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HIV/AIDS Epidemic in the University of Dschang, Cameroon: Evidence and Policy Formulation Process

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Authors' contributions

This work was carried out in collaboration between both authors. Author EA designed the study, performed the statistical analysis, wrote the protocol and wrote the first draft of the manuscript. Author DT managed the literature searches and the analyses of the study. Both authors read and approved the final manuscript.

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ABSTRACT

Using a content analysis approach, we have attempted to carry out a comprehensive analysis on HIV/AIDS Epidemic in University of Dschang, Cameroon with a particular focus on evidence and policy formulation. The main objective of the study is to analyze the evidences and policy formulation process of HIV/AIDS pandemic in the University of Dschang, while the policy objectives are: (I) to enhance the University's capacity to develop and communicate messages for scaling-up the desired behavioral change; (2) to put in place HIV/AIDS sensitive procedures and practices, (3) to develop a working relationship between the University and the neighboring community utilizing the existing frameworks of government and non-governmental organizations and (4) to support the

national efforts to develop and communicate HIV Prevention, AIDS Care and Advocacy messages among the youths in the formal education system and in the neighboring community. The formulation of policy is a major step towards poverty reduction due to expenditure by HIV/AIDS patient to keep up themselves and an effective supply of labour.

Keywords: HIV/AIDS; policy formulation process; University of Dschang; Cameroon.

1. INTRODUCTION

The AIDS pandemic represents a serious threat to Africa. Twenty years ago, the HIV prevalence rate in East Africa was similar to today's rates in West and Central Africa. Cameroon's HIV prevalence rate is estimated at 5.1 percent the highest rate for the West and Central African sub-region [1,2]. The World Health Organization United collaboration with the International AID Agency further noted that HIV prevalence is growing rapidly. In 1990, there 32,000 HIV-positive were fewer than Cameroonians. By 1995, the number of PLHIV increased more than eight times to 264,000. At current rates, there will be about 726,000 PLHIV in 2020. An even larger number of people could be infected if the national response to HIV is not fully funded and implemented [3].

The majority of infected people do not know they are infected and hence may not take precautions to protect their partners [2]. HIV/AIDS is among the most killer diseases ravishing the world today. In 1993 it was reported that 7.5 million people in Sub-Saharan Africa, 1.5 million in Southeast Asia, 1.0 million in Latin America, 1.0 million in North America, 750.000 in North Africa and Middle East, 500.000 in Western Europe, 50.000 in Eastern Europe and Central Asia, 25.000 in East Asia, China and Japan and 25.000 in Australasia were infected with the HIV virus [4]. The December 2002 report on the Global HIV/AIDS Epidemic by UNAIDS, gives the global figure for people living with HIV/AIDS as 42 million. Today, more than 42 million people throughout the world are infected with HIV [5].

Focusing on the global and regional HIV/AIDS situation, in 1993 it was reported that 7.5 million people in Sub-Saharan Africa, 1.5 million in Southeast Asia, 1.0 million in Latin America, 1.0 million in North America, 750.000 in North Africa and Middle East, 500.000 in Western Europe, 50.000 in Eastern Europe and Central Asia, 25.000 in East Asia, China and Japan and 25.000 in Australasia were infected with the HIV virus [5]: The December 2002 report on the Global HIV/AIDS Epidemic by UNAIDS, gives the

global figure for people living with HIV/AIDS as 42 million. Today, more than 42 million people throughout the world are infected with HIV. The great majority lived in Central Africa and South of the Sahara desert, where the first cases appeared. According to World Health Organization (WHO) in 2013, about half of all the people infected with HIV are under the age of 25. In Eastern Europe and Central Asia, for example, more than 80 per cent of those living with HIV are under the age of 30. About half of all new HIV infections are among 15-24 year olds [6]. Of the over 1 billion youth (ages 15 – 24) worldwide, some 10 million are living with HIV and AIDS. Every day, an estimated 6,000 youth are infected with the virus. Of the 15-24 year old young people living with HIV, 63 percent live in sub-Saharan Africa and 21 percent live in Asia-Pacific [3]:

Considering the situation of the pandemic in Cameroon, the first AIDS case was diagnosed in 1985. Since then, about 400 000 cases have been officially reported. Cameroon is facing a generalized epidemic, with adult prevalence rates in the range of 4.8-9.8%. Information on HIV sero-prevalence among antenatal clinic attendees (ANC) in Cameroon is available since 1989. HIV prevalence among ANC attendees in 28 sites was 10.8%. HIV prevalence in Yaoundé was 11.2% and median HIV prevalence in Douala was 11.6%. Yaoundé and Douala are the major urban areas in Cameroon [6]. In areas outside the major urban areas. HIV prevalence among ANC attendees increased from less than 1% in 1989 to 8% in 1996 and has continued to rise. In 2000, median HIV prevalence in 25 sites outside the major urban areas ranged from 6.0% to 13%. HIV prevalence in the same year among 15-19 years old particularly ANC attendees across all the sites, including those in Yaoundé and Douala was 11.5% and among the 20-24 years 12.2%.

A Demographic and Health Survey in 2004 estimated an HIV prevalence of 5.5% in the population. The prevalence is higher in urban areas than in rural areas. Prevalence rates vary from one province to another, with highest rates

in the north-western and eastern provinces. At the end of 2002, 53 000 people were estimated to have lost their lives to the disease – leaving 210 000 children orphaned. HIV transmission is primarily heterosexual, and women are more vulnerable with 170 infected women to every 100 infected men. The most vulnerable groups include sex workers, truck drivers, mobile populations and military personnel. Young people are highly affected a third of Cameroonians infected are 15-29 years of age.

National guidelines for testing and treatment have been revised in 2003. The government is committed to promoting universal access to treatment through the creation of approved treatment centers, affiliated treatment centers and district management units across the country and by reducing the costs of testing, treatment and laboratory follow-up through subsidies. In addition, prevention and voluntary testing and counseling centers have been integrated into all national, provincial and district hospitals in the 10 provinces. A multi-sectoral plan for expanding and decentralizing the provision of antiretroviral therapy has been developed. In 2002, the government of Cameroon reduced the cost of antiretroviral therapy by 53% through a subsidy totaling US\$ 1 230 770 reducing the average treatment cost from US\$ 73 to US\$ 34 per person per month. Since then, the cost of drugs has been substantially reduced with financial support from the Global Fund to Fight AIDS. The cost of antiretroviral drugs declined from US\$ 42 per person per month at the beginning of 2004 to US\$ 10 per person per month in October 2004 [7,8].

2. HIV/AIDS SITUATION IN UNIVERSITY OF DSCHANG

University of Dschang has been part of the fight in Cameroon against HIV/AIDS. In June 1996, the University actively participated in the National AIDS/CAP programme, whose objective was to promote the fight against HIV/AIDS amongst the University students. To get students more committed in this fight, the University of Dschang created an STDs/AIDS club (Jeunesse Avenir – Club MST/SIDA) during the 1997/1998 academic year. Students (peer educators) were trained on matters concerning STD/AIDS. They received lectures on the causes, transmission, diagnosis, prevention and treatment of STDs and AIDS. They were also trained on how to organize STD/AIDs campaign within the University.

Dschang University during its arts and cultural festival in 2001 launched a special programme on the prevention of STDs/AIDS on campus. More peer educators were trained and HIV/AIDS sensitization activities continued. In order to have a successful fight against HIV/AIDS, the University in 2004 and 2005, created the HIV/AIDS coordination committee (made of Rector, the Secretary General of the University, Deans of Faculties, Students and representatives, Medical Doctor, etc) charged with coordinating activities on the fight against HIV/AIDS. Till date, the University of Dschang during festivals (World AIDS day, University sports and culture etc) basically carries out information, education and communication (IEC) campaigns, voluntary counseling and testing exercises and trains student HIV/AIDS peer educators. Activities related to HIV/AIDS are handled only by the medical personnel in the medical centre (one medical Doctor, three senior nurses, one nursing aid and one social worker) and students in anti-AIDS club (club MST/SIDA) who form less than 1% of the University community.

Concerning health services, the University of Dschang has a medical centre and HIV/AIDS counseling and screening centre. The medical centre daily does medical examination of students (old and new), routine medical consultation for students, lecturers and support radiography, staff. laboratory analysis. vaccination in collaboration with the Dschang District Hospital, minor surgery, screening for HIV/AIDS and counseling as well as social consultations. The medical personnel are sent for refresher courses and seminars on HIV/AIDS. The HIV/AIDS counseling and screening centre periodically (during festivals) does free AIDS screening, HIV counseling, distributes male condoms and leaflet on HIV/AIDS, trains HIV/AIDS peer educators and refers HIV/AIDS cases to the national AIDS control centre in Yaoundé. The HIV/AIDS voluntary screening exercise involving students and staff during 2004 and 2005 academic year revealed that 5 males out of 321 (1.5%) and 7 females out of 276 (2.9%) tested positive while the same exercise during 2005/2006 academic year showed that 27 males out of 1001 (2.69%) and 29 females out of 733 (3.95%) tested positive [6].

A recent survey (involving students and staff) to assess the impact of HIV/AIDS sensitization on social perception within the University of Dschang revealed that 98% of respondent were

aware of the existent of HIV/AIDS on campus. 74% of the respondents reported that information on HIV/AIDS was gotten from home (family members and friends) while 26% from the University (during HIV/AIDS campaigns, peer educators and through the University Radio). Although peer educators are available on campus, only 31% of the respondents are aware of their presence [7,8]. However, 73% of the respondents (students and staff) are willing to be trained as HIV/AIDS peer educators. Surprisingly, 63% of the respondents are not aware of the HIV/AIDS screening and counseling units on campus. This high percentage may be the result of poor organization of HIV/AIDS activities on campus. Also 78% of respondents noted out that there are no laws to the best of their knowledge, protecting the rights of those living with HIV/AIDS on campus. The results of the survey revealed that an institutional HIV/AIDS policy will ameliorate the organization of HIV/AIDS activities on campus, since a good policy on HIV/AIDS matters, provide a framework within which an institution can organize a comprehensive response addressing prevention, treatment, care and social support. This is to ensure that policy considerations are in line with the sources of HIV/AIDS for appropriate implementation.

3. METHODOLOGY AND ANALYTICAL ISSUES

Critically, in this framework we used the complementary interaction theory as proposed by [9] and adopted by [10]. Group work ensures that priority is given to the respondents' hierarchy of importance, their language and concepts, the framework for understanding the world. In fact, listening to discussions between participants gives the researcher time to acclimatize to, for example their preferred words of speaking about child health and health related issues clarify the researcher on areas of doubt. In exchange between participants in a group, people's different assumptions are thrown into relief by the way in which they challenge one another, the questions they ask, the evidence people bring to bear on an issue, the sources of their information will all be an enlightenment on many important issues to be discussed.

3.1 Basic Facts about HIV and AIDS

Human means that it affects only humans and lives only in humans. The virus does not live in toilets, mosquitoes, cups or spoons, or on bed

sheets or towels that people who have HIV might have used. Immuno-deficiency refers to a lack of (deficiency) or breakdown of the human body's immune system [11]. The immune system is the body's resistance or the "body's defense force" (BDF) for fighting off infections. The virus attacks and eventually overcomes the body's immune system, or the BDF. The immune system is usually able to defend the body against many infections – except HIV as the virus is a germ.

Principally, AIDS means Acquired Immune Deficiency Syndrome, dissecting this meaning implies, to acquire means to "get or develop over a period of time." As noted earlier, the immune system does not break like an egg; it breaks down gradually over time. It gets deficient, or less and less efficient, under the relentless attack by the multiplying numbers of viruses in the body. Finally, syndrome refers to the group or collection of signs and symptoms (or indications) of diseases in a person who has AIDS, such as unusual weight loss (more than 10 percent of normal body weight), fever (stopping and starting or continuous), dry cough which hangs on, excessive tiredness, diarrhea for a long time (more than a month), swelling of the lymph nodes, respiratory tract infections including pneumonia, thrush, tuberculosis, night sweats, stroke [7,8].

As already revealed in the medical literature, there are two-types of HIV: HIV- 1 and HIV- 2.

HIV-1 is the most common type with different subtypes A, C, D and E. These are common in Africa and Asia. Subtype B is more common in Europe and North America. HIV-2 is mostly found in West Africa, it seems to be less aggressive than HIV-1. HIV-1 virus was discovered in 1979. It affects both young and old; adolescents, economically productive age group, sex workers, migrant workers like drivers. members of armed forces and police. It has affinity for T lymphocytes with a receptor called CD4; enters cells and multiply thereby destroying host cells and as well deplete immune cells. This virus is transmitted through body fluids such as blood and sexual fluids (sperms and semen). The 6 stages of HIV/AIDS developments are; HIV Infection, Window Period, Sero-conversion, Asymptomatic HIV Infection, Related Illnesses, and AIDS [12].

In relation to Symptoms and prevention; these include: unexplained weight loss, incessant coughing, persistent diarrhea, persistent fever,

coated tongue, rashes and skin infections. Other symptoms in adults include anaemia. tuberculosis, thrush, constipation, heart burn, anorexia (appetite loss), nausea and vomiting. While HIV prevention strategies include abstinence from indiscriminate sex, not sharing sharp objects, avoiding transfusion of HIVinfected blood and the use of condom which is one of the well known ways of HIV prevention in Cameroon and the world at large [2]. In addition, we also have abstinence which is 100% effective method, counseling and testing, faithfulness and dedication to one's future partner/faithfulness to partner if married.

The window period is the time from HIV infection to when the usual laboratory tests can detect the antibodies to the virus in an HIV-infected person. The window period can last between six weeks to six months. Different bodies take different lengths of time to produce and release the antibodies, sometimes called "clues" to the virus. During the window period, the commonly used tests cannot detect the antibodies to the virus. Therefore, if someone is tested during that period, the test result will be negative even though they are infected. Some laboratories describe the findings as "non-reactive".

4. DATA AND DISCUSSION

In this study, we are principally focus on the situation of HIV and policy formulation of the situation of Dschang University, implying our data and information is all focus on this area from where we obtain both primary and secondary information. Adopting a content analysis approach, the primary information was obtained through interviews of some of the staff of the University community such as the medical, administrative and support personnel as well as few students. The secondary information was gotten from documented literature in the school medical center, library, Ministry of Public Health and the internet.

4.1 The Policy Formulation Process

The policy process covered five distinct stages: conceptualization and conception, creation of Task Team and HIV/AIDS coordinating committee, formulation of draft policy by Task Team and circulation, revision and adoption of draft policy by the HIV/AIDS coordinating committee and Launching of the HIV/AIDS policy.

In Conceptualization and Conception, the University of Dschang in December 2006 was invited to Kigali by Association of African Universities (AAU) for a workshop to accelerate the response of Higher Institutions to HIV/AIDS. The participant amongst other things received the HIV/AIDS Tool kit prepared by AAU. The rector of Dschang University after reading the chapter on HIV/AIDS policy formulation saw the need for an institutional HIV/AIDS policy. His application to AAU for assistance to prepare University of Dschang HIV/AIDS policy received a favorable answer [7,8].

In Creation of Task Team and HIV/AIDS Coordinating Committee; the rector of the University appointed two project committees (Task Team and HIV/AIDS coordinating committee) whose membership represented a cross section of people from the University community ranging from top Administrators, academic and non academic staff and students (see, appendix for membership). This was followed with the official launching of the project.

In Formulation of Draft Policy, the University community in Dschang, pledge ourselves to implementing this policy statement under five principle components: rights and responsibilities of staff and students living with/affected by HIV/AIDS; provision of preventive, care, support services and education on campus; integration of HIV/AIDS issues into teaching, research and other university activities; implementing structures, procedures, monitoring and research and advocacy, networking and collaboration with other organizations and the community.

4.2 Objective of the Policy

The University of Dschang recognizes that HIV/AIDS is both a health and developmental issue, which concerns the entire University community and the Cameroonian society as a whole. In this, to establish an Institutional Policy on HIV and AIDS related matters. The overall objective is to engage and collaborate with the society in playing an active role in mitigating the respect the University is opportune to be supported by the Association of African Universities (AAU effects among its staff, students and the Cameroonian society as a whole.

The main objectives of the HIV and AIDS Policy are: firstly, to enhance the University's capacity to develop and communicate messages for

scaling-up the desired behavior change. Secondly, to put in place HIV/AIDS sensitive procedures and practices in regard admissions; recruitment in the university service; health care for HIV/AIDS affected members of the University; collaboration with the neighboring community; sensitization of the University community; voluntary counseling and serostatus testing and promotion of safer sexual life [7,8]. Thirdly, to develop a working relationship between the University and the neighboring community utilizing the existing frameworks of government and non-governmental organizations and lastly, to support the national efforts to develop and communicate HIV Prevention, AIDS Care and Advocacy messages among the youth in the formal education system and in the neighboring community [12].

4.3 Rights and Responsibility

4.3.1 Rights of university authorities, Staff and Students

The University reserves the following rights: rights to know the health status of all employees and students and the right to take actions that are, in its judgment, necessary or appropriate to protect persons from exposure to infection if the University becomes aware of activity that poses a significant risk of exposure.

The rights of staff with HIV/AIDS shall be the same as enshrined in the constitution of the Republic of Cameroon, the University regulation, ILO and UNESCO HIV/AIDS workplace policies to which Cameroon is a signatory. The rights of members of staff and their dependents in terms of HIV and AIDS within their work environment shall be as follows: Firstly, no member of staff shall be forced to undergo HIV testing. Secondly, members of staff and their dependents have the right to confidentiality of their HIV and AIDS status and records [7, 8]. Thirdly, the results of the HIV tests conducted at the Medical Social Centre shall remain confidential, and shall not be disclosed to a third party without a written informed consent from the person concerned and Lastly, HIV status shall not be used as a criterion for decisions by the University administration regarding: employment of permanent and contract members of staff; promotion, training and career development of members of staff; employment termination. retrenchment. retirement, access to employee benefits, privileges and rights to health care, allocation of housing and accommodation and participation in non-combative sport.

Other issues related to rights include: HIV-related illness will not be treated differently from other comparable chronic or life threatening conditions with respect to the rights of members of staff. Staff with HIV/AIDS shall have the same benefits as those without; however, they could get more from Health benefits by way of generous subsidy of drugs. They may also be considered for longer leave/sick leave periods. No member of staff shall be discriminated against based on his/her HIV/AIDS status. Others and all members of staff have the right to: firstly, be accepted, regardless of their status, in an environment free of prejudice, stigma and discrimination. Be made aware of the risks of exposure to HIV and AIDS. Work in an environment in which occupational exposure to HIV is minimized by providing appropriate protective methods and post exposure counseling, diagnosis, prevention and treatment, where applicable. Be made aware of and have access to preventive and supportive care services available in the institution. Continue to work if they are deemed medically fit and can meet performance standards for the job they are expected to perform and be granted a change in the job or modification thereof or retirement on medical grounds, performance standards of work are not met; or the continued performance of the job by a member of staff who has AIDS, affects their health [7,8].

In addition, grievances on HIV and AIDS matters should be treated like other grievances in the University system and in accordance with the laws of the land. Staffs who feel aggrieved about discrimination, stigmatization, breach confidentiality and denial of rights should adopt the normal University procedure for seeking redress. All matters must be treated internally before externalization. More specifically: Employment shall not be terminated on the grounds of HIV/AIDS status or retirement decisions made or be used to influence retrenchment; HIV/AIDS status shall not be reflected in the personal files of employees. The HIV/AIDS status of employees shall not be disclosed without the informed consent of the employee concerned. Employees have a right to a supportive and safe working environment in which persons with HIV and AIDS are accepted and not stigmatized. Employees have a right to know of possible risks of occupational exposure to HIV in their working environments and the

University shall endeavor to provide the necessary protective equipment and facilities for use on the job [12].

The rights of all categories of students during and after admission with respect to HIV and AIDS within the campus and study environment shall be as follows: no student shall be forced to undergo HIV testing by UDS; the students have the right to confidentiality of their HIV and AIDS status; the results of the HIV tests conducted at UDS Medical facilities or District Hospitals shall remain confidential, and shall not be disclosed or publicized to a third party without a written informed consent from the person concerned and HIV status shall not be used as a criterion for decisions by the UDS management regarding: admission, registration or de-registration, approval of grants, loans and bursaries, consideration for on-campus accommodation, attendance or performance participation in non-combative sport [3].

Further, HIV-related illness will not be treated differently from other comparable entitlements of students; students with HIV/AIDS shall have the same benefits as those without. However, they shall have access to Health benefits by way of generous subsidy of drugs. They may also be considered for longer leave/sick leave periods [7, Students who feel aggrieved about stigmatization, discrimination, breach confidentiality and denial of rights should adopt the normal University procedure for seeking redress. All matters must be treated internally before externalization and all students have the right to:

- Be accepted, regardless of their status, in an environment free of prejudice, stigma and discrimination.
- Be made aware of the risks of exposure to HIV.
- Study, work and live in an environment in which exposure to HIV is minimized.
- Be provided with appropriate protective methods and post-exposure counseling, diagnosis, prevention and treatment, where applicable.
- Be made aware and given access to preventive, supportive care services available in the institution.
- Continue to study if they are deemed medically able and can meet the expected performance standards.
- Be granted executive approval for leave of absence from the University when the performance of the student, living with HIV

- and AIDS, affects his/her health or study output until deemed medically fit to continue their studies.
- Registration and studentship shall not be terminated on the grounds of their HIV status, unless the student is no longer physically or mentally fit to continue his/her studies and a supportive and safe learning environment in which persons with HIV and AIDS are accepted and not stigmatized.

4.3.2 Responsibilities of the authorities and members of university community

- The University shall ensure that HIV infected persons have a right to associate freely and shall campaign against discrimination of HIV Infected People and Counseling of those living with the virus. Since the scourge leads to decline in productivity, the University should support staff and students living with HIV/AIDS.
- The University Management shall encourage research on HIV and AIDS as well as assist researchers to obtain grants and aids for further research on HIV and AIDS.
- Persons living with HIV/AIDS should be assisted with procurement of drugs at subsidized rates and if possible free and make programmes that will ensure continuous monitoring and guarantee healthy habits of PLWHA shall be put in place and shall create HIV/AIDS Centre where staff and students can be counseled.
- The University shall make testing voluntary and free. Staff and students should be encouraged to submit themselves for testing. The status of every staff and student shall remain confidential to avoid stigmatization and discrimination.
- The University shall build the capacity of staff of the University Counseling Units to handle issues related to HIV and AIDS for staff and students. Finally, management shall support Staff and students' organizations that provide enlightenment, education and awareness on HIV/AIDS.

In the same way, members of the University community shall:

 Accept, support, and participate in Voluntary Counseling and Testing (VCT) services, respect the rights of, support and care for members of staff and students

- living with HIV and AIDS or those affected by HIV/AIDS.
- Know that everyone has an individual responsibility to protect herself/himself against HIV infection as well as know that members of the University community living with HIV/AIDS have a special obligation to ensure that they behave in such a way as to pose no threat of infection to any other person.
- Know that members of the University community have a responsibility not to discriminate against and stigmatize People living with HIV/AIDS and also know that unless medically justified, no student may use HIV as a reason for failing to perform work, complete assignments, attend lectures, field trips or write examinations.
- Know that unless medically justified, members of staff living with HIV must carry out their responsibilities and operate under the same performance criteria as other members of staff
- Members of the University Community living with HIV and AIDS have the responsibility of acting wisely, accepting counseling, keeping healthy and adhering to drug regime.

4.4 Provision of Preventive, Care and Support Services and Education at Campus

The majority of the University community falls within the most sexually active group of ages 15-49. This coupled with the fact that Dschang is a holiday resort for its nice climate and the University of Dschang is the only State university found in the Northwest and West provinces of Cameroon which have been reported to have the highest HIV/AIDS prevalence, makes the University community particularly vulnerable to HIV. It is vitally important therefore that increased Institutional and public awareness of HIV/AIDS in the University and the its environs focus not only on HIV prevention but also on providing counseling, care, treatment and other support services for the members of the University community who may be living with HIV/AIDS already [7, 8]. Aware that our community members will increase their confidence in programmes which combine HIV prevention and practical care; mindful of the fact that trusted Care and support counselors can be good influences on changing the University community attitudes and behaviors and; believing that our

combined prevention, care and counseling strategies will help to reduce STDs and the spread of HIV; University of Dschang will pursue a multi-pronged policy of providing preventive, care and supportive services and education detailed here under:

In Campus Health Services, the staff of the University Medical Centre and the HIV/AIDS Counseling and screening unit shall be trained in the comprehensive management of HIV/AIDS. The facilities available at the campus clinic shall be up-graded to cope with this demanding service. In Sensitization, the University shall provide HIV/AIDS information and education for students, staff and the rest of the neighborhood. This will be done through conducting workshops to create awareness of HIV/AIDS as a killer disease and a barrier to economic, social and national development; and the relationship of sexually transmitted diseases and HIV/AIDS. The articles on HIV/AIDS will be prepared for the University newsletters and radio, and relevant materials and other information will be posted at the various places on the campus. While in HIV/AIDS Prevention, the University is committed to playing an active role of HIV/AIDS prevention and mitigating the impact of HIV/AIDS among its community. Condom education, prevention and counseling will be part of the University's health care service. Skills on abstinence and general moral education will be given [11].

4.5 Integration of HIV/AIDS into Teaching, Research and Other University Activities

HIV/AIDS is not about to go away. We are indeed in for a long haul. Thus, to ensure continuity, cost-effectiveness and sustainability of our efforts; the University will pursue the following policies:

information. education and communication where a particular section in the HIV/AIDS Counseling and Screening Unit will be established where information on HIV/AIDS will be kept and members of the community will be encouraged to use it. All students and staff will be offered education that examines the relevance of HIV/AIDS to their own lives. Peer education programmes for staff and students on the campus will be strengthened and supported. The University will encourage students to continue to combat the spread of HIV/AIDS on the campus and in the community. Secondly, teaching and research in which the University shall incorporate the HIV/AIDS studies in the

academic programmes through regular seminar presentations on HIV/AIDS. Statistics on HIV/AIDS situation in the University and the neighboring community shall be collected regularly and made known to the stakeholders [1].

4.6 Advocacy, Networking and Collaboration with other Organiza-tions and the Community

Because HIV and AIDS are issues bigger than the University community can handle alone; and, because some of the causal factors impinging on the University are beyond the confines of the University as an Institution; Advocacy, Networking and collaboration have been deemed as vital elements in our University HIV/AIDS policy and will be actively pursued in the following manner.

4.6.1 Advocacy

The University shall continue to recognize all those members of the community who promote the prevention of the spread of HIV/AIDS. The University will link with national and international organizations to advocate against those socioeconomic reasons which put people at risk.

4.6.2 Networking and collaboration with the community around the university

The University and its neighborhood interact closely. Students and members of staff shall be encouraged to exchange information with the members of community around to promote the desired behavioral change. The people in the surrounding area will also be called upon to work together with the University to fight against the HIV/AIDS scourge. University of Dschang shall have an on-going crusade against HIV/AIDS.

4.7 Implementation Structures, Procedures, Monitoring and Review

Worldwide. effective implementation formulated policies depends largely on whether or not there are well thought out structures, mechanisms and procedures to help in the implementation, monitoring and evaluation process. The University community is keen on ensuring that the HIV/AIDS policy document is not safely stacked and forgotten on the shelves and in the archives. It has therefore, laid down implementations, monitoring and evaluation procedures that will be followed. The following mechanisms implementation, for periodic monitoring and reviews have been put in place:

4.7.1 Implementation, monitoring and evaluation

The Senior Executive of the University shall support and champion this policy. This shall include the Rector, Vice Rectors, Secretary General, Council Members, Friends of the University, Deans of Faculties, Heads of Department, the Students associations and all other sectors of the University Leadership. The University Doctor shall be required to submit quarterly reports about the counseling, testing and health care HIV/AIDS activities within the University and the surrounding community. The Deans will be required to submit periodic reports to the University Senate on the HIV/AIDS multidisciplinary programmes, teaching and research. The University shall appoint a shall Coordinator who oversee implementation, monitoring and evaluation of the policy. In terms of policy review, as HIV/AIDS is dynamic and policies addressing aspects of the scourge must be revised from time to time. The University will therefore periodically review this policy with contributions from all stake-holders.

5. CONCLUSION

This study has attempted to carry out a comprehensive analysis on HIV/AIDS Epidemic in University of Dschang, Cameroon with a particular focus on evidence and policy formulation. The main objective of the study is to analyze the evidences and policy formulation process of HIV/AIDS pandemic in the University of Dschang. The main objectives of the HIV and AIDS policy are: (I) to enhance the University's capacity to develop and communicate messages for scaling-up the desired behavior change; (2) to put in place HIV/AIDS sensitive procedures and practices, (3) to develop a working relationship between the University and the neighboring community utilizing the existing frameworks of government and non-governmental organizations and (4) to support the national efforts to develop and communicate HIV Prevention, AIDS Care and Advocacy messages among the youth in the formal education system and in the neighboring community.

As noted above, adopting a content analysis approach, the primary information was obtained through interviews of some of the staff of the University community such as the medical, administrative and support personnel as well as few students. The secondary information was gotten from documented literature in the school medical center, library, Ministry of Public Health

and the internet. It was also observed that, there are two-types of HIV: HIV- 1 and HIV- 2. HIV-1 is the most common type with different subtypes A, C. D and E. These are common in Africa and Asia. Subtype B is more common in Europe and North America. HIV-2 is mostly found in West Africa, it seems to be less aggressive than HIV-1. HIV-1 virus was discovered in 1979. It affects both young and old; adolescents, economically productive age group, sex workers, migrant workers like drivers, members of armed forces and police. It has affinity for T lymphocytes with a receptor called CD4: enters cells and multiply thereby destroying host cells and as well deplete immune cells. This virus is transmitted through body fluids such as blood and sexual fluids (sperms and semen). The 6 stages of HIV/AIDS developments are; HIV Infection, Window Period, Sero-conversion, Asymptomatic HIV Infection, Related Illnesses, and AIDS. In of prevention we recommended. faithfulness with sexual partner, condom use and abstinent.

The formulation of policy is a major step towards poverty reduction due to expenditure by HIV/AIDS patient to keep up themselves. This implies that, as the right and responsibilities of the University Community is strictly respected, there is a higher probability that HIV/AIDS pandemic will be eradicated in the University and its environs. Further, as HIV/AIDS is dynamic and policies addressing aspects of the scourge must be revised from time to time. The University will therefore periodically review this policy with contributions from all stake-holders.

CONSENT

It is not applicable.

ETHICAL APPROVAL

It is not applicable.

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COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

- UNESCO: Expanding the field of inquiry: A cross-country study of higher education Institutions' responses to HIV and AIDS; 2006.
- WHO: The impact of hiv and aids in cameroon through 2020; 2013.
 Available: http://data.unaids.org/pub/EPISIides/2009/2009 epiupdate core en.
- Booysen F, Geldenhuys J, Marinkov M. The Impact of HIV/AIDS on the South African economy: A review of current evidence. Paper prepared for TIPS/DPRU conference on 'The Challenge of Growth and Poverty; the South African economy since democracy'; 2003.
- Dawn C, Kathryn H, Maction K. A qualitative study of the impact of hiv/aids on agricultural households in Southeastern Uganda. International Journal Environ Res Public Health. 2009;6(8):2113–2138.
- 5. Agbor EE, Tambi DM. Determinants of the HIV/AIDS epidemics prevalence in Cameroon. International Journal of Research and Review. 2014:1(02):9-19.
- 6. Hamusimbi C, Mataa M, Jere G. Impact of HIV and AIDS on agriculture and food security in SADC: The case of Zambia; Food, Agriculture and Natural Resources Policy Analysis network; 2006.
- Fujimoto K. From women's college to work: Inter-organizational networks in the japanese female labor market. Soc. Sci. Res. 2005;34:651–681.
- FA0: The impact of HIV/AIDS on rural households and land issues in Southern and Northern Africa; Economic and Social Development Department, Food and Agricultuiral Organisation, corporate document repository; 2002.
- Glazer B, Strauss A. The discovery of grounded theory chicago: aldine; 1967.
- Joesch J. Paid leave and the timing of women's employment before and after birth. Journal of Marriage and the Family; 1997;59:1008-1021.
- Tambi DM, Njong AM, Baye MF. Linking child health, maternal labour force participation and household asset endowments. Russian Journal of

- Agricultural and Socio-economic Sciences. RJOAS. 2014;10(34).
- 12. Dow W. Flexible discrete choice demand models consistent with utility maximization:

An application to health care demand. American Journal of Agricultural Economics. 1999;81(3):680-685.

APPENDIX

Summary Description of Dschang University

The University of Dschang was created on January 19, 1993. It inherited the site the resources and facilities of former Dschang University Centre. The University is one of the six state universities with the main campus in the town of Dschang, situated on the western highlands of Cameroon.

In order to contribute to higher training in the several domains of national life, the University of Dschang has seven establishments:

- Faculty of Arts, Letters and Social Sciences
- Faculty of Economics and Management
- Faculty of Law and Political Science
- Faculty of Science
- Faculty of Agronomy and Agricultural Sciences
- Fotso Victor University College of Technology
- Institute of Fine Arts.

The five faculties are found in the main campus while Fotso Victor University College of Technology and Institute of Fine Arts are found in the towns of Bandjoun and Foumban respectively.

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