‘STOP AIDS LOVE LIFE’. ATTITUDES TOWARDS HIV/AIDS: THE ROLE OF HIV/AIDS BEHAVIOUR CHANGE COMMUNICATION MESSAGES AMONG GHANAIAN YOUTH

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ABSTRACT

This study examined the relationship between exposure to HIV/AIDS Behaviour Change Communication (BCC) messages and attitudes towards HIV/AIDS among Ghanaian youth using data from the 2003 Ghana Demographic and Health Survey. Awareness of HIV/AIDS messages (about 94%) was very high. Approximately 10% of females and 13% of males had favourable attitudes (score of 4 out of 4). Of the about 40% of females and 41% of males who had knowledge of all (3) the messages, only 17.0% of females and 20.7% of males had favourable attitudes. Even though a very small proportion of those who had heard or seen all the messages had favourable attitudes, the multiple linear regression shows that having heard two or all the complementing messages is a significant predictor of attitudes towards. The high awareness of HIV/AIDS messages does not manifest in the proportions with favourable attitudes. BCC messages should be packaged holistically and made comprehensive.

Key words: BCC, HIV/AIDS, Attitudes, Youth, Ghana.

Introduction

HIV/AIDS has continuously posed a major challenge to health and the socio-economic development of many countries in the world and Africa is the hardest hit [1-2]. Globally, some 5.4 million young people live with HIV and AIDS today and 40% of all new infections

occur among them, due to their physical, social, psychological and economic vulnerabilities [3]. In Ghana, HIV/AIDS prevalence among the youth (15 to 24 years), which is used as the marker for new infections, was 2.6% in 2007, a marginal increase from 2.5% in 2006 [4].

Often, young people may not perceive themselves to be at risk or lack access to adequate HIV/AIDS information or services. The welfare of young people, who represent an important component of the current trends in the HIV/AIDS pandemic [1], have become the major focus for governments, policymakers and service providers [3]. Realising their vulnerability and also the key role the youth can play in the fight against HIV/AIDS, the 2004 national HIV/AIDS and STI policy paid special attention to the youth. The policy addresses issues like stigmatization, discrimination, positive behaviour change among others. One of the major objectives of the policy was to ensure that adequate attention is paid to vulnerable groups such as the youth [5].

In the absence of accessible, affordable treatment, complete cure for HIV/AIDS and an effective vaccine to prevent HIV infection [6], HIV/AIDS education becomes very critical in the fight against the pandemic, especially among the youth. The initial set of Information, Education and Communication (IEC) programmes on health promotion was in the form of general education through the mass media. General information was initially promulgated to be later reinforced by other sources of information flow. The initial IEC on HIV/AIDS gave basic information about the aetiology and mode of transmission of the disease [7].

Behaviour change communication (BCC) is an interactive process usually with communities to develop tailored messages and approaches using a variety of communication channels [8-9]. These messages should use communication approaches and tools with the aim of empowering young people with skills and capabilities to enable them promote and manage their own health and development. It should also help foster positive change in knowledge,

attitudes and behaviour [3]. HIV/AIDS prevention interventions and campaigns have been grounded in psychological theories and models of health behaviour including the health belief model, the theory of reasoned action, the AIDS risk reduction model and theories of social learning prevention [10-11].

Lessons learned from other countries have shown that, societal response or attitudinal change towards HIV/AIDS is an essential precondition for HIV-related behaviour change [12]. The first national communication program on HIV and AIDS in Ghana was launched in February 2000, titled Stop AIDS Love Life [12]. The initial phase of the Stop AIDS Love Life campaign ("Shattering the Silence") occurred between 2000 and 2001, and emphasized HIV-protective behaviours. It was during this period that the award winning radio show, 'Speakeasy' was aired which led to the development of the famous television program 'Things We Do for Love' which was a serial drama for the youth on reproductive health issues. Subsequent phases have placed greater emphasis on compassion for those living with HIV/AIDS, which involved tribal chiefs and queenmothers in the second phase ('Community Mobilization and Life Skills Series' 2001-2002) and religious leaders in the third phase ('Reach Out, Show Compassion' from 2002-2003) which was geared towards compassion-faith based [12].

Despite various interventions put in place to educate, change and maintain positive attitudes towards HIV/AIDS, policy makers, practitioners among others have noted that, there is a gap between knowledge, attitude and practice [13]. This has created great concern to both policy makers and practitioners. In spite of this, few empirical studies have been conducted to explore the relationship between the much talked about HIV/AIDS Behaviour Change Communication messages and attitudes towards HIV/AIDS among the youth in Ghana. Thus, the present paper seeks to assess this association.

Method

Source of data

This study used data from the 2003 Ghana Demographic and Health Survey (GDHS), which is a nationally representative sample survey, conducted every five years since 1988. It is conducted to provide government, planners, researchers and other organisations with empirical information on a variety of issues including information on sexually transmitted infections like HIV/AIDS. The 2003 GDHS interviewed 2,160 females and 1,791 males aged 15-24 years and collected data on exposure to HIV BCC messages that were aired prior to the survey: 'Stop AIDS, love life', TV show 'Things we do for love' and 'Reach out, show compassion'. The 2003 GDHS also collected data on attitudes towards HIV/AIDS and people living with it. The questions relating to attitudes were whether respondents: would buy fresh vegetables from a vendor who has the AIDS virus; whether they believe that a female teacher who had the AIDS virus should be allowed to continue teaching and whether respondents would want to keep the HIV-positive status of a family member a secret.

Methods of data analysis

Data extracted from the 2003 GDHS were analysed. The study employed descriptive statistics, using frequencies and cross tabulations (significance of the associations were tested using the Pearson Chi-square test) to examine the socio-demographic characteristics and the relationships between the background variables and awareness of HIV/AIDS and HIV/AIDS messages as well as attitudes towards HIV/AIDS. Multiple linear regression was also employed to determine the effects of the predictor variables on the youth attitude.

Variables

Independent variables

The independent variables used in this paper are: age, place of residence, region of residence, highest level of education, ethnicity, religion, marital status, knowledge of HIV/AIDS, number of sources of HIV/AIDS messages, HIV/AIDS messages and household wealth.

Knowledge of HIV/AIDS prevention: Knowledge of HIV/AIDS prevention is computed from responses to three questions (Reduce chances of AIDS by: always using condoms, limiting sex to one uninfected partner and abstaining from sex). For each item, two responses were possible; yes or no (these were re-coded into 'yes' as one and 'no' as zero). The minimum obtainable score was zero and the maximum score obtainable was three which represented comprehensive knowledge.

Exposure to HIV/AIDS messages: Exposure to HIV/AIDS messages is computed using responses to three questions (whether respondents had ever heard or seen these slogans: 'Stop AIDS, love life', TV show 'Things we do for love' and 'Reach out, show compassion') which assessed exposure to HIV/AIDS BCC messages. Exposure to HIV/AIDS messages was computed in the same way as knowledge of HIV/AIDS. All the respondents who were asked about HIV/AIDS messages were all asked about the three messages mentioned above.

Wealth Index: The wealth index of the household to which the young people belonged was used as a proxy to measure their socio-economic status.

Dependent variable

Attitude Score: Attitude score was computed by awarding one mark for each correct answer to four statements that asked the respondent's willingness to: 'buy vegetables from a vendor

with AIDS', 'take care of a relative with HIV/AIDS', 'allow someone with HIV/AIDS to continue teaching' and 'believe that the HIV-positive status of a family member does not need to remain a secret'. These scores assessed respondent's attitudes towards HIV/AIDS. For each item, two responses were possible; yes or no (these were re-coded into 'yes' as one and 'no' as zero). The minimum obtainable score was zero and the maximum score obtainable was four (favourable attitudes). The scores obtained ranged from zero to four. The Statistical Package for the Social Sciences (SPSS) was used to analyse the data.

Results

Background characteristics

In all 2160 females and 1791 males aged 15-24 years were interviewed, about 53% of the females and about 62% of males were teenagers (15-19). About 47% of the females and 38% of the males were between the ages 20-24 years. About 16% of the females and about 9% of the males had no education, approximately 22% of females and nearly 22% of the males had primary education. About 47% of females and 47% of the males had JHS education and nearly 16% of females and 21% of the males had secondary or higher level of education. About 54% of the females and 48% of the males were in urban areas and about 46% of the females and 52% of the males were in rural areas. About 66% of the females and about 90% of the males had never married. nearly 31% of females and about of 8% of the males were currently in union and just about 4% and 2% of females and males were currently not in union.

Awareness of HIV/AIDS and HIV/AIDS messages

HIV/AIDS awareness is almost universal among the youth. About 98% and 99% of young females and males respectively, had heard of HIV/AIDS. There is however variation in

awareness of HIV/AIDS among both females and males across the selected background characteristics with females in the Northern region recording the lowest (87.6% among females and 94.0% among males). Among the males, respondents belonging to other religions (predominantly Traditionalist/Spiritualist) had the least knowledge (93.2%) compared with the various religious denominations.

Awareness of HIV/AIDS messages even though relatively lower than awareness of HIV/AIDS was also very high. About 93% of females and 94% of males had heard or seen at least one message on HIV/AIDS (Table I). There was however variation in awareness of HIV/AIDS messages among both females (ranging from 70.4% to 100%) and males (78.6% to 100%) by background characteristics. Among both sexes, awareness was higher among respondent's aged 20-24 (females, 93.5% and males, 95.9%) than those aged 15-19 (females, 92.8% and males, 93.5%). Awareness was higher among both sexes in urban areas (females, 97.8% and males, 98.8%) than among those in rural areas (female, 87.6% and male, 90.3%). Male respondents' belonging to other religions had the least awareness level (93.2%) among the various religious denominations.

Awareness of HIV/AIDS among both sexes increased with increasing level of education. A similar pattern was observed with wealth status which also increased with increasing wealth status among both sexes.

Sources of HIV/AIDS messages

Table II shows the sources of HIV/AIDS messages. Ghanaian youth had a variety of information sources, and most of them got information from mass-media such as radio (female 91.3% and males 95.1%), television (females 85.5% males 85.8%) and tee shirt or cap (female 78.9 % and males 83.3%). The least mentioned source of information mentioned by both females and males was brochures (females 43.0% and males 38.9%)

Number of sources of HIV/AIDS messages

Approximately 14% of females and 14% of males recalled hearing HIV/AIDS messages from 11 communication sources (Table III). The number of sources of information was higher among males than females. About 23% and 12% of females and males respectively heard the information from none of the sources of information mentioned.

HIV/AIDS prevention

From Table IV, about 78% of females and 82% of males aged 15-24 years knew they could reduce their risk of getting the AIDS virus by using condoms, 87.9% of females and 88.6% of males believed they could reduce the risk of getting the AIDS virus by limiting sex to one uninfected partner and about 81% of females and 83% of males reported that abstaining from sex could reduce their chance of getting the AIDS virus.

Knowledge of HIV/AIDS prevention

Table V shows that, about 5% and 4% of females and males respectively had no knowledge of HIV/AIDS (zero out of a possible three). About 8% of females and 8% of males had a score of one out of a possible three. Twenty percent of females and 20.7% of males had a score of two out of a possible three. In all, about 65% of females and about 68% of males had comprehensive (Reduce chances of AIDS by: always using condoms, limiting sex to one uninfected partner and abstaining from sex) knowledge of HIV/AIDS prevention.

Awareness of HIV/AIDS messages

Knowledge of HIV/AIDS messages was generally higher among males as shown in Table VI. About 76% of females and 88% of males had seen or heard the slogan ‘stop AIDS love life’. Approximately 52% of females and 56% of males had heard or seen the slogan ‘reach out, show compassion’ while about 55% of females and 60% of males had seen the TV show ‘Things we do for love’.

Exposure to HIV/AIDS messages

Exposure to HIV/AIDS messages was generally higher among males than among females (Table VII). About 5% of females and 4% males had not heard or seen any HIV/AIDS message. Approximately 17% of females and 7% of males had heard other HIV/AIDS messages aside the three messages specifically mentioned. Almost 12% and just over 15% of females and males respectively, had heard or seen one of the messages while a little over 26% and less than 33% of females and males respectively had heard or seen two of the HIV messages. About 39% of females and 41% of males had heard or seen all the three the messages they were asked about.

Attitudes towards HIV/AIDS

About 71% of females and 72% of males indicated their willingness to care for a family member with HIV at home, while 30% and 37% of females and males, respectively, would buy fresh vegetables from a vendor with AIDS. Approximately 44% and 50% of females and males, respectively, believed HIV positive female teachers should be allowed to continue teaching and 54.3% of females and 60.5% of males believed that the HIV positive status of a family member does not need to remain a secret (Table VIII).

Attitude scores

As already indicated, attitude score was computed by awarding one mark for each correct answer to four statements that the respondents gave. Table IX show that, about 7% of females and 5% of males had an attitude score of zero, more than half of young people had attitude scores below three (one and two out of a possible four). In all, less than a tenth (9.6%) of females and a little above one tenth (13.6%) of males expressed favourable attitudes on all four measures.

Exposure to HIV/AIDS messages and attitudes

From Table X, the proportion of the youth with favourable attitudes increased with increasing number of messages heard. Seventeen percent of females and about 21% of males who had heard or seen all the three messages had comprehensive attitudes. About 8% of females and 11% of males who had heard or seen two of the messages had comprehensive attitudes. Of those who had heard or seen one or none of the messages, 2.4% and 0% percent of females respectively and 7.5 and 1.3% of the males respectively had comprehensive attitudes. Of those who had heard other messages 2.5% of females and 4.3% of males had comprehensive attitudes.

Determinants of attitudes towards HIV/AIDS among the youth

Using the enter method a significant model emerged for both female ($F_{34, 2090} = 13.067$, $p < 0.0005$) and male models ($F_{34, 1732} = 11.785$, $p < 0.0005$). About 16% and 17% (adjusted R squared, female = 0.162, male = 0.172) of the variation in the response variable is explained by the predictor variables in the model among both females and males respectively.

From Table XI shows that age of respondents was not significantly related to attitudes among both sexes. The results indicate that, females and males aged 20-24 had more favourable attitudes (females 0.072 and males 0.022 respectively) than respondents aged 15-19. The youth's type of place of residence was also not significantly related to attitudes towards HIV/AIDS.

Among females it was only senior secondary or higher education that was significantly related to attitudes. Among the males in senior secondary or higher and middle/JHS level of education was significantly related to attitudes. Young females and males with senior secondary or higher education had (female 0.320, male 0.489) more favourable attitudes and those with middle or junior secondary education had (female 0.071, male 0.258) more favourable attitudes than those with no education.

Number of sources of information was significantly related to attitudes. The results show that an increase in the number of sources will lead to more favourable attitudes by 0.025 among females and 0.032 among males. Among females it was only the richest wealth status that showed up to be significantly related to attitudes, indicating that the richest had a 0.230 more favourable attitudes than the poorest. Among the males it was only the middle wealth status that showed up to be significant, the results indicating that those with middle wealth status had 0.805 more favourable attitudes than the poorest.

Having heard or seen two or three of the HIV/AIDS messages among females and having heard or seen one, two or three among males were also significantly related to attitudes. The results suggest that hearing or seeing three and two messages induced 0.387 and 0.221, respectively more favourable attitudes among females and among males, hearing or seeing three, two and one message induced 0.545, 0.333 and 0.320, respectively, more favourable attitudes than hearing none.

Discussion

Prevention of HIV/AIDS infection through behaviour change communication messages is a key strategy for the control of the HIV/AIDS pandemic. In Ghana people were informed about HIV/AIDS long before the first case was diagnosed in March 1986. The major reason being that people 'should not be allowed to die of ignorance' [14]. Aligned with local literature, majority of Ghanaians have heard about AIDS [14] and results from this study show a similar pattern of universal awareness. Awareness of HIV/AIDS messages among the youth was relatively very high but higher among males (females, 93.1% and males, 94.4%) which could be due to an equally higher awareness level among males. However, less than half of the respondents (females, 39.3% and males, 41.4%) had actually heard or seen all the three messages of the "stop AIDS love life" campaign which complemented each other to

some extent; probably because the messages were not given the same level of coverage. It appears that a lot of success has been choked in raising AIDS awareness, but the HIV/AIDS messages minimal impact in changing attitudes [14].

A study among students in tertiary institutions in Ghana found that young people's first source of information on HIV was the mass media and their most important sources were the radio (46%) and television (27%) [15]. This is similar to the findings of this paper where radio and television were the principal sources of HIV/AIDS information. Young people are more attached to the radio and television and again probably due to the fact that these are the channels through which HIV/AIDS information is rife. In the absence of a formal AIDS education programme in the school curriculum, the mass media among other sources becomes the sources of information, but such communications could also be a source of misinformation, prejudice and myth [16]. Approximately, 14% of females and 14% males had high level of exposure to HIV/AIDS messages; that is recalling hearing HIV/AIDS messages from 11 communication channels.

A large proportion of the youth knew various ways of HIV/AIDS prevention methods. Knowledge was relatively high but was higher among males than among females probably because of a higher level of awareness of HIV/AIDS and HIV/AIDS messages among males; about three in four (more than 75%) of young people knew they could reduce their risk of getting AIDS through each of the various ways of HIV/AIDS prevention methods. The higher level of HIV/AIDS knowledge can be attributed to the continuous HIV/AIDS education in the country over the years even though knowledge does not necessarily lead to favourable attitudes.

The awareness of HIV/AIDS messages vary by background characteristics ranging from 92.6% to 100% which is probably due to the different number of media coverage in different areas. The 'Stop AIDS love life' slogan was more popular among the youth than the

other messages ('Reach out, Show compassion' and the TV show 'Things we do for love'). This may be due to the fact that the initial phase of the stop AIDS love life campaign was more publicised than the other slogans like 'Things we do for love' which was only television. As mentioned earlier, each phase of the communication programme complemented each other and each one had a key objective and for that matter if someone misses out on one part of the communication process then the individual is missing out on a key part of the communication process. This could probably be explaining the relatively poor favourable attitudes towards HIV/AIDS.

Favourable attitudes towards HIV/AIDS were very low among both sexes. Amazingly of the about 40% of females and 41.1% of males who had heard or seen all of the three messages only 17.0% and 20.7% of females and males respectively had favourable attitudes. This was quite an abysmal score taking into consideration the proportion of young people who have seen or heard all the three messages and those who have seen at least heard or seen a (over 90%) messages. A study in Ghana among students in tertiary institutions showed similar poor attitudes towards HIV/AIDS, making remarks such as 'they should be sacked', 'they should be quarantined or killed', and 'they should be imprisoned with hard labour' [15]. Everybody is at risk of HIV infection unfortunately, majority of adolescents in Ghana do not consider themselves at any personal risk of HIV/AIDS [17]. Eighty percent of students in junior secondary schools through university in the Central Region did not consider themselves to be at risk of HIV infection in the next month or year Awusabo-Asare et al., 1999 cited in [17]. In the 1998 GYRHS, among those who had ever had sex, 76% of the females and 71% of the males indicated that they were not likely to contract HIV/AIDS Tweedie and Witte, 2000 cited in [17]. These findings go to confirm how poor attitudes are among young people.

People with higher level of education are able to appreciate and relate to what they see or hear better than those with lower levels of education as a result as level of education

increases attitudes also increase. Even though there appears to be a gap between knowledge, attitudes and practice, people with knowledge of HIV/AIDS are more likely to better appreciate HIV/AIDS issues than those with no or little knowledge of HIV/AIDS. Knowledge of HIV/AIDS was significantly related to attitudes towards HIV/AIDS among only males but it showed a similar pattern among females, indicating that as knowledge of HIV/AIDS increases attitudes also got better.

Since the messages complement each other to some extent, young people who had heard or seen three probably had heard enough messages to put them in a better position to have more favourable attitudes than their counterparts who had heard none, one or two. This could probably be due to the way the HIV/AIDS messages were rolled out; that is each phase coming with specific objective of addressing one part of the problem at a time. It was revealed in this study that aside the three messages some respondents had heard or seen other messages. However, this was not a significant predictor of attitude. This could be probably be due to the fact those messages were not probably fashioned out properly to make the desired impact.

Prevention of HIV/AIDS infection through the continuing use of HIV/AIDS behaviour change communication messages is a key strategy for the control of the HIV/AIDS epidemic even if vaccines and drugs become more available, accessible, and affordable. The paper yielded important findings as it was conducted among a risky and vulnerable group (15-24 year olds). The majority of young people had heard of HIV/AIDS and had heard multiple HIV/AIDS messages but very few of them had favourable attitudes towards HIV/AIDS. Efforts at targeting the youth as a priority group for prevention interventions are in the right direction; thus, there is the need to maintain strengthen and expand these programmes. However, these messages should be holistic and comprehensive enough for young people to comprehend.

Acknowledgements

The authors wish to thank Francis N. A. Dodoo, Kwanky S. O and all M.Phil and Ph.D students at the Regional Institute Population Studies, University of Ghana, Legon for their constructive criticism and encouragement in carrying out the study.

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Tables

Table I: Background characteristics and awareness about HIV/AIDS messages by sex

Background characteristics	Female			Male		
	Yes	No	Total	Yes	No	Total
Age						

15-19	92.8	7.2	1127	93.5	6.5	1086
20-24	93.5	6.5	998	95.9	4.1	681
Region						
Western	93.5	6.5	214	95.3	4.7	169
Central	92.0	8.0	176	95.7	4.3	138
Greater Accra	97.6	2.4	380	95.7	4.3	230
Volta	78.8	21.2	179	94.8	5.2	173
Eastern	98.6	1.4	215	97.7	2.3	175
Ashanti	98.2	1.8	454	98.6	1.4	347
Brong Ahafo	95.1	4.9	224	95.7	4.3	209
Northern	71.5	28.5	130	79.7	20.3	148
Upper East	97.1	2.9	104	93.8	6.2	130
Upper West	81.6	18.4	49	79.2	20.8	48
Place of residence						
Urban	97.8	2.2	1156	98.8	1.2	853
Rural	87.6	12.4	969	90.3	9.7	914
Education						
No education	81.0	19.0	315	78.6	21.4	159
Primary	89.5	10.5	465	88.9	11.1	389
Middle/JHS	96.6	3.4	1010	97.6	2.4	842
Secondary+	99.1	0.6	335	99.5	0.5	377
Religion						
No religion	70.4	29.6	54	86.8	13.2	76
Roman Catholic	93.1	6.9	332	93.7	6.3	255
Other Christian	94.5	5.5	1409	96.2	3.8	1068
Moslem	91.8	8.2	305	92.4	7.6	314
Other religions	80.0	20.0	25	85.2	14.8	54
Marital status						
Never married	94.6	5.4	1400	94.3	5.7	1591
Currently in union	89.9	10.1	651	94.8	5.2	134
Formerly married	94.6	5.4	74	97.6	2.4	42
Ethnicity						
Akan	96.7	3.3	1130	96.7	3.3	871
Ga-Dangme	97	3.0	166	92.7	7.3	109
Ewe	88.3	11.7	273	95.2	4.8	226
Mole-Dagbani	84.8	15.2	237	87.8	12.2	294
Other	88.4	11.3	320	94.4	5.6	266
Wealth status						
Poorest	81.2	18.8	282	84.1	15.9	290
Poor	86.6	13.4	322	92.0	8.0	311
Middle	93.8	6.2	406	95.6	4.4	365
Rich	96.3	3.7	516	97.5	2.5	404
Richest	98.7	1.3	601	99.5	0.5	397
Total (15-24)	93.1	6.9	2125	94.4	5.6	1767

Computed from GDHS, 2003 dataset

Table II: Sources of HIV/AIDS messages by sex

	Female		Male	
Source	Number	%	Number	%
TV	1408/1647	85.5	1342/1564	85.8
Music video	1058/1647	64.2	900/1564	57.5
Radio	1504/1647	91.3	1487/1564	95.1

Newspaper	660/1647	40.1	687/1564	43.9
Poster	1259/1647	76.5	1217/1564	77.8
Car sticker	1107/1647	67.2	1151/1564	73.6
Brochures	708/1647	43.0	608/1564	38.9
Tee shirt or cap	1300/1647	78.9	1302/1564	83.3
Mobile ISD van	917/1647	55.7	750/1564	48.0
During community event	855/1647	51.9	739/1564	47.2
Road show	819/1647	49.7	735/1564	47.0

Computed from GDHS, 2003 dataset

Table III: Number of sources of HIV/AIDS messages by sex

Number of sources of HIV/AIDS messages*	Female		Male	
	Frequency	%	Frequency	%
0	486	22.9	203	11.5
1	64	3.0	68	3.9
2	84	3.9	69	3.9
3	110	5.2	101	5.7
4	115	5.4	121	6.9
5	127	6.0	123	7.0
6	151	7.1	158	8.9
7	155	7.3	200	11.3
8	175	8.2	191	10.8
9	188	8.9	142	8.0
10	175	8.2	139	7.9
11	297	14.0	251	14.2
Total	2125	100.0	1767	100.0

*See sources of information in Table II

Computed from GDHS, 2003 dataset

Table IV: Various knowledge of HIV/AIDS prevention by sex

	Female		Male	
Knowledge of HIV/AIDS prevention	%	Total	%	Total
Using Condoms	77.9	2125	81.7	1767
Limiting sex to one uninfected partner	87.9	2125	88.6	1767
Abstaining from sex	80.5	2125	83.0	1767

Computed from GDHS, 2003 dataset

Table V: Knowledge scores by sex

	Female		Male	
Scores	Frequency	%	Frequency	%
0	112	5.3	65	3.7
1	179	8.4	132	7.5

2	447	21.0	365	20.7
3	1387	65.3	1205	68.2
Total	2125	100.0	1767	100.0

Computed from GDHS, 2003 dataset

Table VI: Percentage of respondents by HIV/AIDS messages and sex

	Female		Male	
HIV/AIDS Messages	%	Total	%	Total
'Reach out, show compassion'	51.7	2125	56.3	1767
'Stop aids, love life'	76.3	2125	87.7	1767
TV show 'Things we do for love'	54.5	2125	60.2	1767

Computed from GDHS, 2003 dataset

Table VII: Exposure to HIV/AIDS messages by sex of respondent

	Female		Male	
HIV/AIDS Messages	Frequency	%	Frequency	%
Heard none	113	5.3	76	4.3
Heard other messages	365	17.2	115	6.5
Heard one	250	11.7	268	15.2
Heard two	562	26.4	577	32.7
Heard three	835	39.3	731	41.4
Total	2125	100.0	1767	100.0

Computed from GDHS, 2003 dataset

Table VIII: Percentage of respondents by various attitudes towards HIV/AIDS and sex

	Female		Male	
Attitudes towards HIV/AIDS	%	Total	%	Total
Willing to care for relative with AIDS	71.3	2125	71.9	1767
Would buy vegetables from vendor with AIDS	30.0	2125	37.1	1767
Person with AIDS allowed to continue teaching	44.0	2125	49.5	1767
Not allowed to keep AIDS infection secret	54.3	2125	60.5	1767

Computed from GDHS, 2003 dataset

Table IX: Attitude scores by sex

	Female		Male	
Attitude scores	Frequency	%	Frequency	%
0	137	6.5	94	5.3
1	635	29.9	417	23.6
2	653	30.8	555	31.4

3	496	23.3	461	26.1
4	203	9.6	240	13.6
Total	2125	100.0	1767	100.0

Computed from GDHS, 2003 dataset

Table X: Exposure to HIV/AIDS messages by attitude score and sex

HIV/AIDS	Female						Male					
Messages	0	1	2	3	4	Total	0	1	2	3	4	Total
Heard none	12.5	43.8	31.3	12.5	0.0	112	17.3	40.0	30.7	10.7	1.3	76
Heard oth. Mes.	10.1	50.4	25.5	11.5	2.5	365	7.8	40.9	29.6	17.4	4.3	115
Heard one	10.0	36.8	37.6	13.2	2.4	250	4.5	29.7	36.5	21.8	7.5	267
Heard two	7.5	25.1	33.8	25.4	8.2	562	5.4	28.6	31.2	23.9	10.9	577
Heard three	2.3	20.3	28.8	31.6	17.0	836	3.7	13.1	30.2	32.3	20.7	732
Total	6.4	29.9	30.7	23.3	9.6	2125	5.2	23.6	31.5	26.1	13.6	1764

Pearson Chi-Square Value = Female, 301.339 and Male, 172.3929.
Significant at α level=0.01
Computed from GDHS, 2003 dataset

Table XI: Multiple linear regression analysis of the determinants of attitudes HIV/AIDS

	Female				Male			
	B	S.E	t	Sig.	B	S.E	t	Sig.
(Constant)	1.130	0.188	6.018	0.000	0.988	0.203	4.872	0.000
Age								
15-19(R)								
20-24	0.072	0.051	1.421	0.155	0.022	0.056	0.395	0.693

Region								
Upper East(R)								
Greater Accra	0.050	0.138	0.363	0.717	0.088	0.111	0.794	0.427
Central	-0.155	0.146	-1.058	0.290	-0.188	0.118	-1.604	0.109
Western	-0.078	0.140	-0.557	0.578	-0.328	0.112	-2.935	0.003
Volta	-0.024	0.150	-0.161	0.872	0.253	0.131	1.935	0.053
Eastern	-0.075	0.143	-0.524	0.600	-0.265	0.146	-1.810	0.070
Brong Ahafo	-0.062	0.133	-0.464	0.642	-0.361	0.108	-3.339	0.001
Northern	0.060	0.139	0.434	0.664	-0.013	0.142	-0.089	0.929
Upper West	0.168	0.180	0.932	0.351	-0.035	0.192	-0.182	0.855
Ashanti	-0.156	0.132	-1.177	0.239	-0.354	0.098	-3.620	0.000
Place of residence								
Rural(R)								
Urban	0.046	0.063	0.732	0.464	-0.041	0.069	-0.587	0.557
Education								
No Education(R)								
Primary	-0.081	0.080	-1.010	0.313	0.108	0.105	1.028	0.304
Middle/JSS	0.071	0.080	0.891	0.373	0.258	0.108	2.388	0.017
Secondary +	0.320	0.099	3.224	0.001	0.489	0.122	4.013	0.000
Religion								
Other Religions(R)								
Roman Catholic	0.287	0.132	2.184	0.029	0.194	0.114	1.700	0.089
Protestant	0.185	0.133	1.389	0.165	0.293	0.114	2.556	0.011
Other Christian	0.226	0.127	1.779	0.075	0.200	0.102	1.965	0.050
Moslem	0.153	0.134	1.141	0.254	0.161	0.117	1.371	0.171
Marital Status								
Never Married(R)								
Married/Liv.Tog.	0.009	0.059	0.160	0.873	-0.007	0.099	-0.067	0.947
Formerly Married	0.236	0.124	1.905	0.057	0.144	0.166	0.867	0.386
Ethnicity								
Other (R)								
Akan	0.124	0.091	1.363	0.173	0.022	0.094	0.240	0.810
Ga-Dangme	0.007	0.120	0.057	0.954	-0.121	0.135	-0.896	0.370
Ewe	0.030	0.107	0.282	0.778	-0.128	0.112	-1.140	0.254
Mole-Dagbani	0.049	0.096	0.517	0.605	0.330	0.095	3.489	0.000
Knowledge of HIV/AIDS	0.039	0.026	1.475	0.140	0.116	0.033	3.501	0.000
Number of Sources	0.025	0.010	2.561	0.010	0.032	0.011	2.913	0.004
Wealth Status								
Poorest(R)								
Poorer	-0.119	0.087	-1.370	0.171	-0.129	0.091	-1.413	0.158
Middle	0.022	0.087	0.247	0.805	-0.204	0.095	-2.137	0.033
Richer	0.069	0.096	0.724	0.469	0.032	0.108	0.297	0.766
Richest	0.230	0.106	2.171	0.030	0.184	0.120	1.530	0.126
HIV/AIDS Messages								
Heard none(R)								
Heard other messages	-0.059	0.112	-0.527	0.599	0.197	0.152	1.299	0.194
Heard one	-0.044	0.126	-0.351	0.726	0.320	0.144	2.225	0.026
Heard two	0.221	0.124	1.777	0.076	0.333	0.145	2.289	0.022
Heard three	0.387	0.135	2.858	0.004	0.545	0.157	3.478	0.001

Computed from GDHS, 2003 dataset