

Oral Pathologies in Subjects Living with HIV (PLHIV) At Campus University Hospital of Lomé

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DOI: [10.36347/sjds.2021.v08i05.005](https://doi.org/10.36347/sjds.2021.v08i05.005)

| Received: 19.04.2021 | Accepted: 31.05.2021 | Published: 15.06.2021

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Abstract

Original Research Article

Objective: To assess the dental care needs of people living with HIV who are regularly monitored at Campus University Hospital of Lomé. **Method:** This was a descriptive prospective survey conducted on patients followed regularly, from January 1 to December 31, 2016. **Results:** Our study involved 111 patients, 76.58% of whom were female. The most represented age group was between 30 and 39 years old. Fourteen percent of the patients had a CD4>500cell / mm³ count and 37.5% of the lesions were seen in patients with WHO stage III HIV infection. Mucosal lesions were more common in subjects with low CD4 counts. Periodontitis represented 59.03%, candidiasis 3.47%. Seventy-six percent of the subjects required oral care. **Conclusion:** People living with HIV have a real need for oral health care. Systematic management of oral health care in these subjects should improve their well-being and ensure them a life that is more balanced with their serological status.

Keywords: PLHIV, PLWHA, oral health, oral care, Togo.

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INTRODUCTION

Oral health is integral to general health and essential to quality of life [1]. The oral mucosa is fragile because it is easily exposed to bacterial, viral and mycological attacks which can cause a variation in its appearance. Certain systemic diseases such as diabetes, HIV infection or Crohn's disease lead to changes in the oral environment leading to the development of oral diseases [2].

Oral lesions associated with HIV are among the first manifestations to appear in people living with HIV (PLHIV), reaching prevalence rates ranging from 40 to 50% [1]. They can have diagnostic or predictive value and help monitor the course of infection in patients.

Several studies have described oral lesions associated with HIV infection, but very few have addressed the oral care needs of PLHIV [3]. In Togo, studies specifically evaluating the oral health care needs of PLHIV are non-existent.

As a result, there is no real integration of oral health into the care system for PLHIV. This observation

is the main reason for this study, the general objective of which was to contribute to improving the access of PLHIV to quality oral health care. This specifically involved determining the prevalence of various oral diseases among PLHIV and assessing their needs for oral health care.

PATIENTS AND METHOD

This was a prospective, descriptive study in the odontostomatology service and the PLHIV care center at the Lomé Campus University Hospital, from January 1 to December 31, 2018.

Inclusion criteria

People whose retroviral serology was known to be positive for HIV and regularly treated for this status, and whose CD4 count was less than 6 months old and in permanent dentition, constituted our study sample.

The parameters studied were socio-demographic (sex, age, profession, residence), clinical (clinical stage, the individual Decayed, Missing and Filled Teeth (DMFT) Index, the prevalence of mucosal lesions, oral hygiene) or paraclinical (CD4 count).

Data collection and analysis technique

The patients were recruited in the care and monitoring center for PLHIV of the Campus University Hospital according to their care program. After an awareness session on the need for a clinical oral examination, informed consent was obtained beforehand following tripartite counseling with the subject and the attending physician at the care center for an odontostomatological consultation. For ethical reasons the rules of confidentiality of the study were required. The data collected was processed using Microsoft Office 2010 Word and Excel software. About fifteen patients were asked to refuse to participate in the survey.

RESULTS

Out of 762 people living with HIV/AIDS (PLWHA) regularly monitored, 111 were concerned by our study, or 14.57%. All of the 111 subjects were infected with the HIV1-like virus. Eighty-five subjects were female, ie 76.58%. The sex ratio was 0.31. The age of the subjects surveyed varied between the extremes of 12 and 63 years, and those whose age was between 30 and 39 years were the most represented (36.94%). On the professional level, subjects without a fixed job represented 52.25% followed by trades people (27.93%).

Clinical data

Their HIV status was associated with hypertension in 18.92% of cases, diabetes in 1.80% of cases, and 19.82% were used to alcohol and tobacco. Thirty-seven point five percent of the lesions have been observed in patients with WHO stage III HIV infection.

CD4 count

Almost 14% of our patients had a CD4>500 cells / mm³ count (Table I).

Table-I: Distribution of patients by CD4 count

CD4 count (/ mm ³)	Number	%
CD4 < 200	51	45.95
200 < CD4 < 500	44	39.64
CD4 > 500	16	14.41
Total	111	100

Prevalence of oral lesions.

In the 111 patients followed, 144 lesions of the oral cavity were diagnosed. Periodontitis represented 77% of cases, candidiasis 5% (Table II). There were 33 cases of oral manifestations in patients with a CD4 count >500 (Table III). The overall DMFT index presented by the 111 subjects in our sample was 3.48.

Table-II: Distribution of patients according to their oral health compared to WHO clinical stages (N = 144).

	Gingivitis	Mild periodontitis	Moderate periodontitis	Candidiasis	Leukoplakia	Cheilitis	Caries
Stage I	1	9	2	1	0	0	13
Stage II	3	18	1	1	0	0	10
Stage III	0	37	2	2	0	2	11
Stage IV	4	14	2	1	1	0	9
Total n(%)	8 (5.56)	78(54.17)	7(4.86)	5(3.47)	1(0.69)	2(1.39)	43(29.86)

Table-III: Distribution of patients according to their oral health in relation to the CD4 count (N = 144).

	Gingivitis	Mild periodontitis	Moderate periodontitis	Candidiasis	Leukoplakia	Cheilitis	Caries
CD4<200	4	32	4	3	1	1	12
200<CD4<500	2	29	2	2	0	1	18
CD4>500	2	17	1	0	0	0	13
Total n (%)	8 (5.56)	78(54.17)	7(4.86)	5(3.47)	1(0.69)	2(1.39)	43(29.86)

Oral care needs

In 13.51% of cases, the oral lesions observed did not require treatment (Table IV).

Table-IV: Distribution of patients according to their dental care needs (N = 111)

Oral care needs	Number	%	
Caries treatment	Dentin treatment	9	8.11
	Pulp care	2	1.80
	Tooth extractions	23	20.72
Periodontal treatment	Descaling	81	72.97
	Periodontal pocket curettage	5	4.50
Mucosal care (drug treatment)	18	16.22	
Prosthetic care	21	18.92	
No treatment	15	13.51	

DISCUSSION

This study enabled us to establish the oral health of a population of PLWHA in Togo, and to assess their needs for odontostomatological care. This was a static observation of the oral-dental situation, without highlighting any causal links between the specific immunological status of these subjects and the pathologies thus listed, or their degree of development. This is one of the limitations of this study which nevertheless has the merit, by evaluating the needs for oral health care among PLHIV in Togo, of posing the problem of an odontostomatological concern that is necessary or even essential for their care and follow-up, in order to ensure a more balanced life compatible with their serological status. The optimal care of PLHIV in Togo, should integrate, according to our study, the oral aspects of which the various socio-demographic and clinical determinants are to be considered in the overall file of the subject.

The female predominance of our sample is only a reflection of the general epidemiological profile of HIV infection in Togo [4]. This predominance could be explained not only by the high exposure of women to risk factors for HIV infection, but also by their greater motivation to participate in the various surveys. Our results are on this point, similar to those of neighboring Benin and Cameroon [5, 6].

The prevalence of dental pathologies and oral mucous membranes in PLHIV according to age groups would also be in line with the general trends mainly affecting young adults, the most represented in our study, being between 30 and 39 years old, and corroborating most of the findings. Literature work. These young layers are in fact more concerned by practices with a high risk of contamination by the AIDS virus [7-9].

Clinically, determinants reveal the exclusivity of our subjects' infection with HIV1, which is also very widespread in West and Central Africa with carrier rates varying between 68% and 99%, both among children than adults [10-14].

Studies with a specific method, the objective of which would be to search for possible causal links between the oral pathologies recorded, their mode of development and the serological status would make it possible to better elucidate the question of oral diseases of the subject PLHIV.

The highest proportions of oral and dental pathologies, in particular mucous membranes, in this study were located at a CD4 count of less than 200 / mm³. This is the case with periodontitis, candidiasis, leukoplakia and cheilitis. This result could give particular importance to the CD4 count as a significant

determinant of the condition of the oral mucosa of the subject PLHIV.

Dental caries, for its part, does not seem to be linked to the CD4 count and / or to the clinical stage in our study, as some studies have already observed in the literature [15].

By their nature and prevalence, oral diseases of PLHIV should deserve special attention in the process of their monitoring and management. Mucosal pathologies seem in their evolution to be more related to their immunological status. Oral candidiasis, which is recognized in the literature as the most frequent manifestations, occupied a relatively low proportion in this study [16]. This low proportion should be put into perspective because of the effective intake of current ARVs by all of the subjects in our sample.

At the dental level, the CAO index of 3.48 measuring the state of dental health is average and therefore does not present a significant difference with that found in a hospital study on dental caries in the same study framework [17].

In view of the pathological picture, PLWHA therefore have a significant need for periodontal, mucous membrane and dental treatments, which are necessary and essential to limit the occurrence of opportunistic oral pathologies, in order to lead a balanced life compatible with their immunological status.

CONCLUSION

Paying more attention to oral care in all care and monitoring programs for PLWHA would improve their state of health and well-being and ensure them a more balanced life, compatible with their HIV status.

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