Radio as a Tool of Health Education:  
What Makes for an Effective HIV/AIDS Radio Campaign in Sub-Saharan Africa?

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Abstract  
From the bustling cities of Zambia to the most rural parts of Lesotho, HIV/AIDS is a raging epidemic that affects over 15% of the adult population in many regions of Sub-Saharan Africa. Public health interventions often take the form of media campaigns, which utilize television, radio, and print advertisements to spread awareness and inform the population of risk factors, prevention methods, and treatment options. This paper will focus on HIV/AIDS radio programs in Malawi, Zambia, and other countries of Sub-Saharan Africa. It will analyze these programs’ air times, audience, presentation style, and content, and identify how these factors influenced behavioral changes in the audiences. Additionally, this paper proposes promising techniques to ensure the success of future campaigns based on previous findings. Given these reviews of broadcasts of the past and their strengths and weaknesses, radio stations can better understand the reasons behind the programs’ respective impacts on the target populations. Further, this methodology can be applied when considering new radio programs for health education for HIV/AIDS and beyond.
Introduction

“It's a bit like swimming in a lake where you have crocodiles, yeah? You can swim sometime without getting bitten, but if you stay swimming a long time, at some point, you gonna get bitten,” a doctor tells Thembi Ngubane, a South African woman who is suffering from HIV/AIDS (“Out,” 2006). This excerpt comes from one of thousands of radio programs on the topic of HIV/AIDS, a devastating, worldwide pandemic which has claimed the lives of nearly 40 million since its first outbreak (“Statistics,” 2015). This disease has been especially destructive in developing regions of Sub-Saharan Africa, where infection rates soar above 20% in countries like Lesotho and Botswana (“HIV/AIDS,” 2016). In areas like these, there are often no newspapers, televisions, nor news sites. However, most residents have access to radio, which is the primary form of media and communication in the majority of these countries. Ever since the first HIV/AIDS outbreak in the early 1980s, there has been a rise in HIV/AIDS-related programs to promote awareness and educate the population about various health practices such as sexual health, nutrition, and hygiene (“Timeline,” 2015). These programs range from public service announcements about condom use to dramatic radio plays, which remove stigma surrounding the disease.

With such a sensitive subject, it is understandably difficult to create a program that is well-received by all and fulfills its purpose for health education. In order to effectively persuade their audiences, some directors may focus on a particular age group, style of program, or a particular emotional appeal. Only select stations are able to find the perfect balance of entertainment and education, among other factors. Based on previous studies of radio campaigns for HIV/AIDS as well as other diseases, the evidence shows that the success of these radio broadcasts has so far been determined by four main factors: the specificity of the target audience, the relevance of the content, the ways in which the material is presented, and the ease of accessibility of the programs. These four areas can be taken into account when planning future media campaigns to increase the success of HIV/AIDS awareness outreach in Sub-Saharan Africa.

Why Radio?

Before exploring the reasons behind the success of these past broadcasts, it is important to first understand why radio is such an effective medium of communication for these messages. Radio is the most accessible form of media in most countries in Sub-Saharan Africa since newer types of media are simply unaffordable for most of the population. In Zambia, for example, about 85% of people living in urban areas have access to radio, along with 68% of the rural population (Phiri, 2008). For a full breakdown of media access, consider Kenya, whose accessibility statistics are detailed in Figure 1. About 400,000 people receive daily newspapers, which is 13 out of every 1000 people; 23 out of every 1000 have television sets;
merely 6 out of every 1000 have internet access; radio, the leading form of media, reaches approximately 100 out of every 1000 people (Obonyo, 2003). Though this is only about 10% of the population, radio is still at least four times more accessible than any other media platform.

![Graph showing media access in Kenya](image)

**Figure 1.** Breakdown of various forms of media, Kenya (Graph content: Obonyo, 2003).

Among the various mediums for health campaigns, radio programs tend to have the most widespread impact in terms of number of audience members reached. However, that is not to say that television programs, poster campaigns, or theatrical performances cannot greatly impact their respective audience members. Take the “Puppets Against AIDS” show in Johannesburg, South Africa, for example. This puppet show, produced by the African Research and Educational Puppetry Programme (AREPP), used entertaining characters and straightforward scripts to teach the young population about the dangers of HIV/AIDS. Their 21 shows reached an audience of about 3,000. Comparing viewer knowledge before the show to viewer knowledge after the show, the intervention was successful in the following areas: there was a twofold increase in number of people who understood that anyone can get AIDS, the people who “identified condoms as a source of protection” increased from 3.8% to 29.8%, and there was a 20% increase in the knowledge that healthy-looking people can transmit AIDS (Skinner et al., 1991). Evidently, the program succeeded in changing the audience’s perception of AIDS and knowledge of basic prevention methods. On a holistic scale, however, the impact of this live theatre program did not stretch much further than the 3,000.
audience members. Radio programs are considered more effective at spreading HIV/AIDS information due to their greater audience scope; in South Africa, if the puppet program had been broadcasted on one of today’s popular radio station, like Metro FM or Umhlobo Wenene FM, there may have been over 5 million listeners (“SA,” 2015).

Besides its convenience and accessibility, radio is especially effective in Sub-Saharan Africa due to the region’s culture of oral tradition. For example, radio programs may include narratives in tribal tongues or traditional songs, which could not otherwise be conveyed in a magazine or newspaper (Panford et al., 2001). In the context of HIV/AIDS campaigns, audiences of programs that utilize personal testimonies benefit from being able to hear the true voices of the victims; there are no visuals or texts to distract from the verbal expressions of emotion.

The “Who”: Choosing a Listener Group
For ultimate absorption of the educational messages, the radio programs must each be targeted toward a particular audience. These demographics may be as specific as middle-aged men, primary schoolchildren, female teenagers, prison inmates, pregnant women, “farmers, rural mothers, illiterates,” or dozens of others (Mthembu, 1995). In order to effectively present the information to the audiences, the radio programs “require responsiveness to the particular sensitivities of the target groups” (Mabachi, 2008). Different demographics respond better to different types of radio shows, so adjustments must be made accordingly. To better reach the audience, the creators of the programs must identify a certain group they are trying to connect with and plan every segment of the broadcast with this group in mind. Some may argue that it would be best to have a program that applies to all audiences; however, as researcher Chilufya Phiri explains in a study of Zambian radio campaigns, such programs are less useful since they often discuss general, broad topics which typically include already well known information. Participants in this Zambian study agree that the information provided in these general programs did not address specific needs of people living with HIV/AIDS and their close friends (Phiri, 2008).

To prevent this issue of overgeneralization, those who are creating the program should first pick an audience based on age, gender, or another category. Then, they can narrow down their focus to a more limited group within that audience, based on occupation, economic status, or other factors. Dr. Seth Noar of the UNC School of Media and Journalism explains that “successful campaigns tended to use multiple variables to segment audiences” (Mabachi, 2008). To demonstrate this method, consider a reproductive health program targeting youth: the producers “further segment[ed] their campaigns to focus on ‘cutting edge youth,’ high sensation seekers, occasional or frequent drug users” (Mabachi, 2008). Another audience characteristic to concentrate on is religious preferences, as shown with the Malawian program Nzatonse, which
tackles issues such as “the modes of HIV transmission and how HIV transmission can be prevented from a Catholic perspective” (Munthali, 2008). They discuss nutritional requirements for people with the disease, as well as the controversies regarding condom use within the Catholic Church (Munthali, 2008). Another Malawian program, Ndiye amodzi, “is funded by the Muala Parish,” and aims to “eliminate stigma and discrimination associated with HIV and AIDS” from a religious viewpoint (Munthali, 2008). Because the information is tailored to an audience with a particular set of values, the messages have been better absorbed by the audience since they coincide with their beliefs.

This methodology has seen tangible effects in developing countries. A Malawian program targeted towards Mulanje women in their 20s encouraged these women to get examined and tested for HIV/AIDS-related symptoms, and it discussed the benefits of early detection. Local clinics near Mulanje reported dramatic increases in women’s HIV/AIDS consultations, and many of these women revealed that the radio programs prompted their decision to seek medical advice (Munthali, 2008). By focusing on the specific group of women ages 20-30, the program was successful in its initiative to have these women gain a full understanding of their HIV/AIDS risk.

The “What”: Deciding What to Include
Once they identify a target audience, the radio stations must decide what information to incorporate and how much detail to include. First, it is important to understand the audience’s current perceptions of HIV/AIDS: what they know, what they do not know, and what they think of the disease and its victims. The Young African Leaders Initiative suggests asking questions such as, “How do people talk about HIV/AIDS and other sexual issues? Are people comfortable talking directly about sexual issues or do they talk about them indirectly? How susceptible do people believe themselves to be to AIDS? What are the beliefs about who gets AIDS?” (“How,” 2014). Answers to these questions help the radio stations understand their audience better and assist them in identifying a purpose or goal for their broadcast; doing so will allow them to make decisions regarding what information is most important to include.

A Malaria Radio Campaign for ethnic minorities performed in the UK demonstrates the importance of relevant subject material. A solid understanding of society’s perceptions of a disease is crucial when creating a program. In his synopsis of the study in Representing Health, Martin King remarks on the necessity of “[taking] account of the target populations’ potential knowledge of malaria” (King & Watson, 2005). The lack of this understanding of the population’s knowledge in this particular study led to its failure to make change. Informants reported that the advertisements were “‘not enough,’ ‘too simple,’ ‘not new,’ or ‘too general’” (King & Watson, 2005). Much of the target audience already had thorough knowledge of the basics of malaria and its modes of
transmission. In short, this was a “problem of the under-estimation of [their] experiential knowledge” (King & Watson, 2005). Though we are examining a different disease (HIV/AIDS) in another region (Sub-Saharan Africa), we can learn from the failure of the Malaria campaign when choosing what to focus on in future HIV/AIDS campaigns.

With HIV/AIDS, there are several different issues the programs can choose to address, including (but not limited to) “condom use, reduction of high-risk behaviors, abstinence, knowledge of transmission,” and communication among sexual partners (Bertrand, O’Reilly, Denison, Anhang, & Sweat, 2006). The topics discussed should depend wholly on the target audience. For example, while nutrition may be a relevant topic to address in a program for middle-aged mothers, who are traditionally the primary food preparers in most countries Sub-Saharan Africa, this topic would be less pertinent in a program for males aged 15-20, who are less likely to prepare their own food in most regions (Munthali, 2008). This group may instead benefit from a discussion of safe sex practices and risky behaviors, as this is statistically the most common age for males to become sexually active (Browne, 2000). Likewise, condom use would not be relevant to a program for elderly victims of HIV/AIDS, which should rather focus on another topic, such as HIV/AIDS stigma or caring for those with the disease.

In some cases, there exists a particular problem in a community that needs to be directly addressed by the radio show. A Malawian program, from the NGO MANASO, found great success by targeting the issues surrounding dangerous cultural practices in Monkey Bay, which “promote the spread of HIV” (Munthali, 2008). These high-risk traditions include kusasa fumbi, also known as sexual cleansing, in which puberty-aged girls are encouraged to gain sexual experience through frequent practice (Park, 2004); wife inheritance, in which widows get married to and have sexual relations with a relative of their deceased husband (Ligomeka, 2003); and fisi, a ritual in which 11-year-old girls have sexual relations with a hired male following an initiation ceremony (Kamlongera, 2011). The program included information about HIV/AIDS transmission methods and how to prevent the spread of the disease. Community members reported that many of the risky cultural practices were “significantly reduced” as a result of these radio messages (Munthali, 2008). In this instance, the creators of the program successfully identified exactly what the community needed to hear and were consequently able to make a greater impact.

Once a target audience and content focus are selected, the level of detail in the program content should be adjusted accordingly. A program for primary schoolchildren, for example, does not need to include descriptive information about sexual behaviors. This group would instead benefit from a more general synopsis of the disease itself, or, when addressing the modes of transmission, it would be perhaps more appropriate to focus on transmission through contact with open wounds.
rather than sexual penetration. In-depth analysis would be suitable for some groups more than others. For instance, a program targeted towards the medical community would necessarily need scientific details about how the disease manifests itself, while a program for victims of the disease should focus on the patient side of the issue.

The “How”: Presenting the Content
When organizing the material to create a broadcast, the radio stations may consider numerous show styles and formats. Some of these types include radio plays, personal testimonies, interviews, public service announcements, and soap operas, just to name a few (Munthali, 2008). In the context of HIV/AIDS, radio plays may range from comedies about misconceptions to dramatic narratives about diagnosis stories. Personal testimonies may be from people living with HIV/AIDS, family members of victims, or others who are directly or indirectly affected by HIV/AIDS. These testimonies may include anecdotes, sentimental stories, and expressions of desperation, pain, joy, or hope—this format is often the most effective in connecting with the audience on an emotional level. Interviews, usually taking the form of a dialogue between radio hosts and health professionals, are utilized to convey more educational information about preventative measures, diagnosis, treatment, and other related topics. Public service announcements are brief—usually a minute or less—and include basic but urgent information about the disease, such as news of a high concentration of infection in a particular community. The goal of a soap opera is to provide the audience with an entertaining, dramatic show. The secondary focus of these dramas is the educational health messages, which are woven into the plotline, often subtly, in order to keep the audience entertained. For example, a soap opera radio program may include a conversation among sexual partners about safe sex or a scene in which a female character gets tested for HIV/AIDS.

There are various advantages to each type of program, most of which depend on the context and audience. For example, soap operas “allow for the repetition of education messages,” along with reiteration of central concepts and health behaviors, through an entertaining, comprehensible medium (Peters, 2010). South Africa’s Soul City had a drama serial that included various health messages, and they reported a “real difference in people’s attitudes and behaviour” during and after the series had broadcasted (Peters, 2010). Another successful soap opera was a hygiene-oriented BBC radio show in Afghanistan, which was equally entertaining and informational (Schapp et al., 2002). These two dramas were extremely effective at reaching their female audience members, who were able to easily connect and empathize with characters in the stories.

While these two programs benefitted from the serial drama format, other programs would be better presented in different ways. A Pakistan Community Center informant explained that an interview or question and answer style was more effective in their malaria campaign for middle-aged
Travelers. Asking questions in this setting “encourages listeners’ curiosity, and also give[s] more time to ‘absorb’” the message at hand (King & Watson, 2005). A debate format also proved useful in this malaria campaign, since the radio listeners got the opportunity to join the debate participants in considering various aspects of the disease (King & Watson, 2005). As demonstrated by the soap operas, question and answer show, and debate, the style of the radio program should be tailored to the audience at hand as well as the topics to be covered in the broadcast.

Once a format is chosen for the program, the radio stations should choose an appeal or captivating quality upon which to focus. Some examples of appeals “include threat/fear, rationality, emotion, humor, and individualism” (Bosslet, 2013). In the context of HIV/AIDS programs, emotional appeals have been effective in connecting with the audience in past broadcasts in Zambia, such as Zimachitika. This program is a radio play that includes deeply emotional personal testimonies, and was successful in its initiative to spread awareness of the importance of getting tested for the HIV virus. Listeners were able to sympathize with the speakers, and they were consequently persuaded to take action (Munthali, 2008). Other programs may be better suited to logical or humorous appeals; it all depends on the target audience and what captivates them the most.

The “When”: Reaching the Audience

Even the most exceptional radio program will not be successful if it is not accessible by its intended listeners. Frequency and timing are two of the most important factors when determining whether or not a program will have positive results. Radio programs that are aired more often have been found to achieve the best outcomes when it comes to the scope of message dissemination. Jeffrey Hedquist, a radio campaign creator and writer for Success, comments on the importance of frequent broadcasts: “Nineteen to 25 commercials per week typically will deliver the necessary repetition to see results” (Hedquist, 2014). Especially for shorter programs, including PSAs and commercial-style messages, audience members benefit from repetition of these messages; the more the pieces are broadcasted, the more ingrained the messages become in the listeners’ minds. When it comes to longer programs, such as 30-minute serial dramas or longer radio shows, Hedquist’s suggestion is understandably unrealistic. Radio stations should instead focus on consistency of these broadcasts. Hedquist adds, “It’s better to run an effective schedule on a station that has a smaller audience than it is to run a less-than-adequate schedule on a larger station” (Hedquist, 2014). Based on this logic, weekly episodes of an HIV/AIDS awareness program on a local station may be just as beneficial as more frequent 30-second commercials on a large, regional station.

To understand the necessity of optimal program times, consider your favorite television channel: what shows are aired at 3:30am? A monotone infomercial, or maybe an old episode repeat? You may wonder if there is
even an audience for such programs. Likewise, in a health campaign context, radio programs broadcasted at unpopular times have minimal audiences, and therefore minimal results on the basis of message dissemination. Since air times can make or break a program, the producers should first collect statistics of listenership in order to identify the ideal program times. Maxwell Mthembu, a University of Durban student, completed research on HIV/AIDS radio programs in Swaziland, which included various interviews about listener preferences. The responses to one of his questions, “What do you think is the most appropriate time for the dissemination of these messages?” are summarized in Figure 2. In general, most groups indicated that they would be interested in HIV/AIDS programs broadcasted before and after popular radio programs, such as news shows or serial dramas, especially in the evenings (Mthembu, 1995). This data set aided the setup of HIV/AIDS programs in Swaziland, though listeners in other countries may have different preferences. It is advantageous to conduct full surveys of the target population before choosing when to air the HIV/AIDS programs.

<table>
<thead>
<tr>
<th>Listener Group</th>
<th>Ideal Radio Program Times</th>
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<tbody>
<tr>
<td>High School Students</td>
<td>Mornings before school,</td>
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<tr>
<td></td>
<td>Before and after the evening news shows</td>
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<tr>
<td></td>
<td>weekends</td>
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<tr>
<td>Off-Duty Army Members</td>
<td>Before and after radio dramas,</td>
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<tr>
<td></td>
<td>Quiet hours of the day and evening</td>
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<tr>
<td>Youth Brigade (similar to Boy Scouts)</td>
<td>1:00-2:00pm, 6:00-7:00pm,</td>
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<tr>
<td></td>
<td>During meal prep hours</td>
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<tr>
<td>Pregnant Women</td>
<td>After the news,</td>
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<td></td>
<td>After radio dramas</td>
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<tr>
<td>Factory Workers</td>
<td>Following the 7:00pm news,</td>
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<td></td>
<td>During live soccer commentaries</td>
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</tbody>
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*Figure 2. Survey of listener groups: “What do you think is the most appropriate time for the dissemination of [HIV/AIDS radio] messages?” (Table content: Mthembu, 1995).*

Another crucial factor to consider is the overall radio accessibility in the region to which the station is broadcasting. Rural or undeveloped areas are often less equipped with radios and radio towers, so these residents would benefit less from the HIV/AIDS radio campaigns. Urban areas, on the
other hand, may have higher concentrations of audiences who listen to the radio regularly. In Zambia, about 85% of people living in urban areas have access to radio, while 68% of the rural population has access; in other countries, this gap is much greater (Phiri, 2008). Radio stations must also take into account the functionality of residents’ radios when choosing where to broadcast their program. A survey by the National Statistical Office reports that approximately one-third of all radios in rural areas of Malawi are dysfunctional due to “flat batteries.” Further, they mentioned that “the cost of batteries was a major constraint in rural areas to radio listening” (Munthali, 2008). Future radio campaigns for HIV/AIDS awareness should focus on populated areas with working radios and active audiences; this way, the information broadcasted will reach as many people as possible.

Conclusion
Identifying a specific audience, adjusting the content, choosing a show style, and making the program accessible may seem like a daunting task for those starting a radio campaign. It may help to consider other programs that have found success by focusing on these criteria. Consider this South African reproductive health program, which launched an HIV/AIDS-focused show. The target audience was 16 to 20-year-old females in Soweto, an urban area of Johannesburg, South Africa. It included information about safe sex practices and reduction of risky behaviors. The content was presented in the form of weekly radio talk shows, which was a popular medium among the target population. The HIV/AIDS-focused program was broadcasted once a week, for 12 months; following this, the show continued for another four to five years, concentrating on other health topics though still incorporating less frequent HIV/AIDS messages. The Soweto program was found to have “positive effects on skills, knowledge about health services and social norms” in the target population (Bertrand & Anhang, 2006). This goes to show that the four factors previously mentioned are, in fact, effective in creating successful radio programs for HIV/AIDS campaigns. If we can apply these strategies to future radio campaigns in Sub-Saharan Africa, the programs will be more likely to achieve their intended purposes, from increasing knowledge of transmission methods, to removing of HIV/AIDS stigma, to spreading general awareness of the disease.

Nearly as important as creating effective programs is methodically evaluating the impact of the campaigns. Many developing countries in Sub-Saharan Africa lack the financial or technological resources to conduct successful evaluations of the radio programs. Thus, it is difficult to determine whether the programs resulted in lower HIV/AIDS transmission rates, for instance. Further, programs targeting youth pose challenges in feedback analysis due to the need for longitudinal studies; it is both expensive and logistically difficult to keep track of the child audience members’ sexual health behaviors and knowledge. Bertrand and
Anhang (2006) note that “there is far less consensus on the workings of the social world in and through which behavioural interventions operate,” and it is therefore challenging to quantify the impact of HIV/AIDS campaigns which target human behavior and perceptions of the disease.

Looking forward, much improvement can be seen in the field of radio campaigns for health education. HIV/AIDS is just one of thousands of diseases which spread rapidly among populations who are misinformed or lack the baseline knowledge to prevent these illnesses. Nonetheless, the strategies discussed in this paper can be applied beyond the subject of HIV/AIDS and outside of Sub-Saharan Africa. By taking care in choosing a specific target audience, relevant content, an appropriate presentation method, and accessible air times, radio stations have the potential to reach thousands of individuals and make great strides in the field of health education.
References


