

## KNOWLEDGE, SEXUAL BEHAVIOUR AND ATTITUDE TOWARDS HIV/AIDS IN TERTIARY INSTITUTIONS IN NORTHERN GHANA

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### ABSTRACT

*Between May and August 2003, the University for Development Studies conducted a Ghana AIDS Commission funded study, as part of a project, aimed at establishing empirical benchmarks to help inform anti-HIV/AIDS programming in tertiary institutions of Northern Ghana. The strategic goal of this project was to reduce the impact of the HIV/AIDS menace on the human capital at the point-of-training. Emphasis was placed on the knowledge, perceptions, and behavior of members of the communities of tertiary institutions of Northern Ghana. The principal objective was to bring about permanent sexual behavior change. A field survey was conducted in 10(ten) institutions. Students, staff and their dependents constituted the respondent-groups. A 10% representative sample ( $n = 1131$ ) was studied. The self-administered survey schedule was employed in data collection. Overall response rate was 80 %. An SPSSx software package was used to analyze the quantitative data yielding statistics such as frequency and percentage distributions as well as measures of significant differences and correlations. The study reveals that the populations of tertiary institutions in northern Ghana are mostly youthful, with largely unmarried populations, who are fairly educated, and belong to the two dominant religions in Ghana, namely, Christianity and Islam. Though they are quite knowledgeable about HIV/AIDS and hold views that are similar to concerned anti-HIV/AIDS groups worldwide, majority of members of these institutional communities seem to engage in rather "unhealthy sexual behaviors." Though somewhat seemingly insignificant, there appears to be differences by gender in terms of perceptions on major beliefs. Findings of this study are only preliminary. Hence, there is the need to interpret them with extreme caution. Conclusions drawn are only tenuous and not definitive.*

**KEY DESCRIPTORS:** HIV/AIDS, Sexual Behavior, Reproductive Health, Tertiary Institutions, Attitudinal change.

### INTRODUCTION

Since the discovery of the HIV/AIDS virus in the mid-1980s, the disease has reached epidemic levels across the globe. For example, the AIDS epidemic claimed more than three (3) million lives worldwide in 2003 alone and an estimated five (5) million new infections were recorded that same year (*Department for Education: The Gambia Experience, 2004*). In 2004, the estimated number of people world-wide living with the virus was about 40 million. World figures indicate that 60 % of all new in-

fections are among the youth aged 15–49 years. They also show a steady increase in mother-to-child transmission rates.

Countries in Sub-Saharan Africa have been and continue to be most ravaged by it. The epidemic is threatening to wipe out whole populations in sub-Saharan Africa with 25 million people living with HIV/AIDS. Governments in Sub-Saharan Africa are now seeking ways and means of reducing the incidence of the menace and its impact on life and well-being of their populations. Whilst governments are mapping out and implementing survival strategies, they are now becoming too acutely aware of the impact of the disease on their workforce. In particular, the need to protect their highly trained professionals from the virulent disease has become too painfully obvious. Countries like Botswana, South Africa, Kenya and Uganda seem to be at the threshold of national catastrophes in respect of the HIV/AIDS pandemic.

In the West African sub-region the situation is becoming increasingly alarming. Ghana's neighbours are struggling to cope with the ever-increasing annual rates of infection. In the case of Ghana the steady increase in the rate of infection is cause for concern. For instance, in 2000 the prevalence rate was reported at 4.6%, this figure dropped to 3.4 % in 2002 but climbed up to 3.6 % in 2003. It is projected that this rate will continue to rise. Consequently, the national strategic goal of reducing the incidence by 30% at the end of 2005 is under threat (Ministry of Education Youth and Sports (MOEYS, 2004).

The most disturbing reality in all these cases is that the most affected and vulnerable groups are female and the youth (GSS, 2003). Compounding the problem is the fact that there is an increase in infection among professionals in all these countries. There are economic and social implications of the current situation where females and the youth are the major victims, but also the continual rise in incidence among professional categories of the remaining populations. There is, therefore, a dire need to save the possible destruction of the current and future national workforce. Consequently, national anti-HIV/AIDS strategies should include programming to curb the incidence of HIV infection in the universities, polytechnics and colleges where professionals are trained.

In Ghana, it is often assumed that most people are knowledgeable about the disease. On the contrary, the level of ignorance about the disease is quite high among all sections and classes of Ghanaians. The knowledge level of those in tertiary institutions is equally low. Findings of case studies conducted in some universities in Ghana revealed that a "thick cloak of ignorance, lined with layers of secrecy, silence, denial and fear of stigmatization" surrounds the disease on campuses (MOEYS, 2004). Data from the 2003 Ghana Demographic Health Survey (2003 GDHS) show that awareness is universal. The problem, however, has been with knowledge. Awareness responds to the question...*Have you heard of HIV?* Knowledge is expressed in indicators such as correct use of condoms, modes of transmission and preventive measures. In Ghana, while awareness is high, knowledge is poor due largely to the inabil-

ity for people, especially vulnerable groups, to translate awareness to knowledge and apply it to practice. This situation is indicative of the yawning gap between awareness and knowledge as well relevant practices in relation to behavioral change for positive living.

Through the agency of the Ghana AIDS Commission (GAC), the Government of Ghana has given support to a wide spectrum of initiatives to combat the HIV/AIDS pandemic in the country. Towards this end, tertiary institutions have received funding support to help fight the disease and its precursor. It was against this background that a project was initiated to help combat the HIV/AIDS in tertiary institutions in northern Ghana. With funding from the GAC, the first phase of the project entailed the conduct of a baseline survey to ascertain the knowledge level, sex behavior and attitude towards HIV/AIDS among staff, students and their dependants of these institutions. Findings from the survey were then used to inform decisions on how to carry out the remaining phases of the project, namely sensitization, training materials development, and training of peer counselors. Preliminary findings from the baseline is presented in this paper.

## **METHODS AND PROCEDURES**

Populations for this study comprised three categories of tertiary institutions in northern Ghana, Namely; the University for Development Studies (UDS), two (2) polytechnics (Tamale, and Wa), and seven (7) Teachers' Training Colleges. Three (3) respondent groups provided the requisite information. In all, a total of 1131 respondents were interviewed.

A survey design was used in the study. A questionnaire was developed and pre-tested for interviewing respondents. It contained a combination of both closed-ended and open-ended items. Field staff went to 12 campuses/locations (which included the 3 campuses of UDS respectively) to gather the data using the survey schedule. Respondents completed the survey schedule themselves in groups at the various locations facilitated by field staff and contact-persons.

Data were coded and analysed using SPSSx software package. Frequency distributions, percentages and correlations were computed. Major findings are presented below in tabular and textual forms.

## **MAJOR FINDINGS**

### **Background of Institutions and Respondents**

The respondents of the survey came from higher educational institutions in the three northern regions namely, Northern, Upper West and East regions. The target populations were in ten (10) institutions comprising seven (7) training colleges, two (2) polytechnics and the three (3) Campuses of the University for Development Studies.

Refer to Table 1 below. Majority of the institutions covered were located in the Northern Region. Over one-half of the respondents came from the Tamale Polytechnic and the University for Development Studies.

The respondents were mainly Christians and Moslems with about 55% percent being Christians. One percent of the respondents practice Ghanaian traditional religion while the remainder were Buddhists, Hindus, Jewish, Zoroastrians and Rastas. See Table 2.

Respondents were aged 15 years and older, but the majority of them were in the 15 – 34 age group.

About 7 in 10 respondents were male while 72 percent indicated they have “never been married”. In all, 23 percent of respondents were married. Of this, about four percent (4%) had their spouses living somewhere else (Table 3).

**Table 1. Background Characteristics of Respondents**

<b>Institution</b>	<b>F</b>	<b>Percent</b>
Tamale Polytechnic	364	32.0
University for Development Studies (three campuses and Central Administration)	267	24.0
St. John Boscos Training College	78	7.0
Nusrat Jehan Teachers' Training College	39	3.0
Wa Polytechnic	38	3.0
Tumu Training college	61	5.0
Tamale Training College	81	7.0
Bagabaga Training College	85	8.0
Bimbila Training college	64	6.0
Total	1131	100

Source: Field Survey 2003

**Table 2. Background Characteristics of Respondents by Religion**

<b>RELIGION</b>	<b>FREQUENCY</b>	<b>PERCENT</b>
Christian	604	55.0
Muslim	481	43.0
Traditional	11	1.0
Other	21	1.0
Total	1106	100

Source: Field Survey 2003

**Table 3. Background Characteristics of Respondents by Age Group (3.1) and Gender (3.2), and Marital Status (3.3)**

<b>3.1 Age cohort (in Years)</b>	<b>F</b>	<b>Percent</b>
15-19	97	9.0
20-24	485	47.0
25-29	235	23.0
30-34	75	7.0
35-39	34	3.0
40-44	44	4.0
45-49	43	4.0
50-54	18	2.0
55-59	1	0.1
60+	1	0.1
<b>Total</b>	<b>1033</b>	<b>100.2</b>
<b>3.2 Sex</b>		
Male	752	69.0
Female	344	31.0
<b>Total</b>	<b>1096</b>	<b>100</b>
<b>3.3 Marital Status</b>		
Married and living with spouse	201	19.0
Married spouse lives somewhere	41	4.0
Not Married but lives with someone	211	20.0
Divorced	8	1.0
Widowed	5	1.0
Never been married	593	52.0
<b>Total</b>	<b>1059</b>	<b>100</b>

**Source:** Field Survey 2003

**Table 4. Background Characteristics of Respondents by Level of Education**

Highest Level of Education	F	Percent
Never been to school	5	1.0
BECE	69	7.0
SSSCE	261	25.0
GCE "O" Level	37	4.0
GCE "A" Level	11	1.0
Teacher Certificate "A"	183	17.0
HND/Diploma	231	22.0
Bachelors Degree	167	16.0
Masters and higher	40	4.0
Other	46	4.0
Total	1050	100

Source: Field Survey 2003

Approximately 88 % of respondents had at least secondary level education. Those with a second degree or higher, Bachelor's degree, and the HND/Diploma accounting formed 4 % , 16 % and 22 % respectively (Table 4).

#### **Future Plans about Sexual Engagements**

Respondents were asked to express their plans for sexual engagements in the future. The results show that slightly over one-half (51.0 %) of respondents irrespective of gender would like to postpone sexual engagements until after marriage (Table 5). About the same proportion of both females and males held the same view. About 41 % of respondents said they would remain faithful to their partners. An important finding was that, slightly more females than males indicated they would remain faithful to their partners. Overall, a negligible number of respondents (2.0%) reported they are "looking for sexual opportunities".

**Table 5. Future Plans for Sexual Engagement by Gender**

Intention	Gender				Total	
	Female		Male			
	F	Percent	F	Percent	F	Percent
Wait till marriage	157	51.0	346	51.0	503	51.0
Remain faithful	129	42.0	274	40.0	403	41.0
After engagement	5	2.0	10	2.0	15	2.0
Find lover before sex	9	3.0	13	2.0	22	2.0
Be 19 years before	1	0.3	0	0.0	1	0.1
As soon as possible	3	1.0	3	0.4	6	1.0
Looking for opportunity	3	1.0	18	3.0	21	2.0
No plans at all	4	1.0	20	3.0	24	2.0
Total	311	100.3	684	100.4	995	100.1

Source: Field Survey 2003

## **Ideal Age for Sexual Engagement**

As to the issue on the “ideal age” for young men and women to engage in sexual activity, nearly nine out of 10 (88%) respondents indicated it should be 18 years or older. However, whereas nearly three (3) out of every four (4) respondents (i.e. 74%) felt that age should be between 18 and 20 years for female, only about one (1) in every two (2) respondents (about 57%) indicated same for male.

Gender did not seem significant in the expression of views. Only slightly more females (76%) than males (74%) indicated 18-20 years as the ideal age for a female to become sexually active. Slightly more males (59%) than females (53%) indicated the 18-20-age range. These findings are quite similar to findings in other studies. Elizabeth Eggleston et al. (1999) for example found that boys’ attitudes were significantly more permissive than those of girls regarding premarital sex. A sizable proportion of boys who participated in focus group discussions thought that a boy should have sex by age 12 or 13. On the other hand, girls in the focus group discussions disapproved of a girl that age who engaged in sexual intercourse.

## **Perceptions on Contraceptives and Condom Use**

Respondents’ qualitative perceptions on condom use were solicited. On the more positive side, worthy of note were views about women requesting the use of condoms, condom use among partners in serious relationships, use of condom and partner trust, and that it was embarrassing to purchase condoms. Over three-quarters of the respondents were of the view that:

- condom use is necessary among partners in serious relationships,
- women requesting the use of condom during sex will not lose their respect and
- it is not embarrassing to buy condoms

Similarly, positive perceptions were expressed regarding the affordability and use of condoms.

- 77% of females and 67% of males agreed with the view that condoms are affordable,
- 68% percent of females and 74% of males agreed with the view that condoms were easy to use.

Negative views expressed that were quite significant included:

- About two-thirds of the respondents were of the view that knowledge about contraceptives encouraged indiscriminate sexual engagement. Slightly more females (64%) than males (61%) hold that perception.
- Concerning condom use and sexual promiscuity, 59% of females compared to 65% of males agreed with the view that condom use promoted sexual promiscuity.

Regarding the use of contraceptives by girls/females, there was somewhat weak agreement overall:

- One (1) out of every two (2) female respondents (i.e., 51 %) agreed with the view that youth who use contraceptives risk lowering their childbirth potential and only 40 % of the males agreed. Just about a third of females and close to one half of males disagreed.

As to whether or not it was embarrassing to purchase condoms, nearly four (4) out of every five (5) females disagreed that it was embarrassing to purchase condoms and just over two (2) out of every three (3) males disagreed. Respectively, 18 % and 27 % agreed that it was embarrassing to purchase condoms. Also, males and females were about equal in the view that “use of condoms seemed to suggest “lack of trust” between partners.

There were very strong disagreements with regards to desperate boys/youth resorting to “Sugar Daddy/Mommy” to learn a trade and desperate schoolgirls should not depend on “Sugar Daddy/Mommy” to pay their school fees. In all, disagreement was at least four (4) in five (5) respondents.

In terms of whether boys/males should have sexual engagement before marriage, there was very strong disagreement by both female (80 %) and male (85 %) respondents.

**Table 6. Respondents’ perceptions on contraception and condom use and related issues by gender**

HIV/AIDS-related issue	Female						Male						Total	
	Agree		Disagree		Don't know		Agree		Disagree		Don't Know			
	n	%	n.	%	n.	%	n.	%	n	%	N	%	No.	%
Knowledge about contraception encourages indiscriminate sexual behaviour	203	64	93	29	21	7	432	61	246	35	30	4.2	1025	100
Use of contraceptive methods reduces child bearing in youth	163	51	109	34	48	15	281	40	330	46	101	14	1032	100
A female carrying condoms cares about her health	232	72	75	23	16	5	511	72	170	24	31	4	1035	100
A female carrying condoms is promiscuous	124	40	146	47	40	13	309	44	328	47	63	9	1010	100
A woman requesting condom use will lose respect	42	13	255	79	26	8	123	17	540	75	55	8	1041	100
A male carrying condoms cares about his health	247	77	63	20	10	3	532	75	154	22	24	3	1030	100



A male carrying condoms is promiscuous	128	41	147	47	36	12	290	41	354	52	55	8	1011	100
Condoms are affordable	250	77	60	19	13	4	476	67	198	28	38	5	1035	100
Condom use is not necessary in a serious relationships	67	21	243	75	14	4	169	24	499	70	45	6	1037	100
It is embarrassing to purchase condoms	57	17.5	256	78.5	13	4	197	27	493	69	28	4	1044	100
Use of condom is a sign of lack of trust	106	33	209	64	11	3	240	34	453	63	21	3	1040	100
Using condom is a sign of mutual respect	174	54	106	33	43	13	421	59.5	220	31	67	9.5	1031	100
Condoms are easy to use	216	68	42	13	58	18	529	74	112	16	69	10	1026	100
Discussion on condom use promotes promiscuity	182	59	92	30	35	11	459	65	204	31	28	4	1010	100
It is acceptable for desperate boys to learn a trade from a Sugar Daddy/Mommy	52	16	259	80	13	4	118	16.5	580	81	15	2	1037	100
It acceptable for desperate girls to get school fees/help from a Sugar Daddy/Mommy	42	13	269	84	10	3	69	14	595	83.5	19	3	1034	100
Boys can have sex before marriage	51	16	260	80	13	4	91	13	610	85	17	2	1042	100

Source: Field survey 2003

## EMERGING ISSUES

### Socio-demographic Factors

The strategic goal of the project was to reduce the impact of the HIV/AIDS menace on the human capital at the point-of-training. Against this background, this survey focused on the knowledge, perceptions, and behaviour of members of the communities of tertiary institutions of northern Ghana. The principal objective was to implement innovative programme activities that would facilitate permanent sexual behaviour change.

Findings show that the population under study was quite young with nearly 4 out of 5 respondents below 30 years. Given the youthful nature of the population under study, it is expected that by implication, the planned education and training programme will reach the youth who are also the most vulnerable members of these tertiary institutions.

In general, the communities of these institutions could be described as largely "Not Married" populations who even though are biologically matured to have sex, are so-

cially not expected to be sexually active. However, this population belongs largely to a relatively more permissive environment (unlike secondary and Junior secondary schools for example) because they are tertiary institutions. The challenges facing most of these young people including the social pressures to be sexually active have been widely documented. Thus, the need to implement an education and training programme on HIV/AIDS in these institutions cannot be overemphasized.

The population also can be described as fairly well educated with majority (9 in 10) attaining at least secondary education. This factor could present a great opportunity in the planning and delivering of messages aimed at behavioral changes in the group.

Findings show that an overwhelming majority of the population seems to have strong beliefs and perceptions regarding the relationship between morality and HIV infection. This may be related to the fact that majority of respondents belong to the two dominant religious groups - Christianity and Islam - which generally frown on pre-marital sex. It can therefore be expected that strong religious beliefs and perceptions will pose some serious challenges in HIV campaigns especially in program activities relating to the use of condoms and safer sex practices among sexually active youth who are unmarried.

A significant proportion of the population has parental/guardian responsibilities since they have at least two dependents to care for. The planned education and training programme in the tertiary institutions will be helpful in providing the needed support to these parents/guardians as they grapple with problems associated with the HIV/AIDS scourge in relation to their wards.

The need to implement an education and training programme aimed at combating the HIV/AIDS pandemic among the student populations in the tertiary institutions is crucial because they constitute about 80 % of the communities under study and also the most at-risk and extremely vulnerable groups.

### **Knowledge of Reproductive Health**

On the issue of respondents' knowledge about the meaning of "Safer Sex", a variety of responses were given, accounting for 48 % of the responses. It is rather surprising that a half (50 %) of respondents either "Don't Know" or failed to give any specific definition to the term.

Hospitals/clinics and pharmacies were the first points of call when majority (78%) of the respondents had reproductive health problems. Parents and teachers seem to have lost their enviable position of providing "answers or solutions" to such problems, since only about 1% and 4 % respectively reported that they "turn to" these two groups for help when faced with reproductive health problems.

The Planned Parenthood Association of Ghana (PPAG) also seemed somewhat "indicted" in terms of respondents seeking and receiving help from the PPAG for their reproductive health problems because a miniscule < 1% reported receiving such help. The pharmacies and hospitals/clinics were the primary sources of contraceptives as reported by 91 % of the respondents. Even though peer counselors and youth centres are not widely used, they could and should serve as credible "agents of change" for the planned education and training programme for the tertiary institutions.

Respondents can be described as quite knowledgeable regarding some basic issues on HIV/AIDS and STIs. For instance, most of them agree that AIDS is not curable, an HIV(+ve) mother can infect an unborn child, one can be infected during their first sexual engagement, a healthy looking person can be HIV (+ve), and the gestation period for the AIDS virus can be quite long.

Though an insignificantly small portion of the respondents both female and male did not believe "AIDS" exists, it is a great cause for worry. There is obvious need to intensify the awareness and education campaign as to the existence and ravaging nature of the AIDS menace.

There is also a dire need to bring about positive behavior changes in the communities of these tertiary institutions because about 1 in 3 of the respondents reported "doing something risky in the last 6months" and are afraid of getting the AIDS virus.

### **Beliefs, Attitudes and Intentions**

A significant portion of the respondents, both females and males, thought a girl/female should be about 18 years old before engaging in her first sexual encounter. Equally significant though slightly smaller portion of the respondents felt a boy/male should do so at the same age. Eighteen (18) years seem to be the average age of those who matriculate into tertiary institutions. Thus, they could easily engage in reckless sexual experiments with devastating effects with respect to contracting AIDS while in the very first year of tertiary education.

There seems to be a fairly strong view within the institutions that discussing condom use promotes promiscuity especially among the youth. Both female and male respondents seemed to hold the view that young people's knowledge about contraceptives encourages indiscriminate sexual engagement. Both female and male respondents agreed strongly that a girl should not engage in sexual activity before marriage. Both female and male respondents held the strong view that it was not embarrassing to purchase condoms.

The respondents, both female and male, disagreed fairly strongly with the view that using a condom is a sign of lack of trust in one's partner. There was near even split in disagreement within the female group regarding the message of promiscuity if a fe-

male carries condoms. Likewise the males were equally split on the issue. Again, both male and female were equally divided as to whether a male carrying condoms was promiscuous.

These beliefs/viewpoints are quite informative. Hence planned education and training programmes for the tertiary institutions will take them into consideration in the selection of message appeals, the messages themselves as well as the message delivery techniques.

### **Sexual Engagements and Practices**

- A seemingly small yet significant proportion of both female and male groups can be described as “sexually active.”
- Quite a significant proportion of both female and male respondents can be described as having “risky” behavioural tendencies in terms of the lapse period between meeting a partner and engaging them in a sexual encounter, with males slightly more so than female.
- A higher proportion of females seem to have remained more faithful to their partners than males over the 12-month period prior to this study.
- Both female and male respondents can be described as quite confident in handling temptations of sexual engagements such as gifts and payment of school fees as baits/ advances from those they care for deeply and those they barely meet.

### **Communicating Modes**

#### **Two modes of communication were identified**

The respondents regard the physical presence of AIDS patients or persons who are HIV (+ve) as the most appealing mode of communicating messages on the subject of HIV/AIDS.

The electronic media (TV advertisements, radio and TV documentaries) and Drama/ plays were also regarded as quite appealing for conveying HIV/AIDS messages. These could be useful for prevention campaigns.

### **CONCLUSION**

The potential health threat of HIV to youth in Ghana is a public concern. The purpose of this study was to examine the knowledge, attitude and behaviour of students in tertiary institutions in northern Ghana in relation to HIV/AIDS. This is part of a project aimed at establishing empirical benchmarks to help inform anti-HIV/AIDS programming in tertiary institutions of northern Ghana. The findings show that there is need to intensify the awareness and education campaign among students in tertiary

institutions especially in the northern sector. Even though there is evidence that awareness about HIV/AIDS is very high, it is clear that there exists a yearning gap between awareness and the conscious planning and avoidance of risky behaviour. The study points out pathways for developing acceptable strategies that could effectively help in reducing the impact of the HIV/AIDS menace on the human capital at the point-of-training.

### **Critical Follow-up Activities**

A systematic research programme should be designed and implemented to address issues on HIV/AIDS in relation to the preparation of the nation's workforce by the tertiary institutions. Major components of the proposed programme should include role of religious beliefs/dogma, traditional customs, campus environment, HIV/AIDS outreach agenda for the institutions, and longitudinal/cohort studies on graduates in particular.

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