

Attitude towards HIV/AIDS among Private Plantation Workers in the Southwest Region of Cameroon

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KEYWORDS HIV/AIDS. Epidemic. Stigma. Discrimination. Productivity

ABSTRACT The study was carried out in private plantations within the southwest region of Cameroon. A survey method was adopted to collect data for this study using simple random sampling technique. Pre-tested questionnaire/structured interview schedule and focus group discussion were used to collect data. The data was analyzed using regression analysis, Analysis of variance (ANOVA) and student's t-test. A total of 86 respondents were used for the study. The results show that although there was a high positive attitude among respondents, HIV/AIDS-related stigma and discrimination still existed in the plantations. Stigmatization and discrimination would have a severe negative impact on the productivity of affected workers hence, intervention programmes aimed at eliminating stigmatization and other discriminatory attitudes such as education of plantation workers against blaming affected members should be carried out by the plantation administration.

INTRODUCTION

Right from the beginning, the HIV/AIDS epidemic has been accompanied by an epidemic of fear, ignorance, and denial, leading to stigmatization of and discrimination against people living with HIV/AIDS (PLWHA) and their family member (International Center for Research on Women 2002). HIV/AIDS –related stigma and the resulting discriminatory acts create circumstances that fuel the spread of HIV (Busza 2001). The fear of being identified with HIV prevents people from learning their sero-status, changing unsafe behavior, and caring for people living with HIV/AIDS. A study in Botswana and Zambia found that stigma against HIV-positive people and fear of mistreatment prevented people from participating in voluntary counseling and testing and programmes to prevent mother-to-child transmission (Aggleton 2000). The authors argued that apart from fuelling the spread of HIV/AIDS, stigma and its resulting discrimination also intensifies the pain and suffering of both PLWHA and their families. Studies have also shown that PLWHA are unfairly treated and/or discriminated against because of their actual or suspected HIV/AIDS status (Gilmore and Somerville 1994; International Center for Research on Women 2002; UNAIDS 2002). Discrimination against people living with or suspected of having HIV/AIDS, apart from denying them their basic rights, is also an ineffective public health measure.

According to UNAIDS statistics, 600 Cameroonians get infected every day at a rate of 25 persons per hour (NACC 2004). The pandemic has left a very serious impact on the nation's labour force, with significant attendant drops in productivity and profitability. Above all, it constitutes a serious threat to the socio-economic development of the country. In 2007, the number of people living with the HIV in Cameroon was estimated at 510,000 with 8,006 in the south West Region (Oye and Kuper 2007).

The link between migration and the spread of HIV has been well established. Numerous studies in developing countries have cited migration as one of the most important factors leading to the rapid diffusion of HIV (Anderson et al. 2003; Lukalo 2000; Skeldon 2000; Wolffers et al. 2002). Since workers in plantations in Cameroon come from all parts of the country, and giving the fact that negative attitudes of persons fuels stigma and discrimination against HIV/AIDS patients which might affect productivity, it was necessary to look at its situation with respect to private plantation workers in the southwest region of Cameroon.

The broad objective of the study was to examine the attitudes of private plantation workers towards HIV/AIDS patients with a view to suggest how stigma and discrimination can be mitigated in the plantations. The following hypotheses were also tested:

(1) *H₀*: Personal characteristics of plantation workers in southwest region, Cameroon

have no significant influence on their attitude to HIV/AIDS; and

- (2) *Ho*: There are no significant variations in the attitude relating to HIV/AIDS among different categories of plantation workers in southwest region, Cameroon.

DATA COLLECTION AND ANALYSIS

A survey method was adopted to collect data for this study using simple random sampling technique. Pre-tested questionnaire/structure interview schedule was used to collect data. Four privately owned plantations in southwest region of Cameroon were purposively selected (on the basis of accessibility to the researcher and owner's consent) for the study. Proportionate sample (20% of the work force) was randomly selected from a list of workers in each of the four plantations. Focus group discussions (men and women workers separately) were also held in the selected plantations. A total of 86 respondents were used for the study.

Attitude towards HIV/AIDS was elicited using a set of 20 questions portraying positive or negative attitudes towards HIV/AIDS. The respondents were requested to indicate a "Yes" or "No" response to each of the questions. For each question, the percentage of respondents that indicated "yes" or "no" response was determined. A percentage score of $\geq 80\%$ was regarded as very high attitude, 60-79% as high attitude, 40-59% as moderate attitude, 20-39% as low and $\leq 19\%$ as very low attitude (a modification of the classification of Iliyasu et al. 2005).

Again, for each respondent and for each of the 20 questions, a response indicating positive attitude was scored +1 while a response indicating negative attitude was scored -1. Scored responses were used to construct attitude indices (AI) and this was done by adding all the scores across the 20 questions for the number of respondents in each category and dividing by the total number of respondents in that category.

The influence of personal characteristics as predictors of attitude relating to HIV/AIDS was determined using regression analysis (with personal characteristics as independent variables and attitude indices as dependent variables). The regression equation is as follows;

$$Y_i = b_0 + b_1 X_{i1} + b_2 X_{i2} + \dots + b_k X_{ik}$$

Where Y_i is the outcome or response variable for the i -th unit, b_0 is coefficient for the

intercept constant), $b_1, b_2, \dots, b_k$ is regression coefficient which interpret the effect of X on Y , X_{ki} is 1 if i -th unit is in the category coded '1' and $X_{ki} = 0$ if i -th unit is in the category coded '0'.

In the regression analysis:

X_1 = sex (male = 1, female = 0)

X_2 = age (entered as continuous variable)

X_3 = marital status (Never married = base category, married = 1)

X_4 = no formal education (Advanced Level = base category, NFE = 1, other educ. Levels coded 0).

X_5 = First School Leaving Certificate (Advanced Level = base category, FSLC = 1, other educ. Levels coded 0)

X_6 = Ordinary Level Cert. (Advanced Level = base category, O'Level = 1, other educ. Levels coded 0)

X_7 = migration status (migrant = 1, non-migrant = 0)

X_8 = job experience (entered as continuous variable)

X_9 = Other orthodox churches religious group (Catholic = base category, Other orthodox churches = 1, New generation churches = 0)

X_{10} = New generation churches religious group (Catholic = base category, New generation churches = 1, Other orthodox churches = 0)

The variation in the attitude indices relating to HIV/AIDS among the different age groups, educational levels and religious groups of the plantation workers were compared using Analysis of Variance (ANOVA). Significant means were separated using Duncan's multiple range test. For sex, marital status, job experience and migration status of respondents, student's t -test statistic was used to compare the difference in the mean attitude indices. All statistical analyses were done using the Statistical Package for Social Sciences version 16.0 and at 5% level of significance.

RESULTS AND DISCUSSION

Personal Characteristics of Respondents

Majority (76.7%) of the respondents were males (Table 1). Also, majority (52.3%) of the respondents were within the 25-34 year age group. The mean age of the respondents was 36.6 years while majority (62.8%) of the respon-

dents were married. About 56% of the respondents had first school leaving certificate. The mean job experience was 4.03 years. Results in Table 1 also reveal that 52.3% of respondents were migrants. Data indicated that majority (96.5%) of the workers were Christians and belonging to one of the three major religious groups viz. Catholic (48.8%), other orthodox churches (32.6%) and Pentecostal (15.1%). Christianity forbids premarital and extramarital sex and as a large proportion of the respondents are Christians, if they adhere strictly to their religious doctrine it will go a long way to limit the entry and spread of HIV/AIDS in the plantation. Study by Trinitapoli and Regnerus (2004) shows that independent of denomination, attendance at religious services is associated with reduced odds of both HIV/AIDS risk behavior and perceived risk, an effect that is particularly strong for members of Pentecostal churches (Trinitapoli and Regnerus 2004).

Attitude of Plantation Workers Towards HIV/AIDS

The distribution of respondents according to their attitude towards HIV/AIDS is presented in Table 2. On an average, 69.4% of the respondents in the plantations indicated positive attitudes towards HIV/AIDS. Although a high proportion of the respondents generally had a positive attitude towards HIV/AIDS, a good proportion of them also presented negative attitudes towards PLWHA. For example, 59.3% indicated that they would like HIV/AIDS patients in the plantation to be known while 47% of the respondents would not feel comfortable having PLWHA as neighbours. Similarly, about 38% were not in favour of sharing room/office with or buying goods from a known HIV/AIDS patient while about 35% were in support of the idea that a law should be enacted to compel HIV/AIDS positive individuals to publicly disclose their HIV status. The results also show that about 28% of the workers would neither want to work in the same plantation with PLWHA nor shake hands/hug an HIV/AIDS patient while 39.5% and 33.7% would not have an HIV/AIDS patient as a friend or be willing to eat together with HIV/AIDS patient, respectively. Again, about 30% of respondents indicated that they would want HIV/AIDS positive workers not to be al-

Table 1: Distribution of respondents according to personal characteristics

<i>Variable</i>	<i>No.</i>	<i>%</i>	<i>Mean</i>
<i>Sex</i>			
Male	66	76.7	
Female	20	23.3	
<i>Age (Years)</i>			
15-24	8	9.3	36.6
25-34	19	22.1	
35-44	45	52.3	
45-54	8	9.3	
≥55	6	7.0	
<i>Marital Status</i>			
Married	54	62.8	
Never married (single)	30	34.9	
Once married (widowed, divorced, separated)	2	2.3	
<i>Educational Level</i>			
No formal education	7	8.1	
First school leaving certificate	48	55.8	
General certificate of education ordinary level	16	18.6	
General certificate of education advanced level	11	12.8	
Diploma	2	2.3	
Degree	2	22.3	
<i>Migration Status</i>			
Migrant	45	52.3	
Non-migrant	37	43.0	
Not indicated	4	4.7	
<i>Job Experience (Years)</i>			
≤5	44	51.3	4.0
6-10	29	33.7	
Not indicated	13	15.1	
<i>Religious Group</i>			
Catholic	42	48.8	
Other orthodox churches (Presbyterian, Baptist)	28	32.6	
Pentacostal (Apostolic, Redeemed, etc.)	13	15.1	
Not indicated	3	3.5	

lowed to work in the plantations. Some respondents believed that HIV/AIDS positive persons had gotten what they deserved as they were responsible of their illness by being sexually loose; a belief that was confirmed during FGD. The results showed that although there was a high positive attitude among respondents, HIV/AIDS-related stigma and discrimination still existed in the plantations. This stigmatization and discrimination would have a severe negative impact on the plantation as affected worker(s) may decide to quit their jobs before their status becomes common knowledge. Hence, intervention programmes such as education of plantation workers against blaming affected members aimed at eliminating stigmatization

and other discriminatory attitudes should be carried out by non-governmental organizations.

Table 2: Percentage distribution of respondents according to positive and negative attitude towards HIV/AIDS

	% Positive	% Negative
Do you think people living with HIV/AIDS are merely receiving the punishment they deserve?	89.5	10.5
Do you think HIV/AIDS patients should feel ashamed of themselves?	80.2	19.8
Do you think HIV/AIDS patients deserve sympathy?	73.3	26.3
Should HIV-infected person be allowed to work in this plantation?	69.8	31.2
Will you want HIV/AIDS neighbours to move away?	70.9	29.1
Will you feel comfortable if you have people living with HIV/AIDS as neighbours?	52.3	47.7
Is it necessary to enact a law prohibiting people living with HIV/AIDS from visiting your plantation?	79.1	20.9
Is it necessary to enact a law making people living with HIV/AIDS to publicly disclose their HIV status?	65.1	34.9
If your family member unfortunately contracts HIV, will you be willing to take care of him/her?	83.7	16.3
Will you like HIV/AIDS patients in this plantation to be known?	40.7	59.3
Will you see an HIV/AIDS patient as an outcast?	74.4	25.6
Should HIV/AIDS patients be prohibited from using public facilities?	70.9	29.1
People living with HIV/AIDS should be prohibited from looking after their children?	66.3	33.7
Can you make an HIV/AIDS patient your friend?	60.5	39.5
Will you relinquish your friendship if you find out that your friend is positive for HIV?	76.7	23.3
Would you work with people living with HIV/AIDS in this plantation?	72.1	37.9
Can you share same room/office with HIV/AIDS patients?	61.6	38.4
Will you be able to shake hands or hug an HIV/AIDS patient?	72.1	27.9
Will you be willing to have a meal together with an HIV/AIDS patient?	66.3	33.7
Will you be willing to buy goods from a known HIV patient?	61.6	39.4
% mean score	69.4	

According to Odimegwu (2003), the stigma associated with HIV is promoted by various fac-

tors such as fear, the way the disease disfigures the patient, misconception of transmission routes and fatal nature of the disease. These sentiments may be translated into actions of avoidance of an infected individual. However, over 80% of the respondents were willing to care for a family member who had HIV/AIDS. This probably reflects that no matter how stigmatized the disease is, people are willing to make sacrifices in order to care for their close relatives. According to Bharat et al. (2001), misconceptions about how HIV infection may be transmitted tend to promote negative attitudes towards PLWHA. Consequently, respondents who believe that HIV infection can be transmitted through sex or sharing a meal with PLWHA are more likely to stigmatize and discriminate against PLWHA than other people. This might be indicative of the fact that negative response and attitudes towards PLWHA are strongly linked to general levels of knowledge about HIV/AIDS and in particular, to the causes of AIDS and routes of HIV transmission. In order words, the perception of how HIV/AIDS is acquired is critically important on how people will relate with PLWHA. For instance, in India, as elsewhere, AIDS is perceived as a disease of "others"-of people living on the margins of society, whose lifestyles are considered "perverted" and "sinful" (Bharat et al. 2001).

Influence of Personal Characteristics on Attitude of Respondents towards HIV/AIDS

Results of regression analyses showing the influence of personal characteristics of respondents on their attitudes towards HIV/AIDS are presented in Table 3. The regression model was not significant ($F=1.77$, $P>0.05$) showing that none of the personal characteristics had significant influence on the attitude of the respondents. Thus, the null hypothesis that respondents' personal characteristics had no influence on their attitudes towards HIV/AIDS was accepted. In a study with Chinese undergraduates, Xiaodong et al. (2007) found that sex had a significant influence on the attitude of the students towards HIV/AIDS. Movahed and Shoa'a (2010) also reported that sex of Iranian students significantly influence their attitudes towards HIV/AIDS. The present finding suggests that in a private plantation setting in Cameroon, attitude of workers towards HIV/AIDS is not significantly influenced by their personal characteristics.

Table 3: Regression analysis showing influence of personal characteristics on attitude of workers relating to HIV/AIDS

<i>Personal characteristics</i>	<i>Unstandardized regression coefficients (B)</i>
Sex (male=1, female=0)	0.09
Age (Years)	0.06
Marital Status	
Never married (Base category)	-
Married	2.80
Educational Level	
No formal education	-4.08
First school leaving certificate	-6.90
General certificate of education ordinary level	-6.89
General certificate of education advanced level (base category)	-
Migration Status (migrant=1, non-migrant=0)	-5.34
Job Experience (Years)	-0.59
Religious Group	
Catholic (Base category)	-
Other orthodox churches (Presbyterian, Baptist)	-5.12
New generation churches (Apostolic, redeemed)	-0.03
F cal	1.77
R-squared	24.7%
Adjusted R-squared	10.8%

Variation in the Attitude Relating to HIV/AIDS among the Different Categories of Plantation Workers

The mean attitude index (AI) of male respondents (Table 4) was found to be higher than that of their female counterparts; the difference was however not significant ($t=0.91$, $P>0.05$). Odimegwu reported that female gender showed more negative attitude towards HIV/AIDS patients (Odimegwu 2003). This may be because males interact more than females. Also, they have more access to both print and electronic media than females.

Table 4 shows the means of AI of respondents belonging to the different age categories. Variation in the mean AI of the different age groups of respondents was not significant ($F=0.08$, $P>0.05$). The highest mean AI was recorded for respondents in the age bracket 25-34 years while those 55 years and above had the least mean AI. The results have shown that respondents in the age group 25-34 years had a better attitude towards HIV/AIDS than those 55 years and above. Jona and Terblanché (2006) found that the age group ≤ 34 showed a significant better attitude towards HIV/AIDS. Married respondents had a higher mean AI than the never

Table 4: Means ($\pm$ sem) of attitude indices (AI) relating to HIV/AIDS among plantation workers

	<i>Private</i>
Age (Years)	
15 – 24	8.00 $\pm$ 2.80
25 – 34	8.71 $\pm$ 2.59
35 – 44	8.17 $\pm$ 3.38
45 – 54	8.14 $\pm$ 1.97
≥ 55	6.50 $\pm$ 3.14
Marital Status	
Married	8.93 $\pm$ 1.36
Never married	6.27 $\pm$ 1.97
Once married	-
Educational Level	
Non formal education	10.86 $\pm$ 2.34
First school leaving certificate	5.96 $\pm$ 1.56
Government certificate of education ordinary level	6.25 $\pm$ 2.86
Government certificate of education advance level	14.36 $\pm$ 1.76
Job Experience (Years)	
≥ 5	9.05 $\pm$ 1.30
6 – 10	4.97 $\pm$ 2.20
Religious Group	
Catholic	9.19 $\pm$ 1.56
Other orthodox churches (Presbyterian, Baptist)	6.14 $\pm$ 2.17
New generation churches (Apostolic, Redeemed)	9.14 $\pm$ 2.18

married respondents (Table 4); however, the difference was not significant ($t=1.14$; $P>0.05$). The fact that individuals in the 25-34 age category had a better attitude towards HIV/AIDS is a desirable observation as these individuals are physically more active, and therefore can be more actively involved in HIV/AIDS prevention programmes. Since married workers had better attitudes towards HIV/AIDS than their unmarried counterparts, there exists the possibility of amplification of these positive attitudes in the plantation as the married respondents will transfer their views on HIV/AIDS to other family members.

As shown in Table 4, the means of the AI of respondents belonging to various educational levels did not vary significantly ($F=2.38$, $P>0.05$). However, respondents with advance level certificate had the highest mean AI while those with FSLC had the least. This shows that the higher the educational level of respondents, the more likely they had positive attitude towards PLWHA. Iliyasu et al. (2006) reported that there is a strong positive correlation between educational attainment and knowledge of HIV/AIDS and this may explain why respondents with higher educational level had a more positive

attitude towards HIV/AIDS than their less educated counterparts.

Although respondents with less than 5 years of job experience had a higher mean AI than those with 6-10 years, the difference was not significant ($t=1.70$; $P>0.05$). No significant variation was found in the mean AI of respondents ($F=0.77$; $P>0.05$) belonging to the different religious groups. The highest mean AI was recorded for Catholic respondents. The mean AI of migrant respondents was significantly ($t=3.38$; $P<0.05$) lower than that of non-migrants. This is quite surprising since migrant workers are likely to be more exposed than non-migrant workers. However, this agrees with the findings of Zaw (2002) who found that migrants had a negative or a neutral attitude towards PLWHA in Bangkok. Therefore, any intervention programme to change the attitudes of workers relating to HIV/AIDS should be focused on migrant workers.

CONCLUSION

Generally, attitudes relating to HIV/AIDS were high amongst the sampled population. However, discriminatory and stigmatizing attitudes were displayed by a good proportion of the respondents. Such attitudes are counterproductive in an agricultural setting as the plantation. The results suggest that despite intensive public campaigns relating to various aspects of HIV/AIDS, including its transmission, the message has not quite reached a large majority of people in the private plantations in the Southwest Region of Cameroon. Therefore, information and educational campaigns on HIV/AIDS need to be intensified to dispel some of the prevailing misconceptions about HIV/AIDS transmission. Targeted HIV/AIDS education on attitude should be encouraged and sustained by the plantation owners.

REFERENCES

- Aggleton P 2000. *Comparative Analysis: Research Studies from India and Uganda, HIV and AIDS-related Discrimination, Stigmatization and Denial*. Geneva, Switzerland: UNAIDS.
- Anderson A, Qingsi Z, Hua X, Jianfeng B 2003. China's floating population and the potential for HIV transmission: A social-behavioural perspective. *AIDS Care*, 15(2): 177-185.
- Bharat S, Aggleton P, Tyrer P 2001. *India: HIV and AIDS-related Discrimination, Stigmatization and Denial*. Geneva, Switzerland: UNAIDS.
- Busza J 1999. *Literature Review: Challenging HIV-Related Stigma and Discrimination in Southeast Asia: Past Successes and Future Priorities*. New York, USA: Population Council Horizons.
- Gilmore N, Somerville MA 1994. Stigmatization, scapegoating and discrimination in sexually transmitted disease: Overcoming "Them" and "Us". *Soc Sci Med*, 39(9): 1339-1358.
- Iliyasu Z, Kabir M, Galadanci HS 2005. Awareness and attitude of antenatal clients towards HIV voluntary counselling and testing in Aminu Kano Teaching hospital, Kano, Nigeria. *Niger J Medicine*, 14: 27-32.
- Iliyasu Z, Abubakar I, Kabir M, Aliyu MH 2006. Knowledge of HIV/AIDS and attitude towards voluntary counselling and testing among adults. *Journal of the National Medical Association*, 98 (12): 1917.
- International Center for Research on Women 2002. Addressing HIV-related Stigma and Resulting Discrimination in Africa: A Three-Country Study in Ethiopia, Tanzania and Zambia. Information Bulletin, From <<http://www.heart-intl.net/HEART/stigma/comp/stigmaAfricaInfoBulletin.pdf>> (Retrieved 8 June 2010).
- Jona CN, Terblanche SE 2006. The effect of personal and socio-economic variables on the knowledge, attitude and belief on farm workers about HIV/AIDS: A lesson for extension. *South Afr J Agric Ext*, 35 (1): 71-92.
- Lukalo R 2000. Highly mobile population drives the spread of AIDS in Kenya. In: S Boao (Ed.): *Media and HIV/AIDS in East and Southern Africa: A Resource Book*. Paris: UNESCO, pp. 51-61.
- Movahed M, Shoaib S 2010. On attitudes towards HIV/AIDS among Iranian students (Case study: High school students in Shiraz City). *Pakistan Journal of Biological Sciences*, 13: 271-278.
- Odimogwu CO 2003. *Prevalence and Predictors of HIV-related Stigma and Knowledge in Nigeria: Implications for HIV/AIDS Prevention Initiatives*. Boston, Massachusetts: Takemi Program in International Health.
- Oye JE, Kuper H 2007. Prevalence and causes of blindness and visual impairment in Limber urban area, Southwest Region, Cameroon. *Brit J Ophth*, 91: 1435-1439.
- Skeldon R 2000. *Population Mobility and HIV Vulnerability in South East Asia: An Assessment and Analysis*. Bangkok: UNDP.
- Trinitapoli J, Regnerus Mark 2004. Religious Involvement and HIV Risk: Initial Results from a Panel Study of Rural Malawians. *Paper presented at the Population Association of America Annual Meeting, Philadelphia, PA*, March 31-April 2, 2004.
- United Nations Joint Programme for AIDS .UNAIDS 2002. *Report on the Global HIV/AIDS Epidemic*. Geneva: UNAIDS.
- Wolffers I, Fernandez I, Verghis S, Vink M 2002. Sexual behaviour and vulnerability of migrant workers for HIV infection. *Culture, Health and Sexuality*, 4: 459-473.
- Xiaodong T, Jingju P, Dong Z, Wang C Xie C 2007. HIV/AIDS knowledge, attitudes and behaviors assessment of Chinese students: A questionnaire study. *Int J Environ Res Public Health*, 4: 248-253.
- Zaw, Mau Mau 2003. *Assessment of Knowledge, Attitude and Risk Behaviors Regarding HIV/AIDS among Myanmar Migrant Workers in Bangkok, Thailand*. College of Public Health, Chulalongkorn University, Bangkok, Thailand.
- Zaw Mau Mau 2002. *Assessment of Knowledge, Attitude and Risk Behavior Regarding HIV/AIDS among Myanmar Migrant Workers in Bangkok, Thailand*. Bangkok, Thailand: College of Public Health, Chulalongkorn University.