

# **Using Appropriate Communication Strategies for HIV Prevention Education in Rural Communities in Ghana**

## **Abstract**

The paper presents both qualitative and quantitative data gathered from a rural Ghanaian district to examine existing HIV/AIDS communication channels and strategies and determine the appropriate communication strategies for effective HIV preventive education. Radio, TV, neighbors, teachers, pastors, health workers and print media were found to be the major channels for HIV/AIDS education and communication. However, respondents did not consider existing HIV communication channels to be very accessible as their messages are not usually in the local language. They expressed needs for more detailed information, with illustrations and in their local language. Local people noted that community involvement in HIV/AIDS communication and education has been low, but felt that they could have an important role to play. They suggested involving heads of households and parents, individuals, and setting up community-based groups to improve current HIV-communication efforts in rural communities if HIV education is going to have an impact on rural people's knowledge and behavior.

**Key Words:** Appropriate communication strategies; HIV/AIDS prevention; rural communities; Ghana.

**Authors:** Anafi, P., Asiamah E., Agyepong I., Oduro G., Y & Owusu-Danso, T.

## INTRODUCTION

HIV/AIDS remains one of the world's most critical social and health problem. Globally, about 33 million people are currently infected with the disease, while over 20 million people have already died from the epidemic (UNAIDS, 2010). There is no known cure for AIDS, but infected people are increasingly gaining access to anti-retroviral drugs, which are still costly and inaccessible to the majority of those infected. Although a global problem, HIV/AIDS has had its worst impact on Africa. About 68% of the people infected with HIV live in sub-Saharan Africa and nearly 80% of all AIDS-related deaths since the early 1980s have occurred there (UNAIDS 2010). The severe socio-economic impact of the epidemic in sub-Saharan Africa has been thoroughly documented and includes the rapid loss of human labor and capital, reduced productivity, socio-economic stagnation, poverty, hardship and misery. HIV/AIDS contributes immensely to the health burdens of African countries, depleting scarce resources and reducing household coping capacity (Haacker 2002; WHO/UNAIDS, 2006).

In confronting HIV/AIDS crisis, many African countries have committed themselves to AIDS control and prevention programs (Anarfi, 2005; Bertrand, 2006). In Ghana various communication strategies have been used to sensitize the public of the dangers of the HIV/AIDS and appropriate preventive behavior. The current national HIV prevalence rate is 1.7 percent—indicating that the country has a lower prevalence rate as compared to most countries in the sub-Saharan region. Yet, there are wide regional variations in HIV prevalence with the Eastern region having the highest prevalence rate of 4.7%, the Greater Accra region with 3.0percent and the lowest rate of 1.2% in the Northern region (USAID, 2010). The major concern currently is why some regions do or communities still have high prevalence rate despite efforts at awareness creation and education for behavioral change in lifestyles that increase the spread of HIV infection? Is it that the HIV prevention education has not reached the target individuals, households and communities? Or it has reached them, but the kind of communication strategies and channels used have been inappropriate and ineffective in transmitting information in a manner that would lead to behavior change?

This study was based in the rural Dangme West district in the Greater Accra region of Ghana. In the Dangme West district, it has been observed that preventive messages on HIV have been conveyed to people, but these messages have not translated into actions as hoped to

achieve. There is a steady increase in HIV/AIDS reported cases (District Health Management Team Report, 2008). In this study, we assessed existing HIV/AIDS communication channels and strategies and determine the most effective communications strategies for HIV prevention education. The study specific objectives were: (i) to identify the existing HIV/AIDS communication channels and strategies in the district; (ii) to assess the strengths and weaknesses of these channels and strategies; and, (iii) to determine the most effective strategies for HIV prevention education for behavioral change in the rural district .

### **HIV/AIDS in the Context of Ghana**

Ghana is a low-income sub-Saharan African country on the coast of West Africa with per capita GDP is estimated at USD 1600 (CIA, 2010). In 2010, the population of Ghana stood at about 24 million with 49% of the population living in rural areas. The country has a land size of 230,020 square-kilometers. Despite improvements in health care, infant mortality is still high with the current rate of 48.55 per 1000 live births and life expectancy stands at 61 years (CIA, 2010). The first case of HIV/AIDS in Ghana was reported in 1986. The disease spread slowly, but steady until 1999, when the national prevalence rate was 4.6% (National AIDS/STI Control Program 2008).

According to the annual HIV sentinel surveys conducted among antenatal attendants, the HIV prevalence in the country appeared on a decreasing trend from 3.6% in 2003 to 2.7% in 2005, but increased to 3.2 in 2006, and rate dropped to 2.9 % in 2009. But data from the National Estimates and Projections for HIV prevalence gave the national HIV prevalence rate in 2009 as 1.9 percent (Ghana AIDS Commission, 2010). The HIV prevalence in Ghana varies with geographic areas, age, gender and residence. Data from the 40 sentinel sites showed HIV prevalence rate ranged from 0.7% in the North Tongu district in the Northern region to 5.8% in Agomanya and Koforidua in the Eastern region. The prevalence in urban sites is higher than in rural sites. The current regional prevalence rate ranges from 1.2 in the Northern region to 4.7 per cent in the Eastern region. HIV prevalence was highest (4.0%) in 40-44 years age group, lowest (1.8%) in 45 -49 years age group and 2.1% for young people aged 15-24 in 2009 (Ghana AIDS Commission, 2010).

At the moment approximately 240,800 Ghanaian adults and 21,209 children are living with HIV/AIDS in the country. The disproportionately high rate of infection among women (2:1)

has led to a large increase in the number of pediatric AIDS cases. There were estimated 140, 000 children orphaned by AIDS at the end of 2009 (National AIDS/STI Control Program, 2010). The estimated annual AIDS death decreased from 18, 082 in 2008 to 17, 058 in 2009 (Ministry of Health-National AIDS/STI Control Program, 2010). Although the national HIV prevalence rate shows a downward trend in HIV infection, high prevalence rates in some areas of the country clearly shows that a major behavior change is essential to reduce drastically or half the spread of HIV infection in Ghana (Anarfi, 2005).

A number of studies in Ghana have shown that various communication and education strategies have been used to sensitize the public on the need for appropriate HIV/AIDS preventive behavior (Atipoe, 2008; Bouley et al. 2008). But available data suggest that there is gap in average Ghanaian knowledge about HIV prevention. One study that assessed Ghanaians knowledge about HIV prevention reported that more than 60% women and men know that restricting sex to one partner prevents HIV infection, 21% of women and 39% of men reported condom use as a prevention method; whereas 30% of women and men reported avoiding parenteral threats as a prevention method. In this study, it was only 13% of women and 18% of men who said they know that avoiding commercial sex prevent HIV infection, 6% of women and 9% of men reported abstinence and 1.2% of women and 1.1% of men reported avoiding homosexuality (Benefo, 2004). This same study also revealed that, only 6% of women and 18% of men reported they use condom to prevent HIV infection and 8% women and 16% men said they have delayed in starting sex. This implies that that an average Ghanaian only knows one out of six HIV prevention methods and HIV/AIDS behavioral change is limited (Benefo, 2004).

Previous studies carried out in the Dangme West district also found people had less detailed and accurate information about HIV/AIDS, and did not recognize they are at risk of HIV/AIDS and effect of the disease on district as whole (Integrated Community Development Report, 2000; Garbrah-Aidoo, 2000). Thus, the current study gathered data from rural Dangme West district of Ghana to examine strategies to effectively communicate HIV prevention information towards the goal of increasing rural people's knowledge about HIV/AIDS as well as changing risky sexual behaviors.

## **Study Site**

The site of this study was the rural Dangme West district of the Greater Accra Region of Ghana. The Greater Accra region is one of the ten regions of Ghana in Ghana. The Dangme West district has estimated population of 100,000 and a land size of about 1700 square-kilometers. It lies in the coastal savannah, inhabited by the Ga- Adangme ethnic group. The inhabitants are predominantly fisher folks and farmers who use traditional non-mechanized, labor-intensive farming techniques. The four largest communities, Dodowa, Prampram, Ningo and Asutuare, have populations between 3000 - 6000 people (Dangme West Annual Health Report 2009). Each community has a traditional leader or chief. Until recently, traditional controls on adolescent sexual behaviors were strong. Indigenous cultural rites such as the 'Dipo' (puberty rites), which sought to suppress adolescent sexual expressions, are no longer effective. The district has a current literacy rate of about 39% and the major local language spoken widely by residents is Dangme (Agyepong et al., 2003). Modernity, migration and new forms of social interactions have weakened traditional social norms. Young people in this culture are increasingly becoming sexually active at early ages (Nukunya, 2003, Anarfi, 2005).

The district shares border with the Eastern region, the region with a highest prevalence rate of HIV infection in Ghana. There are no HIV sentinel surveillance sites in the district. Data on HIV/AIDS cases are obtained from 5 hospitals in districts that border on Dangme West. HIV and AIDS continue to be major health and social problems in the district and it is locally considered be a 'silent disease.' Residents still feel reluctant to talk openly about HIV/AIDS and people cover up their HIV/AIDS status for fear of stigmatization.

## **METHODS**

### **Study Design and Instrumentation**

The study used qualitative and quantitative research methods. Focus groups and a pre-tested, structured questionnaire were used to gather data on HIV/AIDS education and communication channels and strategies. The study populations were adolescent (13-19 years) and adult (20 years above) males and females in the Dangme West district. The Dangme West district has an estimated population of 110,000 (Ghana Statistical Services, 2010). Forty-two percent of this population are between 0-12 years, 50% between the ages of 13-49 years and 8%

are 50 years and above. Thus, the population targeted for the study represents approximately 58% of the district total population.

To obtain qualitative data, we held twelve focus group discussions (FGDs) in the communities. Six of the FGDs included adolescents ages 13-19 years. There were three separate FGDs each for adolescent male and female participants. We held the remaining six FGDs with adults, three with males and three with females. Each group comprised 8-10 participants. We held the FGDs in three communities with the highest reported incidence of HIV/AIDS in the study district. Key informants were used to recruit 8-10 adolescent males and 8-10 adolescent females from each of the communities. We repeated the same process for the adult FGDs in the three sampled communities.

For the survey, we recruited 280 adolescents and 320 adults. We used close-ended questions administered in face-to-face interviews. Systematic random sampling was used to select 30 enumeration areas (EAs) or communities from the study site. The sampling frame was a list of all the enumeration areas in the district with their population count obtained from the 2000 national population census and household data report available at the Ghana Statistical Service. In each of the selected EAs, we randomly selected 10 households and in each household we interviewed both adolescent and adult respondents. We selected the households by first locating the landmark of the enumeration area and we selected a household close to the landmark, then we moved on to the next until 10 households in each EA had responded. In a household, if we did not get either an adolescent or adult respondent to interview, we moved to the next household. We interviewed the first person we met in the target age range while visiting a given household. We achieved gender balance by alternating the sex of people interviewed.

In both the structured interviews and focus group discussions, information was sought on the following: existing channels and strategies for HIV/AIDS education and communication for sexual behavior change, the accessibility and acceptability of channels and strategies and the perceived credibility of available channels and strategies, and ways of enhancing effective HIV/AIDS communication and education strategies for sexual behavior change.

### **Data Analysis**

Data from the focus groups were analyzed using thematic analysis. Frequencies and cross-tabulations were used to analyze the survey data. The focus group discussions tapes were

transcribed and entered into Microsoft Word and the data was cleaned together with the field notes. We used thematic content analysis to categorize the data into common themes. The data were given unique quotes as we read through the transcripts and sorted them out into common themes. Based on the objectives of study, we organized the data into five major themes: “Existing communication channels and strategies for HIV/AIDS prevention education,” “Access to channels of communication for HIV/AIDS,” “Acceptability and credibility of channels and strategies for HIV/AIDS communication,” “Community role in HIV/AIDS communication” and “Parents’ role in HIV/AIDS and sexual behavior change communication.”

We used the cut and paste method of rearranging text with similar codes under the theme headings. Using Microsoft word processor, we copied and pasted coded transcripts on the screen into a new document, with headings for each theme. We discussed, compared and identified issues as they emerged in the various categories. Quotes from participants were used to illustrate the issues raised in the focus group interviews. The close-ended questions were coded, entered into Microsoft Excel and transferred into Stata @ 5.0 for cleaning and analysis. Means, frequencies and cross-tabs are used to present the survey data.

## **RESULTS**

### **Existing communication channels and strategies for HIV/AIDS**

The results show that the most common channel of communication for HIV/AIDS information available to the respondents was the radio (92% of adult respondents and 86% of adolescent respondents). Also frequently mentioned were television (40% of adults and 47% of adolescents) and neighbors/relations (24% of both adults and adolescents). Other channels included teachers, pastors, community elders, assembly members, health workers and prints. Table 1 summarizes the responses of both adult and adolescent respondents for communication channels available to them in their communities for HIV/AIDS education and information.

The major strategies for communicating HIV/AIDS information and education identified by the community members were radio news broadcasts (43% adults and 38% adolescents), radio discussions (24% adults and 24% adolescents) and radio advertisements (31% adults and 26% adolescents). These were followed by TV communication strategies. Adolescent respondents recorded higher percentages for TV news (21%) and TV discussion (11%) than the

adults. Adolescents more frequently mentioned teachers than the adults. Only adolescents mentioned dialogue, storytelling, drama and cartoons. Songs, storytelling, cartoons and drama were the least common communication strategies for HIV/AIDS and sexual behavior change communication for both adult and adolescent respondents (see Table 2).

[Insert Tables 1 and 2 about here]

### **Access to channels of communication for HIV/AIDS**

Respondents were asked to describe how difficult it is to get access to the communication channels and to access information on HIV/AIDS through the available channels. We looked at both economic and physical accessibility. From the FGD accounts, radio emerged as quite accessible and community members said they could tune in for information at any time. They also felt that radio is affordable and has wider coverage than any other communication channel. About 80% adult respondents and 84% adolescent respondents in the survey said that radio is easy to access in their communities. However, they thought that the numerous radio stations in the country made it difficult for them to tune to the appropriate channel for the right information at a given time. An adolescent girl explains the problem this way:

*“I do not know which program is being transmitted on which channel and I often not listen to important programs because I do not know which radio station is presenting what.”*

Most community members thought that TV sets are difficult to access and talked about their inability to buy them. The focus group discussions revealed that TV ownership in communities is low, unlike radios, and in many cases, people visit other homes to watch TV. They also said that some communities do not have electricity, making access to TV programs quite difficult for them. One FGD participant thus observed:

*“Not everyone can afford a television set because of poverty. There is no good work to do to earn some money to be able to buy television.”*

Other channels viewed by respondents as providing easy access to information include teachers, neighbors and relatives, pastors and church leaders, and community leaders (see Table 3). With respect to how often people in their communities get HIV/AIDS information through these channels, 59% of the adults and 50% of adolescents responded that they hear HIV/AIDS and sexual behavior change messages on radio daily. Forty percent of the adult and 29%



adolescent respondents have access to HIV/AIDS educational messages on TV daily. Only 6% of adult respondents and none of the adolescents get HIV/AIDS information from print media on a daily basis. However, 47% of adults and 44% of adolescents indicated that they occasionally received HIV/AIDS information in the print media (see table 4). The print media include books, brochures, posters and daily newspapers.

Focus group discussion data also showed that adolescents received HIV/AIDS messages in their schools at least once in a week or fortnightly. This usually occurred during weekly morning worship services or in regular school lessons. HIV/AIDS and information on sexual behavior change were rarely received through mobile information vans, because they do not come to these communities for health education at all. With regards to other channels, including local health workers and community members, the majority of respondents (both adults and adolescents) said that they receive HIV/AIDS messages from them only occasionally. Findings revealed that there was no critical difference between adults and adolescents with respect to their sources of information on HIV/AIDS and sexual behavior change.

[Insert Tables 3 and 4 about here]

### **Acceptability and Credibility of Communication Channels and Strategies**

The community members interviewed felt that information on HIV/AIDS that reached them through these existing channels is reliable. They noted that they understand the messages and believed them to be correct. Based on self-reports, they understand programs on HIV/AIDS covered in TV news, advertisements and discussions, especially when people see photographs of HIV/AIDS sufferers. In one of the FGDs, a participant maintained:

*“With the photographs, you could see that HIV/AIDS is real.”*

Another girl added;

*“We believe that what we are taught at school about HIV/AIDS is real and true. In addition, we read from books.”*

They emphasized that these channels of communication make them aware of the causes of HIV as well as how to protect oneself from infection. HIV/AIDS messages given by health workers, teachers, neighbors, relations and other community members were reportedly very easy to understand. This was largely because respondents had the opportunity to ask questions on

HIV/AIDS related issues.

However, they complained that background illustrations and photographs accompanying TV programs and other visual messages on HIV/AIDS are not done well enough to help them understand messages. FGD participants acknowledged the importance of HIV/AIDS messages that they get through channels available to them and mentioned that these communication strategies for HIV/AIDS and sexual behavior change do not conflict with the traditional structures and norms in their communities. A community elder in one FGD session put it this way: *“The channels and the strategies of communication for HIV/AIDS and sexual behavior change information do not conflict with our social norms and practice. They do rather promote good sexual behavior and reduce teenage pregnancy if young people take such messages more seriously.”*

More importantly, they felt that more action is needed on HIV/AIDS and sexual behavior change communication to enable communities to become more aware of HIV/AIDS, and understand the messages and their implication for sexual health. Participants thought that the major barrier in HIV/AIDS prevention education in their area was the language used in HIV education. According to them, English and Twi languages are most often used to communicate HIV/AIDS and sexual behavior change messages. The use of those languages often makes it difficult for many community members to understand the messages relayed.

To assess the magnitude of language as a barrier in communicating HIV/AIDS and sexual behavior change information, the survey respondents were asked whether they would like to hear HIV/AIDS messages in English or not. Of the 320 adults and 280 adolescents interviewed, 53% adults and 35% adolescents indicated that they prefer not to receive messages in English. The main local language that they would prefer to hear HIV/AIDS information is Dangme (68% adults and 62% adolescents). About 82% of adult respondents and 88% of adolescent respondents felt that community members would prefer to hear HIV/AIDS and sexual behavior messages in Dangme. Table 6 summarizes the findings on respondents' preferences for communication languages for HIV/AIDS and sexual behavior change communication.

[Insert table 5 about here]

## **Community role in HIV/AIDS Communication**

The data gathered suggest that community members' involvement in HIV/AIDS and sexual behavior change communication in their communities was not high. The following comments made by an adult leader participant reflect the prevailing view:

*“I am aware of some of the channels and strategies for HIV/AIDS and sexual behavior change communication and education in the district, but I think that community members' involvement in sexual behavior change and HIV/AIDS communication is inadequate. More especially, I see parents' involvement to be small and they should be given the necessary information and encouragement to be able to pass on this information to children since they spend most of their time with their parents.”*

A pastor who participated in one of the FGDs likewise notes:

*“I think community members' involvement is not enough because I am not aware of any community member direct involvement in HIV/AIDS education, but I have heard of some community based-organization yet to be set up in the district”.*

Findings from the survey indicate that community involvement in HIV/AIDS communication was limited. Only 19% adult and 21% adolescent respondents were aware of any community involvement in HIV/AIDS and sexual behavior communication; those involved were parents, teachers, pastors and opinion leaders. Others mentioned as participating in local HIV communication efforts include community-based organizations, drug vendors, assembly members, local committee members, and health volunteers trained several years ago by Plan Parenthood Agency, Ghana (PPAG) and some local NGOs. When asked about how individuals in communities could become more involved in HIV/AIDS education and communication, respondents reported that individuals could be involved in household HIV communication and outside the household (91% of adults and 90% of adolescents). Respondents suggested that parents and heads of families need training to improve their involvement in HIV/AIDS education and communication. They also thought that individuals should be encouraged to communicate HIV/AIDS and healthy sexual behaviors to other people in their communities. A health co-ordinator in one district school put it this way:

*“For a more positive approach to HIV/AIDS and sexual behavior change communication, I think the participatory learning activity approach [can] be used where community members are made*

*to be involved in designing, implementing, monitoring and evaluating communication strategies that they think will suit them for HIV/AIDS education.”*

In the survey, respondents frequently spoke of the need to set up community-based HIV/AIDS teams (27% adults and 36% adolescents) to visit community members on regular basis. They also felt that it is good set up community drama troupe (11% adults and 13% adolescents) and felt the need to organize community durbars or gatherings and campaign to educate community members (41% adults and 38% adolescents). It was also felt that communities should support HIV/AIDS communication efforts by way of mobilizing funds to complement the efforts of other agencies (5% of adult and 12 % of adolescent respondents). There were also those who felt that chiefs and community leaders should be responsible for HIV/AIDS communication (5% adults and 12% adolescents). Some community members felt that the struggle for survival makes involvement in HIV/AIDS communication and sexual behavior change education very difficult. As one respondent noted:

*“Because there is no meaningful work for people to do, they always go out to look for what they will eat. They do not have time to be involved in HIV/AIDS education and communication and it will be difficult to organize something like this here.”*

Yet another respondent maintained:

*“The poverty has eaten so much into the people that gathering of this nature on HIV/AIDS will be of no use to them. Here people are thinking first of how to survive.”*

Respondents generally agreed that individuals would listen to HIV/AIDS and sexual behavior change information and put what they hear into practice when members of their communities were involved. There were also those who felt that few people would put what they hear into practice (28% of adults and 27% of adolescents). Only very few of the interviewees consider community involvement in HIV/AIDS communication and education as less relevant.

### **Parental role in HIV/AIDS and sexual behavior change communication**

Data from both FGDs and survey support the need for parental involvement in HIV/AIDS and sexual behavior change communication. All the adolescent groups felt that parents and guardians should be more serious about and take responsibility for communicating sexual health and HIV/AIDS information. Young people thought that the ability of parents and

their children to talk about sexual behavior and its implications for sexual health was central to HIV/AIDS communication. However, in most cases, parents were reportedly very reluctant to talk to their children about sexual behavior. Young people also maintained that those parents and guardians who muster the courage to tell children about sexual behavior and its impact on sexual health often do it in the wrong way. One adolescent girl revealed:

*“They always shout at us that we would be pregnant and my mother does this to me.”*

Another girl asserted:

*“My aunt always shouts warnings of pregnancy and insults for everybody to hear when she sees me moving with boys who are friends.”*

During the focus group with adolescents, an animated discussion revolved around how to talk young people and how parents should be actively involved in sexual health and sexual behavior change communication but not infringe on the rights of young people. Interestingly, the adults also felt that parents must come out of their shells and talk to their children about sexual reproductive health issues. When adolescent respondents in the survey were asked how best parents and guardians should communicate HIV/AIDS and appropriate sexual behavior practices to their children, 83% felt that they should be spoken to alone, when other relations or siblings are not around. Young girls felt that they want their mothers to talk to them without the involvement of fathers. Many girls said they would be shy if their fathers were part of sexual health and sexual behavior communication. Some of them are averse to having such messages communicated to them when family or other relations are around (12%). The rest (5%) said that young people deserve access to books and magazines on HIV/AIDS and sexual behavior change. They also thought that young people need biblical or Quran-based instructions as well as the opportunity to watch and attend programs on sexual health and appropriate sexual behavior.

Similarly, the majority (70%) of adult respondents felt that parents should make the effort to talk to their children. They felt that the best approach to communication would be to guarantee young peoples' privacy. Thus, parents and guardians should have an attitude of talking to their children quietly and politely on this subject. Others also thought that young people need teaching on what is good and bad and the consequences with each action (13%). They also believed that books, pamphlets and magazines on HIV/AIDS and sexual behavior should be made available to young people and regular education based on the Bible or Quran be

given to them at all times.

## **DISCUSSION**

There is a wide range of communication channels and strategies in the district for HIV/AIDS education. The radio is the readily available medium, followed by television and neighbors. Others include teachers, pastors, health workers, prints and assembly members. However, for radio and television, there are no proper program guides available for people to see and select programs. There is the need to have more programs in local languages rather than in English. Our results show that the radio is the most accessible of all the communication channels. Benefo (2004) has noted that, because they are inexpensive to acquire and maintain, radios are available in many households in rural African communities. One study conducted in the study site found that radio ownership is very high (i.e. about 72%) among households ( Dangme West District Health Administration, 2008).

The findings also revealed the radio is a highly acceptable channel and convenient in rural settings even where electricity supply is limited. The radio is the medium from which people most often get information on HIV and AIDS and other health related messages. Television came second on the list; TVs are, however, not as accessible as radio. They are not as affordable. These findings suggest that the usefulness of the radio for HIV/AIDS prevention and sexual behavior change communication and education cannot be underestimated (Duflo, 2006, Keating et al., 2006). McCombie et al. (2002) has recommended that any attempt at behavior change communication should rely on the radio to channel health education messages. Radio could use strategies like songs, poems, storytelling and drama, which were recognized as less common for HIV/AIDS prevention education in the study site, but which are likely to make lasting impact on audience. Researchers have shown that using songs, drama, storytelling and many others in these ways for HIV/AIDS education have yielded successful results in many places in Sub-Saharan Africa (Panford et al 2001; Klepp et al. 1994).

Other strategies such as discussions, health talks, advertisements should be made more common for HIV/AIDS education on radio so that people hear these messages more often. The use of print media was limited in the communities studied. In many rural communities, the literacy rate tends to be low (Vaughan et al., 2000). In this study, access to and use of print media by adults and adolescents were very low probably due to low literacy rate among people.

Others reasons are that people are unable to afford daily newspapers and many communities could not even be reached with these materials. Therefore, if print media are to be used for HIV/AIDS education, they should be in the local language and designed in ways that would convey more visual messages for HIV/AIDS.

Emerging from this study is evidence that community members accept existing communication channels and strategies for HIV/AIDS education and information. They also tend to believe the messages that they hear as well as the sources of the information. However, language is a major barrier to their understanding of these messages. Most information that they hear is in English and Twi, which are not understood by many people. More than 80% of both adults and adolescents in the study prefer the use of their local language for HIV/AIDS and sexual behavior communication and wish there could be a kind of communication strategy that would make use of the local, indigenous language. Studies have confirmed that the use of local language in Ghana (Obeng-Quidoo, 1999) and elsewhere (Minja et al., 2001) in supplying important health information has produced positive outcomes. The results of the study also provide information on the need for the use of more background illustrations and visuals to accompany HIV/AIDS and sexual behavior messages.

The study has demonstrated that, although community members are currently not highly involved in HIV/AIDS education, they present an underutilized resource. The findings revealed that only 19% adults and 21% adolescents were aware of community members' involvement in HIV/AIDS education and communication. Moreover, ways suggested for community involvement in HIV/AIDS communication included setting up community teams, community drama troupes and community durbars for HIV/AIDS education. It was also recommended that heads of households become more involved in HIV/AIDS education. Respondents noted that communities could also be involved in mobilizing funds to support HIV/AIDS programs. These findings agree with earlier studies in the developing world (D'Cruz-Grote, 1997; Evian, 1992) where community members suggested similar ways for health education, health promotion and disease prevention.

In Dangme West and many other communities, parents' inability to communicate effectively with their children on many issues adversely affects children's future life (Botchway, 2004; Babalola et al., 2005). This appears most typical in the area of adolescent reproductive

health (Wamoyi et al., 2010). Many parents are reluctant to talk about reproductive health with their wards because of the cultural framing of sexuality as belonging to the realm of secrecy (Babolola et al., 2005). However, there is evidence from the present study that parents appear to realize the need for their effective involvement in communicating HIV/AIDS and sexual health and sexual behavior messages to their children, which offers opportunities for adolescents' sexual behaviors to become safer (Dimbuene & Kuate Defo, 2011). Over 80% adolescents said that they want parents to communicate sexual health and HIV/AIDS information to them directly. Similarly, teachers emerged as important channels for reaching adolescents with HIV/AIDS and behavior change messages. All these indicate young people's readiness to learn. Studies done elsewhere have shown that the involvement of parents and teachers in ensuring positive and healthy behavior lifestyles in children, for instance, has yielded encouraging outcomes since children need direct messages to motivate them to change certain lifestyle behaviors (Bora et al., 2000; Cullen et al., 2000). Church elders, pastors, community elders and health workers are important in reaching adults; others that may be useful include neighbors and relations.

In conclusion, the present study demonstrates that radio and TV are the most available channels in these rural communities. Community members accept current channels and strategies. They understand HIV/AIDS and sexual behavior messages through these channels. However, community members prefer more background illustrations and photos to accompany HIV/AIDS messages and feel that such materials will enable them to understand the issues better. They also prefer the use of local language for HIV/AIDS and sexual behavior change education and see community members as a potential resource for HIV/AIDS communication and education. Currently, however, the involvement of community members in HIV/AIDS education efforts in rural Ghana is limited. Future policy must ensure that the channels and strategies used in HIV/AIDS education and communication in rural Ghana must be those that reflect the needs and sensitivities of the expected beneficiaries of those activities.



## REFERENCES

Agyepong, I. A., Anafi, P., Asiamah, E. and Ansah, E. 2003. Evaluation of the impact of CQI on Malaria Control in the greater Accra region, Ghana. *Research Report*, Ghana Health Service, Dangme West.

Anarfi, J. K. 2005. Under reaction to sexual behavioral change among the Youth in Ghana. In S. Agyei-Mensah, J. B. Casterline and D. K. Agyeman (eds.) *Reproductive Change in Ghana: Recent Patterns and Future Prospects* (Accra: University of Ghana, 225-24.

Attipoe, D. 2008 Literature Review: Looking at Ghana in view of AIDS epicenters elsewhere. The Gully online magazine Also available at:  
[www.thegully.com/essays/gaymundo/0403\\_gaymen\\_hiv\\_ghana/msm\\_ghana\\_lit\\_review.html](http://www.thegully.com/essays/gaymundo/0403_gaymen_hiv_ghana/msm_ghana_lit_review.html).

Babalola, S., Tambashe, O. B. and Vondrasek, C. 2005. Parental Factors and Sexual Risk-Taking among Young People in Cote d'Ivoire. *African Journal of Reproductive Health*, 9, 49-65.

Benefo, K. 2004. The mass media and HIV/AIDS prevention in Ghana. *Journal of Health and Population in Developing Countries*. Available online at: URL/<http://www.jhpdc.unc.edu>.

Bertrand, J. T, O'Reilly, K., Denison J., Anhang, R., & Sweat, M (2006) Systematic review of the effectiveness of mass communication programs to change HIV/AIDS-related behaviors in developing countries. *Health Education Research: Theory & Practice*: 21 4, 567–597.

Bora, S., T., Kelly, L., Shirreff, M., B. and Greiger, C., J. 2000. Developing health messages: Qualitative studies with children, parents and teachers to help identify communication opportunities for healthful lifestyle and prevention of obesity. *American Dietetic Association*, 103, 721-728.

Botchway, A. T. 2004. Parent and Adolescent males' communication about sexuality in the context of HIV/AIDS: A Study in the Eastern Region of Ghana. (University of Bergen).

Boulay, M., Tweedie I & Fiagbey, E 2008. The effectiveness of a national communication campaign using religious leaders to reduce HIV-related stigma in Ghana. *African Journal of AIDS Research*, Vol 7: 1, 133-149

CIA World FactBook 2010. Available at: [www.cia.gov/library/publications/the-world-factbook/index.html](http://www.cia.gov/library/publications/the-world-factbook/index.html)

Cullen, W. K, Baranowski, T. and Rittenberry, L. 2000 Social-environmental influences on children's diet: Results from focus groups with African-Euro-Mexican- American Children and their parents. *Health Education Research*, 15 (5), 581-590.

Dangme West Annual Health Report 2009.

D' Cruz-Grote, D. 1997. Prevention of sexual transmission of HIV/STDs in developing countries: Experiences and Concept. (Gesellschaft, Frankfurt)

District Health Management Team Half Year Report. 2008. Dangme West Health Administration, Ghana Health Service.

Dimbuene, Z., T., & Kuate Defo, B. 2011. Risky sexual behavior among unmarried young people in Cameroon: Another look at family environment, *J. Biosoc. Sci.* 43; 129–153.

Duflo, E., Dupas, P., Kremer, M., & Sinei, S. 2006. Education and HIV/AIDS prevention: Evidence from a randomized evaluation in Western Kenya. Background paper to the 2007 World development report. World Bank policy research working paper 4024.

Garbrah-Aidoo, N. A. 2000. Community perception of HIV/AIDS and other STDs: A study of two sub-districts of the Dangme West District. *Masters Thesis*. University of Ghana.

Ghana AIDS Commission. 2010. Ghana's process report on the United Nations General Assembly special session (UNGASS) declaration of the commitment on HIV and AIDS, January 2008-December 2009.

Ghana AIDS Commission. 2009. The HIV and AIDS Programme of Work. Accra

Ghana AIDS Commission. 2009. Half-Year Report 2009, Multi-Sectoral HIV & AIDS Program (MSHAP). Accra

Ghana Statistical Services. 2010. The 2010 National Population Census Report. Accra, Ghana.

Givaudan, M., Pick, S. and Proctor, L. 1997. Strengthening parent/ child communication: An AIDS prevention strategy for adolescents in Mexico City. *Women and AIDS Program Research Report Series*, International Center for Research on Women. Washington, D.C

Haacker M (2002). Economic consequences of HIV/AIDS in Southern Africa. International Monetary Fund Working Paper WP/02/38, Africa Department.

Integrated Community Development Limited (ICD Ltd). 2000. A survey on Knowledge, attitude, beliefs and practices on HIV/AIDS in the Dangme West. ICD Limited, Koforidua.

Keating, J., Meekers D., & Adewuyi, A. 2006. Assessing effects of a media campaign on HIV/AIDS awareness and prevention in Nigeria: results from the VISION Project. *BMC Public Health*. 6:123, Available online from: <http://www.biomedcentral.com/1471-2458/6/123>

Klepp, K., Ndeki, S. and Seha, A. M. 1994. AIDS education for primary school children in Tanzania: an evaluation study. *AIDS*. 8, 1157-1162.

Kupfer, G. and Pilgramk, K. 2005. HIV/AIDS-a growing threat for rural Africa. *Entwicklung + Landicher Raum*, 39, pp.23-25.

McCombie, S.; Hornik, R.C.& Anarfi, JH. 2002. Effects of a mass media campaign to prevent AIDS among young people in Ghana. In: C, HR., editor. *Public Health Communication, Evidence for Behavior Change*. Lawrence Erlbaum Associates; Mahwah, New Jersey: 2002. p. 147-162.

Minja, H., Schellenberg, J. A., Mukasa, O, Nathan, R. et. al. 2001. Introducing ITN in the Kilombero Valley, Tanzania: The relevance of local knowledge and practice for an IEC Campaigns. *Tropical Medicine International Health*, 6, 614-623.

National AIDS STI Control Program. 2010. Presentation for early warning indicators 9th HIV prevention, treatment, care and support. Review Meeting Accra: National AIDS Control Programs, Ghana Health of Health.

National AIDS/ STI Control Program. 2009. National HIV prevalence and AIDS Estimates Reports 2008 -2015. Accra: National AIDS Control Program, Ghana Health Service, Ministry of Health.

Nukunya, G.K. 2003. *Tradition and Change in Ghana*. (Accra: Ghana Universities Press).

Obeng-Ouaidoo, I. 1999. Assessment of experience in the production of messages and programs for rural communication system: the case of the Wonsuom project in Ghana. *Gazette*, 42, 53-67.

Panford, S., Ofori Nyaney, M., Opoku Amoah, S & Garbrah Aidoo, N. 2001. Using folk media in HIV/AIDS prevention in rural Ghana, *American Journal of Public Health*, 91:10; 1559-62.

UNAIDS. 2010. Report on Global AIDS Epidemic. Also available at: [http://www.unaids.org/globalreport/Global\\_report.html](http://www.unaids.org/globalreport/Global_report.html).

Vaughan, P. W. and Rogers, E. M. 2000. A staged model of communication effects: Evidence from an entertainment-education radio soap opera in Tanzania. *Health Communication*, 5, 203-227.

Wamoyi, J., Fenwick, A., Urassa, M., Zaba, B & Stones, W. 2010. Parent-child communication about sexual and reproductive health in rural Tanzania: Implications for young people's sexual health interventions. *Reproductive Health*, 7:6, Also available at: <http://www.reproductive-health-journal.com/content/7/1/6>.

WHO/UNAIDS, 2006. AIDS Epidemic Update, World Health Organization/United Nations Program on HIV/AIDS.

**TABLE 1: EXISTING CHANNELS AVAILALABLE FOR HIV/AIDS EDUCATION AND INFORMATION**

<b>Communication channels</b>	<b>Adult (%) N=320</b>	<b>Adolescents (%) N=280</b>	<b>Total (%) N=600</b>
<b>Radio</b>	92.0	86.0	89.0
<b>TV</b>	40.0	47.0	44.0
<b>Neighbors /Relations</b>	24.0	24.0	24.0
<b>Teachers</b>	4.0	24.0	14.0
<b>Pastors/Church elders</b>	15.0	7.0	11.0
<b>Health workers</b>	14.0	7.0	11.0
<b>Prints</b>	11.0	8.0	10.0
<b>Information Van</b>	9.0	4.0	7.0
<b>Gong on</b>	6.0	4.0	5.0
<b>Community Elders</b>	9.0	4.0	5.0
<b>Assembly members</b>	5.0	3.0	4.0
<b>Durbars</b>	4.0	2.0	3.0
<b>NGO</b>	0.7	0.7	0.7
<b>Imam</b>	0	1.4	0.7

**TABLE 2: EXISTING COMMUNICATION STRATEGIES FOR HIV/AIDS EDUCATION AND PREVENTION**

<b>Communication strategies</b>	<b>Adults (%) N=320</b>	<b>Adolescents (%) N=280</b>	<b>Total (%) N=600</b>
Radio News	43.0	38.0	41.0
Radio discussions	24.0	24.0	24.0
Radio advertisements	31.0	26.0	29.0
TV News	15.0	21.0	18.0
TV discussions	7.0	11.0	9.0
TV advertisements	20.0	18.0	19.0
Open talks/seminars/discussions	40.0	36.0	39.0
Teaching	3.0	16.0	9.0
Preaching	13.0	8.0	11.0
Dialogue	6.0	10.0	8.0
Story telling	0.6	4.0	2.0
Drama/Cultural display	2.0	4.0	3.0
Songs	1.0	1.0	1.0
Films/Photographs/posters	10.0	6.0	8.0
Cartoons/Comics	0	0.6	0.3

**TABLE 3: RESPONDENT ACCESS TO COMMUNICATION CHANNELS**

Communication Channels	Adults			Adolescents			Total		
	Difficult (%)	Somewhat difficult (%)	Easy (%)	Difficult (%)	Somewhat difficult (%)	Easy (%)	Difficult (%)	Somewhat difficult (%)	Easy (%)
Radio (N=540)	7.5	12.6	80.0	5.5	10.2	84.3	7.0	11.0	82.0
TV (N=267)	21.1	22.6	55.5	11.5	30.0	58.5	17.0	26.0	57.0
Neighbors (N=177)	5.8	24.1	70.1	1.1	13.3	85.6	3.0	19.0	78.0
Print (N=74)	15.6	37.8	46.7	27.6	31.0	41.4	20.0	35.0	45.0
Gong on [??] (N=136)	6.4	15.4	78.2	6.9	15.5	77.6	7.0	15.0	78.0
Durbars [??] (N=17)	16.7	16.7	66.7	0	20.0	80.0	12.0	18.0	70.0
Community elders (N=40)	11.1	18.5	70.4	0	4.6	95.4	6.0	12.0	82.0
Assembly members (N=44)	20.7	3.4	75.9	0	6.7	93.3	14.0	4.0	82.0
Teachers (N=54)	0	0	100.0	17.8	2.2	80.0	15.0	2.0	83.0
Health workers (N=35)	22.7	31.8	45.5	15.4	30.8	53.8	20.0	31.0	48.0
Pastors/church elders (N=50)	0	10.7	89.3	9.1	9.1	81.8	4.0	10.0	86.0
Imam ((N=7)	0	--	100	16.7	--	83.3	14.0	--	86.
Information van (N=69)	16.7	41.7	41.7	19.1	47.6	33.3	17.0	44.0	39.0

**Table 4: Respondents Access to Communication Channels for HIV/AIDS education and Information**

Channels	Adult Respondents (%)					Adolescent Respondents (%)					
	Daily	Weekly	Fortnightly	Monthly	Occasionally	Channels	Daily	Weekly	Fortnightly	Monthly	Occasionally
Radio (n=290)	58.6	28.2	1.4	0.7	10.7	Radio (n=238)	50.4	31.1	3.8	2.1	12.6
TV (n=137)	40.2	34.3	2.9	2.1	20.4	TV (N=131)	29.0	44.3	6.9	3.8	16.0
Prints (n=34)	5.9	38.2	5.9	2.9	47.1	Print (N=23)	-	34.8	4.4	17.3	43.5
Neighbors (n=137)	18.1	15.3	6.9	1.4	48.4	Neighbors (n=62)	22.6	21.0	4.8	3.2	48.4
Health workers (n=43)	2.3	9.3	2.3	11.6	74.4	Health workers (n=20)	-	5.0	5.0	35.0	55.0
Teachers (n=13)	15.4	-	30.8	-	53.9	Teachers (n=63)	27.0	15.9	9.5	6.4	41.3
Church (n=46)	8.7	30.4	8.7	15.2	37.1	Church (n=20)	10.0	40.0	15.0	-	35.0
Durbars (n=10)	-	-	-	-	100	Durbars (n=5)	-	20.0	-	-	80.0
Gong-gong (n=18)	5.7	5.7	11.1	11.1	66.7	Gong-gong (n=11)	-	-	-	9.1	90.9
Assembly members (n=10)	-	8.3	8.3	16.7	66.7	Assembly member (n=10)	-	10.0	40.0	-	50.0
Elders (n=15)	-	20.0	6.7	6.7	66.7	Elders (n=16)	-	6.25	31.25	-	62.5
Mosque (n=4)	-	25.0	-	25.0	50.0	Mosque (n=0)	-	-	-	-	-
NGOs (n=3)	-	-	-	-	100.0	NGO (N=3)	-	-	66.7	-	33.3
Information Van (n=23)	-	-	7.7	7.7	84.6	Information van (n=13)	7.7	-	-	7.7	84.6
Others (n=14)	14.3	7.1	7.1	14.3	41.8	Others (n=14)	14.3	7.1	-	14.3	64.2

**Table 5: Language preference for communication for HIV/AIDS and sexual behavior information**

<b>Language Individual prefers for HIV/AIDS and sexual behavior change communication and education</b>					
	Ga/Dangme (%)	English (%)	Ewe (%)	Twɔ (%)	Other (%)
Adults	68	10	9	10	3
Adolescents	62	22	8	8	1
<b>Language community prefers for HIV/AIDS and sexual behavior change communication and education</b>					
	Ga/Dangme (%)	English (%)	Ewe (%)	Twɔ (%)	Other (%)
Adults	83	1	8	5	3
Adolescents	88	0	8	3	1