

EMPIRICAL EVIDENCE OF THE SPREAD OF HIV/AIDS IN A RURAL AREA IN CAMEROON (AFRICA)

by

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INTRODUCTION

HIV/AIDS is a relatively new epidemic in Africa, compared to other sexually transmitted diseases (STDs) such as gonorrhoea and syphilis, and other diseases, even malaria. Therefore, people who have not been exposed to the dynamics of AIDS are more often likely to qualify the epidemic as a myth, an imaginary phantom or manufactured illness. However, the growing literature on the disease indicates that AIDS is a world wide health problem and that it is spreading perhaps faster than any other epidemic in human history.

As a result, the Acquired Immune-Deficiency- Syndrome (AIDS) in Africa and in other parts of the world has received the attention of medical specialists, social scientists and policy makers. Whereas several countries had admitted that AIDS is a public health and economic problem in their societies, the Cameroon government almost categorically declared only a few years ago that AIDS was not a problem in the country. Although the disease might not have reached the dimensions reported for other African countries, Cameroon health officials and policy-makers have finally come to acknowledge the presence and growing prevalence of HIV/AIDS in the country.

Fear, Ignorance and Prejudice

Fear, ignorance and prejudice rather than humanity, courage, rationality and objectivity have tended to characterize the responses of various countries to the AIDS epidemic. Thus, the first indication announcing that a new disease had emerged in the World was reported with prejudice and fear in the Morbidity and Mortality Weekly Report (MMWR), a publication of the Atlanta-Georgia (USA) based Center for Disease Control (CDC) which collects statistics on the incidence of diseases throughout the United States of America.

They reported the occurrence of a rare form of pneumonia, *pneumocystis carinii*, in five homosexual men in three different hospitals in Los Angeles (Chirimuuta & Chirimuuta, 1989:3). Perhaps out of ignorance or in defense of national or regional pride, the CDC reported in August 1981 that a total of 108 cases of pneumocystis carinii pneumonia (PCP) cases had been documented. Also reported was the incidence of a rare form of cancer, Kaposi's sarcoma (KS) said to have been noticed in 1976. The report stated that:

The majority of the... cases of KS and/or PCP have occurred in whitemen.

Patients ranged from 15-52 years; over 95% were men 25-49 years... and the majority of cases have been reported from New York and California" (Freidman et al., 1981:409-410).

The case of prejudice involving the AIDS epidemic is represented by the perverse belief that AIDS originated in Africa. In her article titled "The AIDS Epidemic: Multidisciplinary Trouble", June Osborn (1986) wrote that,

Although the virus causing AIDS is surely *American by Adoption, not by birth* (emphasis mine), the most likely location of transfer (of the AIDS virus) to the human species is in Central Africa (Osborn, 1986:81).

Although interest grew in an un-named country in Central Africa as a the "probable source of AIDS", a Morbidity and Mortality Weekly Report on AIDS amongst Haitians in 1982 relocated the source of the epidemic to Haitian immigrants in the United States of America. This is how the story was crafted:

Of the 700 reported cases of AIDS in the United States at that time, 34 were Haitian immigrants (i.e. about 5%. a more detailed account of ten of these Haitians, all of whom were resident in the United States seemed to give credence to the Haitian connection for AIDS.

Often, moralistic judgements see the AIDS epidemic as God's wrath visited on the Sodom and Gomorra of sinners such as the homosexual communities of San Francisco, Los Angeles, Manhattan and the other cities of the world. Others see it as the "... witnessing ... in the form of a

communicable disorder, a fulfilment of St. Paul's pronouncement that AIDS is a due penalty for the AIDS patient's error (Altman, 1986:25).

In the preceding paragraphs, I have tried to show that even if the quality of the World Data on HIV/AIDS is improving in terms of validity and reliability, many countries still tend to withhold information on the epidemic for economic and political reasons. For example, one of the reasons why the Cameroonian authorities' tried (unsuccessfully) to downplay the prevalence of HIV/AIDS in the country was the fear that negative publicity would jeopardize tourism and the national image. As a result, many health providers in Cameroon either did not seriously diagnose the problem or they simply ignored the presence of the disease. Now that the clouds of fear and ignorance have been cleared, many health providers in the public and private sectors are now facing the harsh realities of HIV/AIDS and are confronting the problem as they should.

It is evident from the brief conceptual and analytical beginnings of AIDS that accusations and counter-accusations of the source of the disease have been at the centre of early debates on HIV/AIDS. In Cameroon, even as world data on AIDS unfold, there are still people who believe that HIV/AIDS is only an imaginary disease. Cynical statements from some of the educated and illiterate people we talked to in some villages in the course of this study suggest that they still think that HIV/AIDS is "just a myth", "an urban health or woman's problem". Others even say, ironically, that the whole business about AIDS "...is just another trick the whiteman has pulled out of his hat *again (emphasis mine)* to force Africans to practice birth control" (one respondent's reaction).

Purpose and Objective of the Study

This study was undertaken by the author to add more facts to the tons of evidence that have been accumulated over the past ten years about HIV/AIDS. These data provide further empirical evidence within the Cameroon context to the effect that HIV/AIDS is not a myth but fact. The results of the study have even started to effect opinion shifts on the phenomenon as preliminary results were presented in the hospitals where the data were collected and in the villages of some of the respondents involved in the study. It is now obvious in the minds of many of the people who were in doubt in study site, that AIDS is very far

from being a myth. *It is a reality.* The slides and photographs that accompanied community presentations helped to drive the message home.

This paper seeks to achieve four things: i) To demonstrate, using the old extension principle that "seeing is believing" that HIV/AIDS is here and spreading in rural Cameroon; ii) To provide empirical evidence in support of this assertion; iii) To contribute to current scientific knowledge of the extent and scope of the problem from a country perspective; iv) As an exploratory study, this paper also seeks to provide a basis for further research on the Methodology and Theory of HIV/AIDS research in Cameroon so that structural and ideational variables can be used to carry out comparative studies on the causes, trends, scope and consequences of HIV/AIDS in society.

Therefore, whether the AIDS virus originated in the United States, Haiti or somewhere in Central Africa as earlier writers theorized is irrelevant. What is important for humanity today is to find out what is wrong and not who is wrong, and to fight against the force of fear and prejudice in the resolution of the problems of our time.

THE RESEARCH SITE

The data presented in this paper are derived predominantly from empirical secondary data collected and stored in the laboratory department of a prominent local hospital in Cameroon. Some information was obtained in *casual conversations* with some of the patients at the hospital; but this information is not included in the present analysis. The hospital started keeping systematic records of HIV- positive cases in 1989. The data cover the period from June 1989 to June 1993. The hospital is located in a rural area 35 kilometers from the nearest urban centre at an altitude of 1,750 metres above sea level. Access to the hospital is on a dirt road which is very difficult in the rainy season and dusty in the dry season. The hospital is reputed for excellent clinical care.

METHODOLOGY

The research approach is a cross-sectional study of HIV/AIDS patients identified at the hospital through its laboratory screening exercise. As a

routine at the hospital, all patients who are sent to the laboratory for whatever tests must be administered the HIV/AIDS screening test as well. Thus, the records consulted at the hospital included both reactive and non-reactive data entries. The analysis carried out in this paper is only for the reactive or HIV-positive cases.

The data comes from three groups of persons: i) in-patients admitted to the hospital for various illnesses; ii) out-patients who went to the hospital for consultations iii) volunteer blood donors who had reported to the hospital to donate blood to its blood bank or for a relative or friend.

HIV checking was by the DUPONT HIVCHEK method for HIV I and HIV 2. These are initial tests, as confirmatory testing is further carried out on every reactive case at a Centre in Yaounde, the nation's capital. Yaounde is 450 kilometres away from the research location.

LITERATURE REVIEW

An immense amount of literature has been gathered, analyzed and presented on HIV/AIDS since the mid-1980s (Touré, 1995). Social Scientists, demographers, economists and policy makers are showing great interest in the dynamics of the epidemic as demonstrated by the wave of interdisciplinary and intradisciplinary studies that have been carried out on the problem. Although several studies have been conducted on the topic, no major global study has been conducted to sharpen better understanding of the dynamics of the AIDS Pandora's box apart from the CACP studies conducted by WHO within the framework of the GPA-WHO Programme (Touré, 1995:130).

Another problem with the data on HIV/AIDS is that of validity and reliability. While under-reporting of HIV/AIDS cases is a major problem, most data are based on estimates and projections. For instance, the United Nations reported that there were 8 million HIV cases in 1990 (UN, 1994). Of this number, 50% of them were to be found in Africa, an increase of 35% from the 1989 *estimates*.

In Sub-Saharan Africa, approximately 1% (4.5 million people), 15 years and older are considered HIV-positive. The World Health Organization projects that 10 million children in Sub-Saharan Africa will be orphaned

by the AIDS epidemic by the year 2000 particularly in Central, East and West Africa, (Touré, 1995).

As the number of HIV/AIDS victims grows, speculation is rife on the several causes, the etiology and diffusion of AIDS across cultures and various social groups. Although the literature on AIDS states that the major routes for the transmission of the disease is by heterosexual and homosexual activity and skin piercing (Nyamongo, 1995:45), heterosexual contact seems to be the dominant mode of transmission in Africa (Piot and Carael, 1988).

Cultural and Economic Variables at the centre of causation

Cultural and economic explanations seem to be at the centre of structural causation. The value system of the institutions of marriage and the family in Africa have been cited as a driving force for the spread of AIDS in Africa. Clumeck, (1989, as cited by Touré, 1995) states that the African cultural pattern of inheritance which, in many societies compels one to marry one's own diseased brother's wife or even father's wife or wives (provided they are younger than the heir's mother), tends to encourage sexual promiscuity.

Since inheritance laws and religion (in the case of Islam) positively sanction multiple partners, it is to be expected that sexual infidelity will be rife in Africa thus leading to heterosexual transmission of HIV/AIDS than other routes of infection. Thus, while polygyny may have the manifest function of ensuring that more women have culturally sanctioned legal access to a husband, it has the latent dysfunction of accelerating the spread of HIV/AIDS (Touré, 1995; Caldwell, 1993; Nyamongo, 1995).

Economic influences on the spread of AIDS are often lodged in explanations of economic deprivation. Poverty, unemployment and the structural inequality which came on the heels of the so-called "economic crisis" in Cameroon have been blamed for the spread of HIV/AIDS (Nji, 1994). Not only is the lack of opportunities to satisfy basic needs favourable to the spread of HIV/AIDS, the work that people do and sex roles and gender are considered to play an important role in the adoption of sexual behaviours that are conducive to the diffusion of HIV/AIDS.

Thus, AIDS is seen as a threat and a trap to teenagers, commercial sex workers, highly mobile professionals such as truckers and traveling sales persons and "single women seeking to support themselves and secure protection in strife-torn informal settlements and refugee camps", (Preston-Whyte, 1996:113).

THE FINDINGS

Out of 356 lab examinations in 1988/89, thirty-eight cases (10.7%) were identified as HIV-positive. However, in 1989/90 the number of examinations jumped to 460 with only 11 (2.4%) HIV-positive. No explanation can be provided for this sharp drop except that the medical officer in-charge of the hospital had granted an interview to the local radio station in which he mentioned that a number of HIV/AIDS cases had been identified at his hospital.

The reaction from the public was that of fear and shame. It is possible that persons who were suspected to have been infected with the HIV virus might not have considered consulting at the hospital again for fear of exposure.

This finding is consistent with the theory of "avoiding coping" advanced by Stein (1996), in his study of 30 HIV-positive patients at the Johannesburg General Hospital HIV Outpatient Clinic. Patients tended to see or present themselves as "normal" rather than as infected persons. In Cameroon, HIV/AIDS patients are highly mobile health-seekers. They tend to change hospitals more regularly than other types of patients especially within the early stages of the infection.

In a follow-up *on-going* study at the same hospital, where the data for the present paper were collected, medical authorities there told this researcher that as the HIV-positive cases drop in one hospital in the area, the figures rise in another hospital because the patients soon change hospitals as soon as they are diagnosed seropositive and establish acquaintances in the first health facility. Their goal is always to conceal their identity and pretend to be enjoying good health particular in the early stages of the infection when much physical stress is not observable.

HIV INCIDENCE AMONG IN-PATIENTS AND BLOOD DONORS

The data on figure 1. show that the rate of infection increased considerably between 1990/91 (around the time the hospital started its first AIDS screening tests) and 1992/93, the year for which the latest data were collected. A high rate of infection was reported among blood donors, persons who were not seen to be apparently well at the time they went into hospital to donate blood. In another analysis of available data, 43.9% of all HIV-positive cases (male and female) were blood donors in 1990/91.

The donor HIV-positive group represents 26.3% in 1991/92 and 14.8% in 1992/93. This shows a downward trend in this group for the two periods, although the trend in the patient positive group was on the increase. In 1990/91, 56.1% of all positive (reactive) cases came to the hospital either as IN or OUT-patients. This number steadily increased to 73.7% in 1991/92 and 85.2% in 1992/93.

The trend observed at this hospital is consistent with the conclusion that the HIV/AIDS epidemic is not shrinking but spreading, and spreading fast in the African sub-region. For instance, Niang, (1991) reported in a study of HIV prevalence among pregnant women in Lilongwe, capital of the Southern African country of Malawi that the number of infections rose from 3% in 1986 to 18% in 1989--a 600% increase in 3 years! In North Uganda, HIV-positive cases rose from 9% in 1985 to 13.2% in 1989 (Niang, 1991).

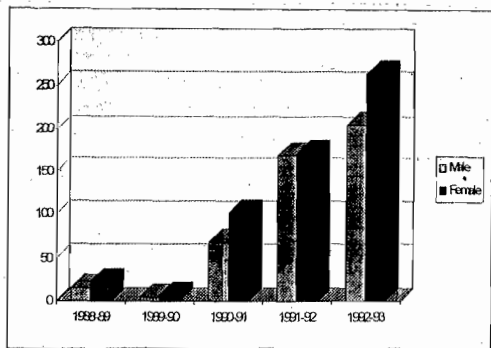


Figure 1: Number of reactive cases by year (1989 -1993)

Source: Hospital Lab. Records

The present findings also confirm the results of other researchers who suggest that compulsory screening for HIV along with routine clinical exams for patients provides a good opportunity to identify HIV-positive cases rather than wait until the patient shows visible signs of ailment. For instance, in Kigali, 26.7% of women who went for consultation were found HIV-positive (Raynaut and Muhongayiré, 1993). And in Abidjan, Côte d'Ivoire, 40% of IN-Patients in a number of health facilities were HIV-positives (De Cock et. al, as cited by Touré, 1995:132).

GENDER AND AIDS

Gender was a key variable in the data collected at this hospital in all cases. Between 1989 and 1993, a total of 1,689 persons had been screened at the hospital for HIV/AIDS. Of this number, 7.7% of the HIV-positive cases were male and 9.3% female (fig. 2). The figures for 1991/92 were 10.29% female and 12.2% male. Fig. 8 further shows that the rate of HIV-infection for both sexes steadily increased between 1990 through 1993 with almost 300% increase for males and 260% for females. It should also be noted that laboratory/clinical examinations at the hospital declined from 1334 cases for the two years from 1989-91 (June) to 923 from July 1991 to June 1993. However, the number of HIV/AIDS cases did not decline proportionately to the trends in clinical examination requests.

The decline generally reflected a downward trend in hospital consultations for all departments at the hospital due primarily to a sharp drop in the purchasing power of Cameroonians. As Nji (1994) reports, the route to medical care had changed due to poverty. Respondents interviewed in a nation-wide study reported that before 1987, they would move from the home directly to the hospital when ill. But from 1990, the route is labyrinthine: Illness-->self medication-->quack doctor/street vendor-->faith/traditional healer-->hospital (as a last resort). Respondents reported that the new behaviour was their coping mechanism for lack of money for consultation fees and medication at the hospital.

Although from our analysis of medical records more males than females were examined at the hospital from 1989 to 1993, 7.7% of the HIV-positive health-seekers are male compared to 9.3% female (fig. 2).

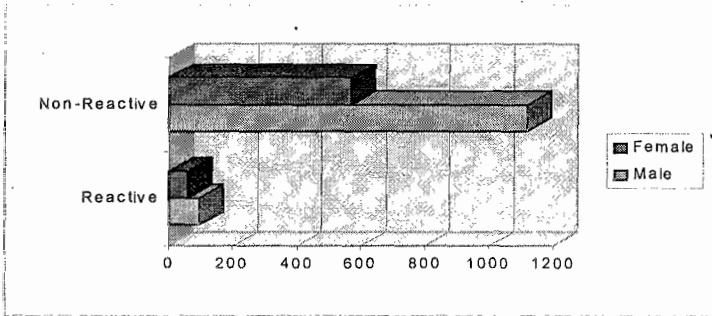


Figure 2: HIV-Positive cases by sex from 1989 - 1993

Source: Hospital Lab. Records

The variation in seropositivity between male and female cases may be attributable to gender biases in the socio-cultural system of the Cameroon society. It has been suggested earlier that the increasing cost of medical care and the double effects of poverty impact women more than men (Nji, 1994; Preston-Whyte, 1996).

The case for relative deprivation of women and cultural biases in the health care system is hereby proffered on the recognition that the Cameroonian woman is less likely to be gainfully employed than men; that women tend to have a higher dependency ratio on men for financial and material support, and that many women still need the green light from their husbands or other male authority in the household before they engage in activities that require substantial financial outlays such as health (Nji, 1997).

These socio-cultural barriers suggest that in the case of HIV/AIDS diagnosis, women may have fewer opportunities to be screened than men. This in part may explain the lower percentage of female cases examined during the period compared to male cases in spite of their numerical strength in the overall Cameroon population (51% female). Besides, most medical research indicates that women have a higher aversion to health risks than men particularly as concerns STDs and pregnancy-related infections, (Nji, 1998).

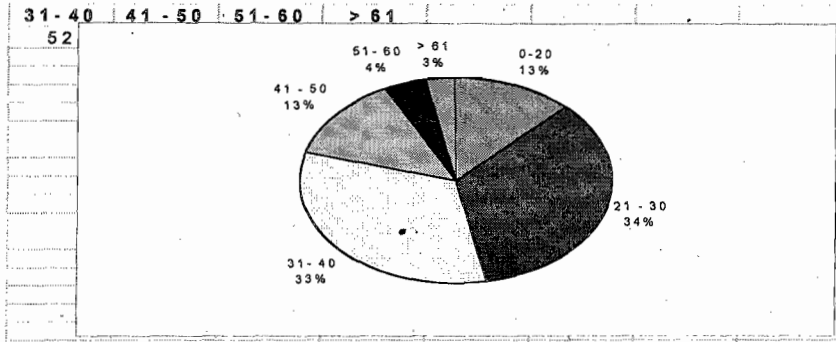


Figure 3: HIV-Positive cases by age group (1989 - 1993)

Source: Hospital Records

THE AGE FACTOR

The data for positive cases for the four years under review analyzed by age shows that 50% of the HIV patients are below age 30 and 31% between 31 and 40 years.

As figure 3 indicates, 81% of all HIV reactive cases identified in this study are in their reproductive years. If we add the age group of 41-50, the proportion of HIV-infected cases of persons with great economic and social potential in this study jumps to 93%! This is consistent with the conclusions of other researchers (e.g. Nyamongo, 1995:45) that "...AIDS predominantly affects young and middle-aged people, those in their prime productive years", and that "among the African adult population, the largest amount of infected people are between 16 and 29 years (World Bank, 1989).

The percent infection is equally shared between male and female cases in the 21-30 years bracket. The same relationship between age and HIV is reported world-wide. In Uganda and Tanzania for example, Niang (1991) reports that 41% of adults aged 25-34 in a rural community were found to be HIV-positive. Also, Nyamongo, (1995:45) proffers that in Africa, men and women seem to have an equal likelihood of infection -- perhaps because of the higher preference for heterosexual relationships rather than other forms of coitus.

MARITAL STATUS

The data show that 68% of the HIV-positive cases were married at the time of study compared to 30% who were never married (Fig. 4). Unfortunately, less than 10% of the married seropositives were willing to bring their spouses to the hospital for diagnosis and counselling.

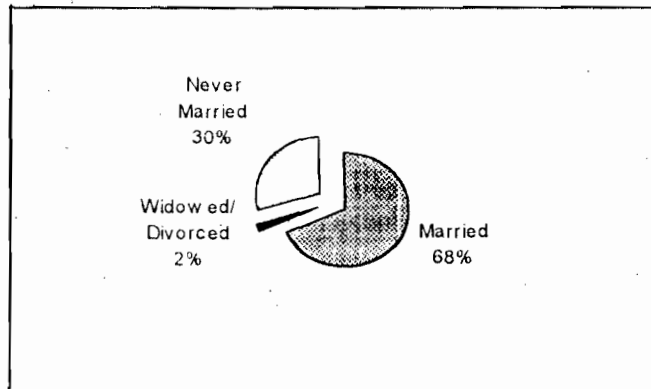


Figure 4: HIV-Positive cases by Marital Status

Source: Hospital Records

On the contrary, persons who are informed that they are HIV-positive work hard to conceal the news from everyone around them including even their spouses. The case was reported at the hospital of an HIV-positive patient who escaped from the hospital, abandoning his prescription when he was advised to bring his two wives for examination as well. Another case was reported of a man who, after he was diagnosed HIV-positive, decided to hang around the commercial centre of the local village to get other people "on board" because, in his words, he "would not die alone".

The prevalence of polygyny (marriage to more than one wife) seems to put most women in that form of marriage at risk. This raises concern for researchers of HIV/AIDS and other STDs because cultural preferences for polygynous unions remain determinant in the African value system. Pebley and Mbugua state that "the proportion of women married into polygynous unions ranged from 9% in Lesotho to 48% in Senegal in 1979" (Pebley and Mbugua, 1989, as cited by Bangha, 1996:46).

Other researchers note that polygyny has proven more durable in Sub-Saharan Africa than had generally been anticipated (Romaniuc, 1988; Pison, 1978) although, however, "younger generations are more likely to reject polygyny", (Bangha, 1996:48). In Cameroon, evidence from the Demographic and Health Survey (HS) conducted in 1991 shows that polygyny is still a common form of marriage for 38.6% of women surveyed, a rate that still compares favourably with the 1978 polygyny rate of 38.8% for Cameroon.

The implications of polygynous marriage arrangements and the dominance of male decision-making on most subjects in the home including health would suggest the vulnerability of women to HIV/AIDS and other STDs. The sub-cultures of most ethnic groups in Cameroon bestows more sexual freedoms upon men than women including the license to have multiple sexual relationships outside of marriage. A friend from one of the tribes in Cameroon once told me that among the people of their tribe, the arrival of a new-born baby in the family is license for the man "to go out and have fun with other women".

Socio-economic factors (Nji, 1997) conspire with the cultural factors to make the Cameroonian women more vulnerable to HIV/AIDS and other STDs. For example,

- * the economic recession in the country which has depressed prices, curtailed jobs and employment opportunities and reduced the economic power of many social groups especially women;
- * women who do not work outside the home have no source of income for health care and personal needs. This has led to widespread prostitution even among married working women;
- * the early sex among girls and sexual promiscuity that seem to bear the tacit approval of the dominant cultural system is determinant in high rates of seropositivity among female patients;
- * women are biologically more vulnerable than men to HIV- infection. Studies have found that male-female transmission of STDs appears to be 2 to 4 times more efficient than female to male transmission;
- * cultural barriers to female assertiveness precludes women from negotiating safer sex;

The obvious power differential between men and women is compounded by the fact that older men interested in marrying a second, third or nth wife always go for much younger women. In a situation of multiple wives, it is the one with the most economic or social clout that receives the attention and financial support of her husband.

These findings also bring out evidence that seems to run counter to conventional conclusions in HIV/AIDS research which often shows single women as most likely carriers of the HIV virus than married women. Perhaps the peculiarity of the context of the study has something to do with the dominant representation of women in union in the study. Since the hospital is located in a rural area, and assuming that rural residents tend to be married than urban residents, it may be conjectured that structural effects may have accounted for more representation of married women in the study.

HIV/AIDS AND OCCUPATION

Figure 5 shows that the largest group (28%) of the HIV/AIDS patients in this study are working in agriculture or allied fields. This is understandable considering that the hospital is located in an exclusively rural environment. But it is not quite so when we recall that HIV/AIDS was previously perceived (erroneously) as an urban health problem. Thus, the diffusion of the AIDS virus into the rural areas of Cameroon is empirically established.

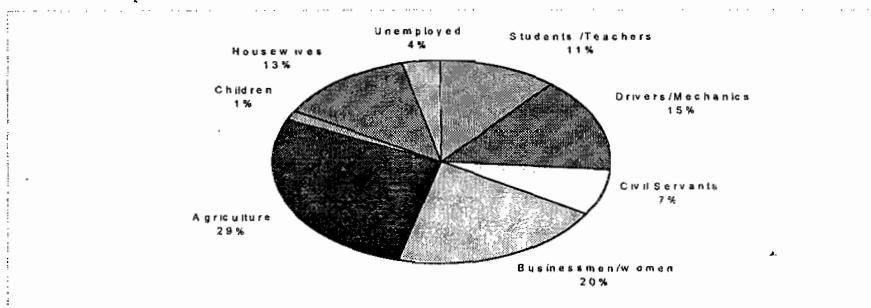


Figure 5: HIV-positive cases by Occupation

Source: Hospital Records

The next concentration of HIV cases in this study (20%) is made up of businessmen and women including tailors, general merchandisers and market women retailers. Housewives make up 19% of the cases by occupation while drivers and mechanics constitute 15% of AIDS patients studied. Other occupational groups represented in the study are civil servants (most of whom are members of the armed forces), students and health professionals. Among the student/teachers group, several of the patients are below 20, and all members in this group are below 40.

Two cases of children (one 4 years old and the other 11) are pathetic. It was not understood during the study whether the infections occurred at birth perhaps for the 4-year-old or later for the 11-year-old child. The parents of both children were not available for interview during the study. Prostitutes (male and female) are among the occupational group with a high probability of HIV/AIDS infection. In Cameroon, the number of commercial sex workers is estimated to have risen as a result of the economic problems in the country. Even though prostitution is an urban phenomenon, rural prostitutes are not hard to find in communities affected by the multiple effects of high economic depression, greater human contact and moral decadence.

This is consistent with the findings that AIDS patients in Kenya were contracting AIDS from areas where there was a great contact with foreigners such as tourists. For example, Kreiss et al., (1986 as cited by Touré, 1995) found that as much as 61% of prostitutes in Nairobi were HIV-positive. The findings here about business people is in conformity with current evidence that salesmen and travelers are more likely to spread HIV/AIDS than people who spend more time in a localized work environment.

AIDS IN THE VILLAGE?

Yes! Just as Vidal, (1993) estimates that in 1989, about 5% of rural residents in Côte d'Ivoire were HIV-positive, the epidemic can no longer be considered to be location specific. Rather, it should be expected wherever sexually active people live and emit behaviours that are prone to the spread of HIV/AIDS.

The data for the present study were analyzed to determine the incidence of the disease in the villages in the administrative jurisdiction of the hospital. For purposes of confidentiality, we will cluster the villages into three areas which we will call Area 1, Area 2 and Area 3. Area 1 includes all villages within a 10-kilometre radius from the hospital. Area 2 covers all villages within a 15-20-kilometre radius while Area 3 includes all other villages within the administrative jurisdiction in which the hospital is located and that fall within a radius of more than 20 kilometres.

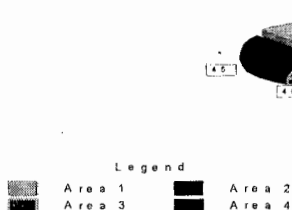


Fig. 6. Distribution of cases by geographical area

Source: Hospital Records

Figure 6 shows that 34% of the cases come from Area 1. Area 2 has the second largest concentration of HIV/AIDS cases identified in this study while Area 3 accounts for 10% of the cases. The hospital operates satellite health posts which are available for counselling if the resources were available.

AIDS BY PROVINCE

Efforts were made to segregate the cases by province of origin and residence. This was not entirely successful because of incomplete or missing data. The data show that 74% of the cases came from the Province in which the hospital is located. Six percent of the cases came from a neighbouring province about 100 kilometres from the hospital but 12% of the patients were from a far-off province about 400 kilometres from the hospital.

This pattern of hospital attendance is expected, in view of the high costs of transportation which preclude patients from seeking medical assistance far away from their home or residence. The high costs of

transportation are often offset by the desire to be buried in one's village of birth. Thus, persons who become very ill and are on the verge of dying tend to seek medical assistance closer to their villages so that in the event of death, transportation and funeral costs will be reduced. This explains perhaps why 77% of all the cases were natives of the general administrative jurisdiction of the hospital. Twenty-two percent came from the administrative division next door and only 1% from towns much further way.

Funeral expenses are high in Cameroon because of a culture of consumption that places emphasis on heavy and elaborate receptions at funerals. Apart from the reception at the place of residence or work of the diseased, custom requires that most people be buried in the village of their birth upon their passing. Persons who die outside their village are often transported over long distances at high financial and social cost to the family. Often, not only the corpse is transported to its final destination; streams of mourners are always on hand to convey the body "home", i.e. the village of the diseased. This is a very expensive undertaking; so HIV/AIDS patients take great precaution by moving closer to their graves when they still have the time to do so.

The presence of patients from far away stations in this rural hospital seems to confirm the fact that HIV/AIDS patients seek and want to maintain anonymity as best they can. Perhaps in addition to Stein's (1996) concept of "coping avoidance", persons infected with HIV change hospitals if the diagnoses will be different (non-reactive to the HIV tests). This attitude was reported in casual conversations with some of the patients at the local hospital.

DISCUSSION

The Macro Effects of HIV/AIDS

Three main factors support the argument that HIV/AIDS has negative macro-economic consequences on the society. First, the lethal character of the disease. As a terminal ailment, AIDS leaves its scars on families and entire communities. Second, the alarming and growing prevalence of the epidemic threatens the very survival of the social system in which the disease spreads. Third, the incidence of HIV/AIDS on the economically productive segment of the population.

The Population Reference Bureau, (1996) estimates that 5.8% of the Cameroon population was infected with HIV in 1994, the majority of them are in their reproductive years. The present study confirms this trend as 80% of the HIV-infected cases were between ages 11 and 40, and 93% between 1 and 50 years. Facts such as these are bound to send chills down one's spine as one recognizes that 32% of the Cameroon population in 1996 fell in the 10-24 years age bracket.

If this trend goes unchecked, the epidemic could reduce Cameroon's working-age population and depress per capita income levels in no too distant future. The sector to be most hit will be the agricultural and manufacturing sectors which are the pivot and bed rock of the economy of any developing nation. The potential rise in morbidity due to the HIV/AIDS epidemic in Cameroon will reduce labour productivity and increase the social welfare responsibilities of surviving families and the State. The orphans to be left behind by diseased AIDS victims will be one of the nation's burdens in addition to an external debt that has climbed from 2,513 million dollars in 1980 to 6,601 million dollars US in 1993 (World Development Report, 1995:200).

These effects will in turn affect savings and reduce resources available for education, health, and investment. Because illness increases uncertainties, psychological stress and strain on individuals and the family, the overall productive capacity of communities visited by the AIDS virus is likely to decrease. The effect of AIDS on savings will negate savings, the potential benefits of poverty reduction initiatives, incomes and the sustainability of various development programs. The impact on rural areas will be to stifle rural development and virtually incapacitate agricultural production and the Agenda for sustainable development.

These negative effects are already being felt. Although no current information is available on AIDS-related deaths in Cameroon, the wave of deaths that is currently sweeping across the country is quite alarming and portends an unhopeful future for Cameroon's economy. HIV/AIDS will put a dent on the Cameroon agricultural system as farming populations become reduced to ailing and unproductive populations. Population growth rates, life expectancy, the composition of the age structure and the overall capacity of the communities will be weakened

by the debilitating disease. Food insecurity is a logical outcome of the HIV/AIDS fiasco.

Implications for Research

The theoretical void and lack of a vaccine for AIDS at the early stages of the onset of the disease create both a methodological and conceptual problem. This is the kind of situation created by a crisis whereby scientists and professionals may be caught off-guard by totally unpredicted natural or man-made catastrophes. The identification of HIV seropositives through routine clinical exams brings back the saliency of the *serendipity pattern* in research. By this construct, a researcher may, per chance, stumble on results which were entirely unplanned, unexpected, yet useful.

The concept of "avoidance coping" advanced by Stein (1996), reminds me of the gentleman who was identified HIV-positive and asked to bring his spouses for screening. But he went for good. Like this gentleman, most HIV-infected persons pretend or try to live a normal sexual life irrespective of the risks to other members of society. And as it has been found, the strategy of "coping avoidance" can be seen to fly in the face of HIV/AIDS counseling theory as "...counseling may often be a place of struggle until counselor and client develop a shared understanding of what it means to cope with HIV", (Stein, 1996:67).

Furthermore, people diagnosed for HIV/AIDS face the reality of what Stein (1996:71) describes as a "stigmatized and disabled social identity" created by the distressing knowledge of one rejection by significant others in a shared human environment on grounds of pathological impairments. The shame which results from social rejection appears to be the greatest catastrophe to the Self.

This revelation paves the way for HIV/AIDS research that should integrate other variables to include relevant theories in sociology, social psychology and economics in addition to other theories of human behaviour and social organization (anthropology, political science etc.)

Implications for Social/Health Policy

The hospital is located in a rural area with a very poor road network. There is no telephone and communication with what is apparently an

excellent health care institution (alt. 1,750 metres) is extremely difficult. The communication problem affects the health delivery system first by the failure of infrastructure, and secondly by the hardships faced by patients. Most of them get to the hospital, if they do get there, on human or horse back. If they are lucky to find one of the old rugged four-wheel drive vehicles that ply the road, the patients might peter out before reaching the hospital.

Because of the communication bottlenecks also, it takes 3-4 months before the results of confirmation tests are received from Yaounde. Usually, the first screening tests are done and the results sent to Yaounde for confirmation. Such long delays create problems for both the AIDS Team and the Patients. The team is unable to follow up its work on a systematic basis and most patients either leave the hospital or die before the confirmation tests are received. Under these circumstances, AIDS counseling does not really begin or hold much ground until the results are confirmed.

The AIDS team at the research site stated with disappointment that reactive blood donors refuse to yield to AIDS counseling because they do not believe the lab results. Considerable work in education needs to be done. In addition to the problem of ignorance or lack of education is that of the cost of the HIV test itself. At the time of the study, the test kit was said to cost 5,000 CFA (about \$US10 prior to devaluation of the CFA).

The Aids team felt that the cost of the test was too high for the majority of the patients, most of whom cannot even afford the cost of basic first aid at the hospital. This calls for the need to make cheaper and more reliable tests available, particularly in poor countries. It would also be helpful to have a facility at the site of this study for immediate confirmation of reactive test results.

The AIDS Team at the study site and those in many of the other hospitals in the country are working on bare bone budgets. Lack of funds and transportation for diagnosis, education, counseling and logistic support to disseminate the results of its work are among the most urgent problems that need solution.

CONCLUSIONS AND RECOMMENDATIONS

The empirical evidence provided by this exploratory study shows that HIV/AIDS in the rural areas of Cameroon is not a myth, but reality. Although AIDS is considered to be an urban social problem, the data show that the epidemic is wasting no time in crossing the urban-rural corridor. Also WHO reports intimating that the highest rates of STDs occur among 20-24 year-olds followed by teens aged 15-19 draws the attention of Cameroon's health policy-makers and providers to reassess its health care system, strategies, focus and policies.

Such an assessment will ensure that needed facilities are made available to those who need them most--the HIV/AIDS victims. Medical institutions in Cameroon have several handicaps. From the lack of adequate medical infrastructure to access roads to health facilities, limited medicines and supplies, inadequate and obsolete equipment and low staff morale.

Health establishments in rural areas are particularly disadvantaged by difficult access, communication bottlenecks and blatant neglect by the urban power elite. Ironically, it is in the rural areas that the future of Cameroon really lies where more than 60 % of the population live and work to provide food and fibre to the society. Therefore, any efforts to address the HIV/AIDS epidemic in Cameroon promptly and with vision and focus will guarantee the tomorrow of today's generations.

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