structures that do not have the same configurations. One would wonder if either of these configurations would not facilitate the perception of S & D.

### **Study sites**

The study was conducted in two antiretroviral treatment (ART) centers in Douala: the Day Care Hospital (DCH) of Laquintinie hospital (site 1) and the Health Care Unit of Nylon district hospital (HCU) (site 2). Laquintinie hospital and Nylon district hospital are the two first centers of support for PLHIV in Douala, with over 40% of all patients being treated in this city (GTRL, 2012).

Laquintinie hospital is a second category center according to health care classification in Cameroon. It was established in April 2001 with the main objective of taking care of patients with chronic diseases such as HIV/AIDS, diabetes and hypertension but this is currently, not the case. DCH takes care of only HIV positive patients and currently has

a regular line of about 4200 patients per month (GTRL., 2012). The DCH is an ATC with a complete and separately dedicated physical infrastructure and located in a barrier within the confines of Laquintinie hospital. The HCU has been in operation since 2007 with an estimated active line of 4010 patients per month, who are regularly followed up (GTRL., 2012). HCU is a virtual structure with other conditions and people living with HIV being given support.

### **Sampling and sample size**

HIV positive subjects who came for consultation or follow up visits were consecutively integrated in the study if they were 18 years or more, and had been followed up for at least 6 months at the center. In all, 410 patients were recruited and after excluding illegible and poorly filled questionnaires, 400 (200 for each hospital) questionnaires were retained for the study. All the patients accepted to take part in the study by signing an informed consent form.

### **Data collection**

Data were collected in the DCH of Laquintinie and the HCU of Nylon district hospital using a questionnaire addressed to the patient and the information recorded accordingly. The questionnaire was pre-tested on 20 patients beforehand in both hospitals. Errors were corrected and questions were finally remodeled.

The questionnaire took into consideration different variables including: Socio demographic data (sex, age, marital status, religion, ethnic group, occupation, level of education, distance of residence), duration of follow-up, ARV medication status, opinion on structural organization of treatment center (name, location of treatment center), opinion on quality of health care given (habits during care administration in Consultation rooms, Laboratory, Pharmacy, Waiting room, counseling room), opinion on policies of treatment center (frightful/death-oriented posters, anti-discrimination office), effect of S & D on health-seeking behaviour (thought of avoiding hospital, effectively avoiding hospital, and hiding of status from healthcare providers). Each questionnaire was completed within an average time

of 12 – 15 minutes. A form prepared to allow investigators to learn about the attitudes of healthcare providers towards PLHIV, including nursing, switching patients to different levels of health care, on the nature of the health care organization of the unit, on measures related stigma in hospital.

### **Ethical considerations**

The confidentiality of data collected was conserved as the information was recorded in an anonymous coded questionnaire that is decodable only by the investigator. An informed consent form was given to each patient who read after thorough explanation before the interview and signed at the end of the interview. Permission to conduct the study was obtained from the National Ethics Committee.

### **Data analysis**

Data was recorded using the software program EXCEL 2013, then exported and analyzed using the STATVIEW version 5.0 SAS Institute (Elford et al., 2012). For the analysis, the rules of descriptive statistics for the calculation of means and proportions of different variables were used. Data was first examined to check the distribution of all different variables, and then bivariate associations between different variables were checked using the Chi-square test and the Fisher exact test. Logistic regression was done to check predictive factors of discrimination.

## **RESULTS**

Of the 400 respondents in the study, 282(70.5%) were female while 118(29.5%) were male. The mean age of the study population was  $26 \pm 5$  years and a modal age range 29-39 years. Majority of respondents 267(66.7%) have had secondary education. Forty-seven percent ( $n = 188$ ) of the patients were Catholics, 227(65.7%) were from the local languages Bamileke and Bamoun. Also 165(41.3%) of the patients were single, while 176(44%) were married or cohabiting with their partners. There were 374(93.5%) patients on ARV drugs with 278 (69.5%) who were followed for over 2 years and only 50(14%) who were followed for less than 1

year. Most of the respondents 226(56.5%) belonged to the informal private sector.

### Manifestations of Discrimination

Discrimination was estimated to be 104 (26%) for the study with the prevalence in DCH of Laquintinie being evaluated at 34.5% which is almost twice that in HCU of Nylon (17.5%). According to these results, blames emerged to be the principal manifestation with 11% prevalence ( $p=0.0088$ ) (Table 1).

### Prediction of risk factors of Discrimination

There was a strong association between DCH of Laquintinie, the maltreatment (OR: 5.461; 95% CI: 1.526—19.545;  $p=0.0091$ ), and blames (OR: 2.631; 95% CI: 1.319-5.249;  $p=0.0060$ ). There was no asso-

**Table 1: Distribution of participants according to manifestations of discrimination**

Variable	DCH, n(%)	HCU, n(%)	P value
Blames	33(16.5%)	13(6.5%)	0.0088
Insults	5(2.5%)	2(1.0%)	0.5275
Maltreatment	15(7.5%)	3(1.5%)	0.0134
Poor quality services	16(8.0%)	17(8.5%)	0.4630

*DCH=Day Care Hospital and HCU=Health Care Unit*

ciation between DCH, insults and poor quality services. Nylon hospital as well as age, gender and level of education were not associated with any element of discrimination (Tables 2 and 3).

### Influence of structural management of hospital, behavior of health care providers and policies of treatment center on stigma

These results shows that objective findings on stigmatizing attitudes and discriminatory habits of personnel, distinctive signs were always found on medical files, occasional voluntary/Involuntary disclosure of HIV status and rare situations of blame were observed in DCH of Laquintinie but none of these were observed in HCU of Nylon. Two patients often entered the consultation room at a time in Laquintinie but in Nylon only one was always observed. In Laquintinie, more than 2 patients were received in the pharmacy often. No death-oriented poster was found. (Table 4).

### Responses of participants on influence of structural organization of hospital, quality of care and policies of treatment center on stigma

From these results, 152 participants (76.1%) in DCH of Laquintinie and 103 participants (51.5%) in HCU of Nylon experienced stigmatization. Twenty eight (7.02%) participants were uncomfort-

**Table 2: Predictors of discrimination in relation with blames and maltreatment**

Variable	Odds Ratio	95% CI	P value
<b>Maltreatment</b>			
Constant= yes	0.000	0.000—1.000	0.9948
Age	1.306	0.980—1.096	0.2074
Hospital=laquintinie	5.461	1.526—19.545	0.0091
Sex=male	0.551	0.172—1.760	0.3142
Primary education	684954.351	0.000—1.000	0.9966
Secondary education	4126923.694	0.000—1.000	0.9961
Tertiary education	1313663.24	0.000—1.000	0.9964
<b>Blames</b>			
Constant= yes	0.092	0.005—1.723	0.1105
Age	1.017	0.981—1.053	0.3687
Hospital=laquintinie	2.631	1.319—5.249	0.006
Sex=male	0.900	0.427—1.896	0.7814
Primary education	0.385	0.031—4.844	0.4603
Secondary education	0.404	0.034—4.758	0.4713
Tertiary education	0.568	0.043—7.462	0.6668

**Table 3: Predictors of discrimination in relation with insults and poor services**

Variable	Odds Ratio	95% CI	P value
<b>Poor service</b>			
Constant= yes	0.000	0.000—1.000	0.9955
Age	1.003	0.962—1.046	0.8758
Hospital=Laquintinie	1.293	0.618—2.207	0.4951
Sex=male	0.537	0.172—2.826	0.6235
Primary education	1727047.183	0.000—1.000	0.9963
Secondary education	3253724.909	0.000—1.000	0.9962
Tertiary education	5440087.243	0.000—1.000	0.9961
<b>Insults</b>			
Constant= yes	0.000	0.000—1.000	0.9956
Age	0.964	0.874 —1.062	0.4572
Hospital =Laquintinie	3.084	0.566—16.815	0.1930
Sex=male	0.471	0.050—4.458	0.5117
Primary education	1096479.046	0.000—1.000	0.9963
Secondary education	688786.253	0.000—1.000	0.9965
Tertiary education	777249.354	0.000—1.000	0.9964

**Table 4: Findings observed in stigmatizing and discriminatory practices of staff attitudes in the waiting room, consultation room and pharmacy**

Variable	Day Care Hospital		Health Care Unit	
	Response	Frequency	Response	Frequency
<b>Waiting room</b>				
Nature	Reserved only for PLWHA	always	Reserved for all patients	always
Nurses to patient ratio	3/55	often	3/5	often
Distinctive signs on file	Yes	always	No	always
Involuntary/voluntary disclosure	Yes	sometimes	No	always
Blames	Yes	Very rarely	No	always
<b>Consultation room</b>				
Nature	Reserved only for PLWHA	always	Reserved for all patients	always
Number of patients	2	often	1	always
Presence of other personnel	1	rarely	0	always
Inward/outward movements	Yes	Yes	sometimes	rarely
<b>Pharmacy</b>				
Nature	Reserved only for PLWHA	always	Reserved for all patients	always
Number of patients	5	often	2	rarely
Blames	Yes	Very rarely	No	always
Inward/outward movements	Yes	rarely	Yes	Very rarely
Refusal of ARV drugs	No	always	No	always

able about the name of treatment center ( $p < 0.0001$ ); 44(11 %) were uncomfortable about its location; 10 (2.5%), 147(36.8%) and 17(4.25%) respectively complained of Medical files indiscretion, ARV dispensation indiscretion, indiscretion in collection of laboratory results. Seven (1.75%) participants complained of frightful/death oriented posters ( $p = 0.0076$ ) (Table 5).

**Table 5: Influence of structural organization of hospital, quality of care and policies of treatment center on stigma**

Variables	DCH, n(%)	HCU, n(%)	P value
Uncomfortable by name of center	28(14.1%)	0(0.0%)	<0.0001
Uncomfortable by location of center	25(12.5%)	19(9.5%)	0.3377
Indiscretion of medical file	8(4.0%)	2(1.0%)	0.0527
Indiscretion of ARV dispensation	77(38.5%)	70(36.0%)	0.3087
Indiscretion in collecting lab results	7(3.5%)	10(5.0%)	0.4700
Frightful/death oriented posters	7(3.5%)	0(0.0%)	0.0076

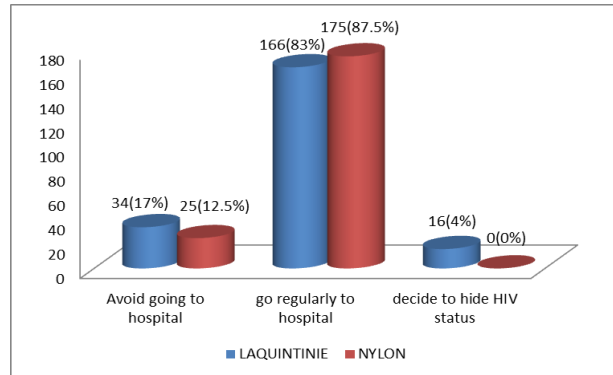
About the knowledge on an organ fighting discrimination, these results show that, 44 out of 400 interviewees (11%) indicated knowing a complaint office in case of discrimination, 16(36%) reported it to be the ward in charge's office, 9(21%) reported it to be the director's office and 10(25%) still reported it to be a complaint/suggestion box.

**Effects of Stigma and discrimination on health-seeking behaviour of participants**

A total of 59 (14.8%) participants avoided going to the hospital because of previous experience of S & D, and 16 (4%) of participants decided to hide their HIV status in situations of seeking health care services, all of the latter being those of DCH of Laquintinie with none in HCU of Nylon (Figure 1).

**DISCUSSION**

The proportions of epidemiological repartition of this study are correlated with current trends of HIV



**Figure 1: Health-related consequences of stigma and Discrimination**

infection in Cameroon (GTRL, 2012). According to the report of the National Committee for the fight against AIDS in 2011, women were more infected than men with the most affected age group being 30-39 years with a prevalence rate of 8.1%. Globally, the prevalence of discrimination was estimated to be 26% with that of DCH of Laquintinie hospital estimated at 34.5% and HCU of Nylon at 17.5%. These two values are lower compared to the 36% revealed by Andrianasolo *et al.*, (2011), in Madagascar. Similarly, Peretti-Watel *et al.*, (2007), showed that 26.28% patients experienced discrimination by medical personnel. Elford, (2012), demonstrated that half of all cases of HIV discrimination were in health care settings. The results of this study revealed that the major manifestations were: blame, insults, maltreatment, and poor health services.

The most prominent manifestation of S & D was blame which was estimated to be 16.5%. This is significantly greater than estimates observed in DCH of Laquintinie (11.5%) and HCU of Nylon (6.5%). The results of this study confirmed that there were very rare cases of blame in Laquintinie with none in Nylon. Occurrence in DCH could be explained by the workload. Only three nurses provide care services for many patients who present themselves every day. This is in line with reports of Adebajo *et al.*, (2003) and Letamo, (2005). The results showed that the abuse experienced by PLHIV to DCH of Laquintinie (7.5%) were much higher than those experienced in HCU of Nylon (1.5%).

Maltreatment which can be manifested in this case as deliberately wasting time to render services, talking to patients without respect, denial of care, quarantine and verbal/physical abuse has been documented (Brown *et al.*, 2003). These authors showed that 10% of doctors and nurses have admitted having refused to care for an HIV-positive patient or had denied HIV-positive patients admission to a hospital. According to findings of Andrianasolo *et al.*, (2011), 18.5% of HIV patients were denied health care.

The second remarkable manifestation of discrimination is the poor services rendered to PLHIV, estimated to be 8.25%. However this manifestation is almost of same magnitude in both hospitals. Poor services was considered to be: using unnecessary precaution, unwarranted referral to other units or facilities, breach of confidentiality, charging for infection control supplies and addressing in hushed tones. A multivariate analysis to check the factors that predict discrimination: age, gender, level of education and hospital was conducted for all the 4 major manifestations of discrimination. The results showed that there were two times and five times more chance to respectively blame and maltreat patients in Laquintinie than in Nylon (OR: 2.631; 95% CI: 1.319—5.249;  $p=0.0060$ ) and maltreatment (OR: 5.461; 95% CI: 1.526—19.545;  $p=0.0091$ ). This can be explained by the workload and the pressure weighing on the nurses in the hospital Laquintinie.

It was found that, 152 participants (76.1%) in the DCH of Laquintinie hospital and 103 participants (51.5 %) in HCU of Nylon experienced stigmatization. In Kenya it was found that 43% of participants experienced stigma and discrimination (Odindo and Mwanthi, 2008). The findings of this study demonstrated that the most cited element (36.8%) of stigmatization was indiscrete manner in which ARV medications were dispensed, that is to say: received in groups of 5-7 at a unit time; given in the presence of other persons not HIV positive patients; waiting room and Day hospital were well known by people as the only site of distribution; involuntary disclosure (calling of names). There was no significant difference in the indiscretion of ARV dispensation in Laquintinie (38.5%) and in Nylon (36%) ( $p=0.3087$ ).

Objective findings showed that there are rarely inward/outward movements into the pharmacy during drug dispensation.

The second element of stigma was the name of the treatment center, which had disrupted 28 patients (7.02%). The reasons being that HIV status is easily deduced because it is reserved for PLHIV only. In this case, all the 28 subjects in Laquintinie were disturbed by the name “Day Hospital” while there none in Nylon. This is justified by the fact that the treatment center in Nylon does not have a particular name like that of Laquintinie. The difference was statistically significant ( $p < 0.001$ ) showing that there is a strong association between the name of the hospital and the discomfort of subjects.

The third stigmatizing element was the conspicuous location of treatment center within the hospital premises being evaluated at 11 % where patients reported to be easily identified as PLHIV. The unit is close to the mortuary with subjects of Laquintinie (12.5%) being more troubled about this than those of Nylon (9.5%) with an insignificant difference between the two hospitals ( $p=0.3377$ ). The indiscretion of medical files (2.5%) followed the same trend as they are manipulated by all personnel, involuntary disclosure, signs, exploration of files in the presence of other persons. There was an association between this variable in favor of Laquintinie hospital ( $p=0.0527$ ).

A total of 59 of interviewees (14.8%) avoided going to the hospital because of previous experience of stigma and discrimination. Some reasons for this motive were: Fear to be identified (7.1%), lack of confidentiality on the part of the personnel (4.7%), fear to be insulted (0.5%), fear to be blamed (0.2%), complain of poor quality services rendered (2.7%), and poor welcome (6.4%). This finding is consistent with that of Campbell *et al.*, (2012), who revealed that perceived and experienced stigma are associated with reduced utilization of prevention services. It was confirmed that experienced and perceived stigma are associated with reduced access to care and treatment by PLHIV (Kinsler *et al.*, 2007).

Also 16 participants (4%) decided to hide their HIV status in case of seeking health care services because of: fear of been identified (2%), fear that their status will be disclosed to others (1%), fear of being verbally abused or harassed (0.7%). The current study agrees with previously published study by Chesney and Smith, (1999), who demonstrated that stigmatization has an effect on health care seeking and strict adherence to medications. The major limitation of this study was the lack of data from the wards and specialized consulting rooms. Additionally, all the elements required to assess stigmatization and discrimination in this study may not have been considered. However, referring to current literature on the subject matter, we took account of the possible variables ever used beforehand. So this study provides important information on determining the extent and impact of stigma and discrimination in a hospital setting.

## CONCLUSION

Several difficulties are encountered by patients and particularly those related to stigma and discrimination experienced in a hospital milieu, can constitute obstacles to better therapeutic adherence. The fight against stigma and discrimination should be included in the strategy against the fight against HIV infection by reviewing the management of treatment centers, elaborating relevant public health policies and training sessions.

## COMPETING INTERESTS

The authors declare that they have no competing interests.

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