

## Reducing Stigma through Household–Based HIV/AIDS Education in Ghana: A Case for Behavioural and Attitudinal Change

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Doi:10.5901/mjss.2014.v5n4p311

### Abstract

The study was aimed at reducing stigma through household – based HIV/AIDS education. It also targeted promoting behavioural and attitudinal change towards PLWHA in Ghana. A pretest – posttest design based on an intervention model was employed for the study. Quota sampling technique was used to select 3231 fathers and 3579 mothers while stratified sampling technique was used to select 3810 adolescent boys and 3552 girls from 3543 households for the study. The instrument used to collect data was a written questionnaire. The data was analysed using SPSS version 15. The study revealed that as a result of the intervention, more households in Ghana have now heard of HIV/AIDS. More people also now know that HIV is not the same as AIDS. They also realized that abstinence from sex and condom use are sure ways of avoiding contracting the virus. The study established that the major sources of information about HIV/AIDS are radio, TV, schools and print media. The attitude of respondents changed towards PLWHA drastically after the intervention. However, statistically significant differences were noted among fathers, mothers, adolescent boys and girls in the areas of having heard of HIV/AIDS before, awareness that HIV is not the same as AIDS, and what causes HIV AIDS. It is concluded that household – based education is a powerful mode of reducing stigma. It should therefore be pursued vigorously if the fight against HIV/AIDS is to succeed.

**Keywords:** Stigma, household-based education, behavioural and attitudinal change

### 1. Introduction

For many years now, the HIV epidemic has been a threat to mankind around the world. It has been increasing at an alarming rate since the first cases were reported in Ghana in the early 1980s. According to UNAIDS Report on the Global AIDS Crisis (2006), Ghana's population is estimated at 22,113,000 with an annual growth rate of 2.18%. The life expectancy at birth is fifty-eight years for women and fifty six-years for men, but increasing rates of HIV/AIDS transmission is threatening to reduce life expectancy drastically. AIDS is affecting women and girls in increasing numbers such that globally, almost 50% of all people living with HIV are female and 76% of young people (aged 15–24 years) living with HIV in sub-Saharan Africa are female. (UNAIDS/WHO, 2004).

The Ghana AIDS Commission continues to assert that stigmatization of the disease is one of the main obstacles to creating behavioural change. Stigmatization related to HIV/AIDS is frequently spread through lack of knowledge, traditional cultural practices and traditional beliefs. Many people deny that they have HIV/AIDS because of the stigma associated with the disease. Sex and sexually transmitted diseases are rarely discussed in public or in the family hence many Ghanaians learn about sex from peers. In the absence of effective cure, the only logical solution is prevention,

which requires the dissemination of reliable information to the individual households. It is believed that increase awareness of the disease will help diminish the stigma associated with it. In this regards, creating awareness and changing perception and attitudes of the Ghanaian household through education becomes a necessary strategy to control the devastating effect of HIV/AIDS in Ghana.

### 1.1 Theoretical Framework

The theoretical basis for the study lies in the Theory of Planned Behavior (TPB) and Attitude Functions. TPB, which was developed by Ajzen in 1985, is a modification of Ajzen and Fishbein's 1975 Theory of Reasoned Action (TRA). The TRA assumes that a person's behavior is a function of his/her attitudes toward the behavior as well as subjective norms. The TPB extends this idea and takes into account performance of behaviors which are not entirely under the individual's control, by including the concept of perceived behavioral control. In the specific case of HIV/AIDS therefore, TPB argues that an individual's behavioral intent is a function of that individual's attitude, which reflects his/her evaluation of the HIV/AIDS associated behavior (UNAIDS, 2009)

Earlier researchers who examined the link between attitudes and behavior departed from the assumption that attitudes had a "directive or dynamic influence on individual response to all objects and situations" (Allport, 1935). According to Fazio (1989) the question of whether there really was a link between attitudes and behavior was initially considered only by few researchers.

## 2. Literature Review

Generally, knowledge about HIV infection is recognized as a critical component for the control and management of this disease (Valdiserri, Janssen, Buehler, Fleming, 2000). Several authors have attributed fear of contagion to inadequate HIV and AIDS related knowledge, whereas others have demonstrated a reduction in fears through improved AIDS education (Shaikh, Khan, Ross, Grimes, 2007, Mulligan, Seirawan, Galligan, Lemme, 2006).

The Ghana National Association of Teachers (GNAT) and the Teachers and Educational Workers Union (TEWU) of the Ghana Trades Union Congress undertook an assessment of the awareness of HIV and AIDS in the education sector and the needs of teachers and education workers in 2007. Six hundred and eighty one (681) respondents (86% teachers and 14% education workers) were surveyed. The study revealed among the respondents: a high degree of awareness of HIV and AIDS (89%) and of direct benefits of HIV and AIDS education (77.6%); moderate attendance rate to HIV and AIDS education organized by Ghana Education Service (58.2%); low readiness to know their HIV status (9.4%); not very popular of condom use (15% said they used condom during casual sex); and one fifth reported abstinence completely as a way of prevention of HIV infection (Baah et al, 2007). Too often, HIV education is not included in national education sector plans and policy frameworks. Some donor-driven programmes are seemingly too ambitious or poorly designed for the educational context. (Clarke, 2009)

Review of the literature of the causes and the pathogenesis of AIDS worldwide revealed that HIV is transmitted primarily by sex (anal, vaginal or oral sex with an infected partner), by injections (sharing contaminated needles for drug use or accidental piercing with a contaminated needle), or from infected mother to child through pregnancy or breast-feeding (Feinstein and Prentice, 2001) Although traces of HIV have been detected in body fluids (saliva, urine, faeces and tears) there is no evidence that HIV spreads through these fluids. Nor is it water-borne, air-borne or transmitted through mosquitoes and other insects (Cote, et al, 2004). In addition, homosexual men are usually heavy users of illicit drugs, alcohol, and rectal glucocorticoids (Fauci et al., 1998; Al-Bayati, 1999). In a study Al-Bayati, (2001) found that AIDS in Africa is caused by malnutrition, release of endogenous cortisol, and by opportunistic diseases. The study noted further that atrophy in the lymphoid tissue has been observed in HIV-negative people suffering from malnutrition.

HIV-affected households face increased expenditures, especially for health. (Alkenbrack et al, 2004). In Cambodia health spending was a significantly higher (22%) percentage of household expenditures in 500 HIV-affected households than in the 500 unaffected households in the study (8%). In communities highly affected by HIV, many children live in households in which their own parents have fostered or are fostering orphans. Researchers posited that all children in the household suffer the same contact information, economic and other deprivations resulting from spreading resources more thinly as a 'coping' response to the epidemic (Barnett and Whiteside, 2007). Parikh et al (2007) also found no statistically significant differences in most education, health and labour outcomes between orphans and the non-orphans with whom they live (cohort of 197 recent orphans and 528 non-orphans aged 9-16 years) in KwaZulu Natal, South Africa.

The literature devoted to stigma and access to care falls roughly into three categories. These are: individuals, health care providers, and providers of ancillary and support services. According to Brimlow, Cook, and Seaton (2003), HIV-related stigma refers to all unfavorable attitudes, beliefs, and policies directed toward people perceived to have HIV/AIDS as well as toward their significant others and loved ones, close associates, social groups, and communities. Patterns of prejudice, which include devaluing, discounting, discrediting, and discriminating against these groups of people, play into and strengthen existing social inequalities—especially those of gender, sexuality, and race—that are at the root of HIV-related stigma.

HIV/AIDS-related stigma affects self-esteem, mental health, access to care, providers' willingness to treat people with HIV, violence, and HIV incidence. Interventions to reduce stigma are therefore crucial for improving care, quality of life, and emotional health for people living with HIV and AIDS. HIV/AIDS-related stigma has been specifically identified as a domestic policy challenge that must be addressed to reduce the number of new HIV infections, and eliminating stigma is a crucial element of global efforts (Institute of Medicine, 2001; Joint United Nations Programme on HIV/AIDS [UNAIDS], 2001; Henry J. Kaiser Family Foundation, 2002; Klein et al., 2002).

The literature on interventions and HIV-related stigma can be divided into three categories: statutory and regulatory, policy development, and programs and services. Most of the literature deals with the legal area. Considerably less attention has been devoted to programmatic interventions, which attempt to change attitudes and behavior. However, a multifaceted approach that goes beyond legal protections is necessary to address the social climate that sometimes appears to legitimize discrimination (Klein et al., 2002).

Studies reviewed show that stigma can be reduced through a variety of intervention strategies, including: Information, Counseling, Coping skills acquisition, and Contact. Even though stigma-reduction interventions work, most of the interventions were tested on small numbers of subjects. In addition, few studies looked at whether changes in attitudes and behaviors were sustained over time (Brown et al., 2001). Interventions to prevent HIV-related stigma and discrimination are integral components of the comprehensive approach to HIV/AIDS described by the New York State Department of Health AIDS Institute (Klein et al., 2002).

### *2.1 Purpose of the Study*

The main objective of the research project is to make a case for the effectiveness of an interventional model for behavioural change through HIV/AIDS education in Ghana. The project also used educational interventional model to provide factual information about HIV/AIDS to the households. It also aims at transforming the social contexts; alter beliefs and superstitions about HIV/AIDS. The study used CCE, UCC teacher trainees pursuing Distance Education Programme in Education, to educate Ghanaian households on HIV/AIDS.

## **3. Methodology**

### *3.1 Research Design*

A pretest – post test design (Brogan & Kutner, 1980) was employed for the study. This design enabled the researchers to establish relationships between baseline and post intervention levels of knowledge. The study involved the baseline assessment of the levels of household's knowledge on HIV and AIDS in terms of its awareness, source of information, causes of the disease, modes of transmission, and post treatment evaluation of factual information about HIV and AIDS. This design was used for the study because it allowed relatively straightforward assessment of an intervention by detecting differences in learning outcomes between two points in time – before and after it. Furthermore, its implementation is relatively non-intrusive and its analysis is more straightforward.

The researchers were certain that the comparison groups were not inadvertently exposed to the intervention and participants in the study did not communicate with one another about their experiences. The researchers also ensured that the groups did not differ in ways that could not be controlled.

### *3.2 Participants*

The participants comprised of father, mother, an adolescent boy and girl in each household selected for the study. Three thousand five hundred and forty-three (3543) households in all the ten regions formed part of this study.

### 3.3 Instruments

The main instrument used for this study was a written questionnaire. The questions were close-ended with pre categorized answers. The close-ended questions helped the research assistants to record answers quickly to promote easy analysis of the data.

### 3.4 Sample and Sampling Procedure

Quota sampling technique was used in the selection of father and mother in each household. On the other hand, stratified sampling was used to select the adolescent boy and girl between 14 – 19 years from each household. The quota sampling was used because it ensured that the number of sample units from different categories with specific characteristics such as father and mother appear in the sample. On the contrary, a stratified sampling technique was used for the adolescent boy and girl sample because random or systematic samples of a predetermined age group were obtained from each group. The total sample size for this study, therefore, was fourteen thousand one hundred and seventy two (14172) respondents.

Even though participants were not to declare their HIV/AIDS status, considering the sensitive nature of the topic, the researchers made sure that no ethical standards were compromised. Participants were assured of confidentiality in all the information they provided to the research assistants.

### 3.5 Data Collection Process

The research assistants were issued with introductory letters to the chiefs and assembly members of the community after going through training. They organized preliminary meetings with the selected households and introduced themselves to the household. The purpose of the project was also made known to the respondents. The Ghana Education Service and District Assemblies were also informed about the study.

Research assistants conducted interviews with their respondents. Each research assistant covered two households. The four respondents in each household were interviewed separately on one to one basis.

The interviews were conducted in the afternoons between 5.00 pm – 6.00 pm. This was to allow the research assistants and the children to return from school. It also allowed parents to return from their places of work. Each family or household was visited three times and each interview session did not last for more than 15 minutes. The first visit was the pre – treatment phase to find out the level of awareness of the disease. The second visit was the treatment phase. The research assistants used pictures, illustrations, and diagrams in passing on information on the disease. The post - treatment phase was to find out what has changed. Each visit took 2 days. There was two weeks interval between each visit. The period was planned not to coincide with the farming season.

A field work manual was prepared for the research team. The manual spelt out guidelines on sampling procedures. The purpose and procedures of the study was also part of the manual used to introduce each interview session. Instruction sheets giving details on how to ask certain questions and how to record the answers were also provided.

At the end of each visit, the data gathered was checked to ensure that they were complete and accurate. Each questionnaire was numbered at the time of the interview. The instruments were labeled using the following indicators: F – Father, M – Mother, AB – Adolescent Boy, and AG – Adolescent Girl. This was checked by the supervisors before storing the questionnaire in envelopes marked for the purpose.

### 3.6 Data Analysis

The quantitative data was analyzed with SPSS version 15. Inferential statistics was used to analyze and discuss the data collected for the study. The independent sample t-test was used to determine whether statistically significant changes occurred as a result of the educational intervention introduced in the households. One way analysis of variance (ANOVA) and Tukey HSD Post-Hoc was executed to determine whether statistically significant differences occurred among the groups and the direction of the differences respectively.

#### 4. Results

The following hypotheses were formulated to guide the study. The hypotheses were tested at 0.05 level of significance.

##### 4.1 Hypothesis 1:

There is no statistically significant change in the level of awareness of HIV/AIDS in Ghanaian Households before and after the intervention.

**Table 1:** T-test results of mean score on knowledge of HIV/AIDS before and after intervention

	No. of Subjects	Mean Score		t-value	P- value
		Pre Intervention	Post Intervention		
Hearing of HIV/AIDS	14172	1.0544	1.0248	20.804	0.000*
HIV same as AIDS	14172	1.5392	1.8679	-83.308	0.000*
Difference between HIV and AIDS	14172	2.9745	2.2320	125.489	0.000*
Avoid contracting the virus	14172	2.5188	2.4980	5.848	0.000*

The data analyzed in Table 1 shows the before and after intervention mean score for the four dimensions used in assessing level of awareness of HIV/AIDS. The results showed statistically significant increase in knowledge about hearing of HIV/AIDS ( $t=20.804$ ;  $p<0.000$ ); HIV being the same as AIDS ( $t=-83.308$ ,  $p< 0.000$ ); difference between HIV and AIDS ( $t=125.489$ ,  $P<0.000$ ); and avoiding contracting the virus ( $t=5.848$ ,  $p< 0.000$ ) respectively. These findings suggest an improvement in the level of awareness about HIV/AIDS. Therefore, on the strength of the analysis reported in Table 1, the null hypothesis that there is no statistically significant change in the level of awareness of HIV/AIDS in Ghanaian Households before and after intervention was rejected.

##### 4.2 Hypothesis 2:

There is no statistically significant change in the sources of information about HIV/AIDS in Ghanaian households before and after the intervention.

**Table 2:** T-test results of mean score on Source of Information

	No. of Subjects	Mean Score		t-value	P- value
		Pre Intervention	Post Intervention		
Source of Information	14172	3.3326	3.0775	54.111	0.000*

Table 2 shows the mean scores of subjects' source of information before and after the intervention as 3.3326 and 3.0775 respectively ( $t=54.111$ ,  $P< 0.000$ ). Hence, the research hypothesis that there is a statistically significant change in the sources of information about HIV/AIDS in Ghanaian households before and after the intervention is accepted.

##### 4.3 Hypothesis 3:

There is no statistically significant change in what Ghanaian households perceive as the causes of HIV/AIDS before and after the intervention.

**Table 3:** T-test results of mean score on Causes of HIV/AIDS

	No. of Subjects	Mean Score		t-value	P- value
		Pre Intervention	Post Intervention		
Causes of HIV/AIDS	14172	1.2705	2.3082	-88.762	0.000*

In Table 3, the mean scores on what Ghanaian households perceive as the causes of HIV/AIDS before and after the intervention are 1.2705 and 2.3082 respectively, ( $t=88.762$ ,  $P < 0.000$ ). It is therefore deduced from this result that the intervention has had a significant impact in Ghanaian households. Thus, the null hypothesis that there is no statistically significant change in what Ghanaian households perceive as the causes of HIV/AIDS before and after the intervention was not accepted.

#### 4.4 Hypothesis 4:

There is no statistically significant change in what Ghanaian households consider as modes of transmitting HIV/AIDS before and after the intervention.

**Table 4:** T-test results of mean score on Mode of Transmission

	No. of Subjects	Mean Score		t-value	P- value
		Pre Intervention	Post Intervention		
Unprotected sex	14172	1.1600	1.1433	15.525	0.000*
Blood transfusion	14172	1.5658	1.5277	23.693	0.000*
Mother to child	14172	1.7365	1.6253	42.108	0.000*
Deep kissing	14172	1.8643	1.8649	-3.001	0.000*
Use of contaminated sharp objects	14172	1.6602	1.5631	39.052	0.000*
Others	14172	1.8165	1.7671	27.115	0.000*

The data analysed in Table 4 gives the mean scores of what Ghanaian households consider as modes of transmitting HIV/AIDS before and after the intervention. The results showed significant change in knowledge about unprotected sex ( $t= 15.525$ ,  $p < 0.000$ ); blood transfusion, ( $t=23.693$ ,  $p < 0.000$ ); mother to child ( $t= 42.108$ ,  $p < 0.000$ ). Similar results were recorded for deep kissing ( $t= -3.001$ ,  $p < 0.000$ ); use of contaminated sharp objects ( $t= 39.052$ ,  $p < 0.000$ ) and others ( $t=27.117$ ,  $p < 0.000$ ). Thus, on the strength of the analysis reported in Table 4, the hypothesis that there is no statistically significant difference in what Ghanaian households consider as modes of transmitting HIV/AIDS was rejected.

#### 4.5 Hypothesis 5:

There is no statistically significant change in the attitude of Ghanaian households towards People Living With HIV/AIDS (PLWHA) before and after the intervention

**Table 5:** T-test results of mean score on Attitude towards PLWHA

	No. of Subjects	Mean Score		t-value	P- value
		Pre Intervention	Post Intervention		
Eat from the same bowl with PLWHA	14172	1.4030	1.0715	83.828	0.000*
Sleep on the same bed with them	14172	1.4236	1.0768	86.728	0.000*
Use the same sharp objects with them	14172	1.9043	1.9435	-24.033	0.000*
Share the same clothing with them	14172	1.4401	1.1033	84.831	0.000*
Discriminate between PLWHA and Non-PLWHA	14172	1.6939	1.9338	-66.879	0.000*

The data analysed in Table 5 shows the mean scores of the attitude of Ghanaian households towards People Living With HIV/AIDS (PLWHA). Pre and post intervention results revealed change in attitude in the areas of eating from the same bowl ( $t= 83.828$ ,  $p < 0.000$ ); sleeping on the same bed ( $t=86.728$ ,  $p < 0.000$ ); using same sharp objects ( $t= -24.033$ ,  $p < 0.000$ ), sharing the same clothing ( $t= 84.831$ ,  $p < 0.000$ ); and discriminate between PLWHA and Non-PLWHA ( $t= -66.879$ ;  $p < 0.000$ ).

Further analysis was conducted to establish the reasons for the change in attitude not to discriminate between PLWHA and Non-PLWHA. The result of the analysis in that direction is presented in Table 6

**Table 6:** T-test results of mean score on Reasons for not discriminating between PLWHA and Non-PLWHA

	No. of Subjects	Mean Score		t-value	P- value
		Pre Intervention	Post Intervention		
Need love and compassion	14172	1.4464	1.1873	70.397	0.000*
Entitled to Basic Human Rights	14172	1.8783	1.8865	-10.861	0.000*
Fear of Infection	14172	1.8171	1.9708	-50.728	0.000*
Don't know	14172	1.8582	1.9553	-39.052	0.000*

The data analysed in Table 6 depicts the pre and post intervention mean scores of the reasons why Ghanaian Households do not discriminate between PLWHA and Non-PLWHA. The results of the analysis portrays significant changes in need for love and compassion ( $t=70.397, p<0.000$ ), entitled to basic human rights ( $t= -10.861, p<0.000$ ); fear of infection ( $t= -50.728, p<0.000$ ) and those who do not know ( $t= -39.052, p<0.000$ ).

From the analyses on Tables 5 and 6, the null hypothesis that there is no statistically significant difference in the attitude of Ghanaian households towards People Living With HIV/AIDS (PLWHA) before and after the intervention was rejected.

#### 4.6 Hypothesis 6:

There is no statistically significant change among Ghanaian fathers, mothers, adolescents or children's knowledge on HIV/AIDS before and after the intervention.

The study took cognizance of the fact that even though people live in the same household they may have different levels of awareness as far as the HIV/AIDS epidemic is concerned. A oneway ANOVA was executed to compare the knowledge levels of fathers, mothers, adolescence and children. The result of this analysis is shown in Table 7.

**Table 7:** Households level of awareness of HIV/AIDS (Oneway Anova)

		Sum of Squares	df	Mean Square	F	Sig.
Pre: Have you heard of HIV and AIDS?	Between Group	.251	3	.084	3.462	.016*
	Within Group	342.056	14168	.024		
	Total	342.307	14171			
Pre: Is HIV the same as AIDS?	Between Group	38.526	3	12.842	52.242	.000*
	Within Group	3484.740	14168	.246		
	Total	3521.265	14171			
Pre: What causes HIV and AIDS?	Between Group	496.782	3	165.594	78.411	.000*
	Within Group	9920.942	14168	2.112		
	Total	0417.724	14171			

The data analyzed in Table 7 indicates that statistically significant differences exists among fathers, mothers, adolescents and children in the area of having heard of HIV/AIDS before  $F(2,14168) = 3.462, p<.016$ . In the same vain, a statistically significant difference was noted among fathers, mothers, adolescents and children in the area of awareness that HIV is the same as AIDS  $F(2,14168) = 52.242, p<.000$ . Furthermore, in the area of what causes HIV and AIDS, a statistically significant difference was recorded among fathers, mothers, adolescents and children,  $F(2,14168) = 78.411, p<.000$

A multiple comparison was therefore carried out to establish the reality in the various communities. The results of this comparison is shown in Table 8

**Table 8:** Multiple Comparisons  
Tukey HSD

Dependent Variable	(I)Family	(J)Family	Mean Difference (I-J)	Std. Error	Sig
Pre: Have you heard of HIV and AIDS	Father	Mother	-.002	.004	.962
		Adolescent Boy	.005	.004	.492
		Adolescent Girl	-.006	.004	.346
	Mother	Father	.002	.004	.962
		Adolescent Boy	.007	.004	.204
		Adolescent Girl	-.004	.004	.626
	Adolescent Boy	Father	-.005	.004	.492
		Mother	-.007	.004	.204
		Adolescent Girl	-.012*	.004	.008
	Adolescent Girl	Father	.006	.004	.346
		Mother	.004	.004	.626
		Adolescent Boy	.012*	.004	.008
Pre: Is HIV the same as AIDS?	Father	Mother	.068*	.012	.000
		Adolescent Boy	-.051*	.012	.000
		Adolescent Girl	.073*	.012	.000
	Mother	Father	-.068*	.012	.000
		Adolescent Boy	-.119*	.012	.000
		Adolescent Girl	.005	.012	.978
	Adolescent Boy	Father	.051*	.012	.000
		Mother	.119*	.012	.000
		Adolescent Girl	.124*	.012	.000
	Adolescent Girl	Father	-.182*	.012	.000
		Mother	.076	.012	.978
		Adolescent Boy	-.406*	.012	.000
Pre: What causes HIV and AIDS?	Father	Mother	.182*	.035	.000
		Adolescent Boy	-.076	.035	.124
		Adolescent Girl	-.406*	.035	.000
	Mother	Father	.182*	.035	.000
		Adolescent Boy	.258*	.034	.000
		Adolescent Girl	-.224*	.034	.000
	Adolescent Boy	Father	-.076	.035	.124
		Mother	-.258*	.034	.000
		Adolescent Girl	-.482*	.034	.000
	Adolescent Girl	Father	.406*	.035	.000
		Mother	.224	.034	.000
		Adolescent Boy	.482*	.034	.000

\*The mean difference is significant at the .05 level

The analysis in Table 8 shows that in the case of having heard of HIV/AIDS before, the direction of the difference in the level of awareness lies between adolescents boy and girl. In the case of father-mother; the mother-adolescent, and father-child the differences are just marginal. However, in the case of knowing that HIV is the same as AIDS the direction of differences exist on all the four fronts except between mothers and children. Similarly, the directions of significant differences were noted among all four groups except father and adolescent.

There is evidence which suggests that the levels of awareness of the HIV/AIDS epidemic among fathers, mothers, adolescents and children are not the same.

## 5. Discussion

The study reveals that as a result of the intervention, more households in Ghana have now heard of HIV/AIDS and that HIV is not the same as AIDS. The study further revealed that the major sources of information about HIV/AIDS are radio, TV and schools both before and after intervention. However, print media became prominent as one major source of



information. Furthermore, abstinence from sex and condom use were identified as ways of avoiding contracting the virus. This finding collaborate earlier studies carried out on mass media exposure which revealed that there is a link between behavioural intent and behavior. MacIntyre et al. (2001), in their study of condom use among men in Uganda, Kenya and Zambia found that men in Kenya and Uganda who listened to the radio on a daily basis were significantly more likely to report behavior change than those who did not listen. However, this relationship was not significant for Zambia. Karlyn (2001) found a similar exposure in Mozambique, where adults who recalled the campaign messages were almost twice as likely (odds ration 1.9) to try to change their behavior as those who did not recall these same messages. Interestingly, this study included a measure of self-efficacy to measure intent to carry out the targeted behavior after exposure to a certain message.

The study further established that unprotected sex is the major mode of transmitting HIV/AIDS. There was also an increase in awareness of blood transfusion and mother to child as modes of transmitting the disease. This finding is consistent with Dinesh & Gopalakrishnan (2003) study which identified sexual transmission, blood transfusion, and mother to child transmission as the major modes of transmission of the virus.

It also came out clearly that even though the levels of awareness of the HIV/AIDS epidemic among fathers, mothers, adolescents and children increased, they are not the same. It is heartening to note that the intervention has raised the knowledge level of the four categories of respondents. What is frightening is the fact that some strong beats and pieces of misconceptions that still exit in the communities about how to find a cure for the HIV/AIDS. Some still hold the view that sex with virgin female could cure STDs. This misconception calls for continuous education and strong media advocacy.

Another finding was that respondents' attitude changed towards PLWHA drastically after the intervention because they realized that PLWHA need love and compassion from people. This is not a new development. Brown et al (2001) used peer education and workshops, street interviews, conversations with PLWHAs, and concerts to improve attitude towards PLWHA by encouraging acceptance and compassion. The effect of each intervention was measured by the participants' willingness to sit next to, eat with, and visit PLWHAs. The results showed a significant increase in positive attitudes towards PLWHAs on all measures and a reduction in the number of participants who sought isolation for PLWHAs.

## 6. Conclusion

It is obvious that targeting households in the fight against stigmatization through education is a very powerful intervention measure because the attitude of Ghanaians changed towards PLWHA drastically. It is now clear that PLWHA need love and compassion from other people.

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