This is the author's final, peer-reviewed manuscript as accepted for publication. The publisher-formatted version may be available through the publisher's web site or your institution's library.

Older adults' perspectives on HIV/AIDS prevention strategies for rural Kenya

Nancy Muturi & Samuel Mwangi

How to cite this manuscript

If you make reference to this version of the manuscript, use the following information:

Muturi, N., & Mwangi, S. (2011). Older adults' perspectives on HIV/AIDS prevention strategies for rural Kenya. Retrieved from http://krex.ksu.edu

Published Version Information

Citation: Muturi, N., & Mwangi, S. (2011). Older adults' perspectives on HIV/AIDS prevention strategies for rural Kenya. Health Communication, 26(8), 712-723.

Copyright: © 2011 Taylor & Francis Group

Digital Object Identifier (DOI): doi:10.1080/10410236.2011.563354

Publisher's Link: http://www.tandfonline.com/doi/abs/10.1080/10410236.2011.563354

This item was retrieved from the K-State Research Exchange (K-REx), the institutional repository of Kansas State University. K-REx is available at http://krex.ksu.edu

OLDER ADULTS' PERSPECTIVES ON HIV/AIDS PREVENTION STRATEGIES FOR RURAL KENYA

Nancy Muturi & Samuel Mwangi A.Q. Miller School of Journalism and Mass Communications Kansas State University

Contact: Nancy Muturi nmuturi@ksu.edu

This paper is published in the *Health Communication* Journal and can be cited as follows:

Muturi, Nancy & Mwangi Samuel (2011). Older Adults' Perspectives on HIV/AIDS Prevention Strategies for Rural Kenya, *Health Communication*, 26(8) 712-723

Editorial Manager(tm) for Health Communication Manuscript Draft

Manuscript Number: HC-D-10-00141R2

Title: Older Adults' Perspectives on HIV/AIDS Prevention Strategies for Rural Kenya

Article Type: Original Article

Corresponding Author: Dr Nancy Muturi, Ph.D.

Corresponding Author's Institution: Kansas State University

First Author: Nancy Muturi, PhD

Order of Authors: Nancy Muturi, PhD; Samuel Mwangi, PhD

Abstract: Though prevention of HIV/AIDS is the mainstay of various responses to the epidemic, communication strategies used to motivate behavior change are challenged for lack of cultural appropriateness, hence the lack of success. Participatory communication that is culture-centered and culturally sensitive is emphasized in HIV/AIDS communication to engage affected communities in defining problems and finding appropriate solutions. This paper examines the views of older adults as key targets in HIV/AIDS prevention given the increasing number of elderly living with the disease and their changing role as caregivers of those infected and affected by HIV. As cultural, social, political, and opinion leaders in rural communities, older adults are in a position to influence attitudes and behaviors of their community members, but they have not been involved in the current HIV/AIDS prevention interventions. Several recommendations were made to inform the design and implementation of a culture-specific prevention program for rural Kenya.

Older Adults' Perspectives on HIV/AIDS Prevention Strategies for Rural Kenya

Sub-Saharan Africa is the hardest hit by the HIV/AIDS pandemic, with almost 25 million people living with the virus, over 1.9 million newly infected, and 1.4 million deaths from AIDSrelated causes by the end of 2008. In Kenya, the United Nations Joint Program on HIV/AIDS estimates that more than 1.2 million people live with HIV where the adult prevalence rate stands at 6.7 per cent (UNAIDS, 2009). Though majority of those infected are in the 15–49 age group, the number of older adults diagnosed with HIV or dying from AIDS-related causes is on the rise. The Kenya National AIDS and STI Control Program (NASCOP, 2005) estimates about 5 per cent of those living with the disease as aged 50 years and older. This is not a unique Kenyan situation as the UNAIDS projects an increase of HIV/AIDS cases among the older adults globally to 20 per cent by 2050 (UNAIDS, 2007). This projection is attributed to the advances in medical care and treatments including antiretroviral drugs leading to longevity of life. The increasing rate of HIV infection among older adults has led to recent research and public discourses highlighting the need to focus on older people in the fight against HIV/AIDS (Chiao, Ries, & Sande, 1999; Guerny, 2002; Kyobutungi, Ezeh, Zulu, & Falkingham, 2009; Levy-Dweck, 2005; Linsk, 1994; Martin, Fain, & Klotz, 2008; Nguyen & Holodniy, 2008; Simone & Appelbaum, 2008).

Prevention and early diagnosis of HIV are the cornerstones of combating the disease and remain the mainstay of global response, as indicated in the United Nations Declaration of Commitment (UNAIDS, 2008). Goal six of the United Nations Millennium Development Goals (MDGs) is to halt and begin reversing the epidemic by 2015, which could be achieved through effective behavior change communication among all sexually active populations. Since HIV/AIDS was declared a global epidemic, the dominant paradigm for prevention has been use

of mass media campaigns (Cherie et al, 2005; Dutta-Bergman, 2005; Myre & Flora, 2000). This information, education, and communication (IEC) approach aims at modifying behaviors and promoting safer sexual practices that include condom use. There has, however, been some discourse concerning the effectiveness of mass media public health campaigns in producing healthier behaviors (Agha, 2003; Dutta-Bergman, 2005; Morton and Duck, 2001; Singhal & Rogers, 2003), some describing them as disastrous due to lack of results (Tufte, 2005). Mass media campaigns fail due to various reasons: audience resistance barriers that arise at each stage of response, from exposure to behavioral implementation; not reaching the audience and attaining attention to the message; misperceptions of susceptibility to negative outcomes; deflection of persuasive appeals; denial or applicability to self; rejection of unappealing recommendations; inertia or lethargy (Atkin, 2001, p.51). Other factors include not facilitating understanding of the message (Kline, 2006); lack of relevance of the message and channels used in message dissemination; and lack of cultural sensitivity, appropriateness, and relevance of messages (Kreps, 2009; Muturi, 2005; Tufte, 2005).

Based on the information, motivation, and behavior (IMB) model (J. D. Fisher & Fisher, 2000; J. D. Fisher, Fisher, Bryan, & Misovich, 2002; W. A. Fisher & Fisher, 1993) HIV prevention information, motivation, and behavioral skills are the fundamental determinants of HIV preventive behavior, hence the need for more comprehensive prevention interventions. Increasingly studies have identified the need for a change of paradigm that embraces cultural identity and understanding, and incorporates cultural context in health communication interventions. This means exploring the ways in which health meanings are constructed and negotiated by local cultures that are envisioned as transformative, constantly metamorphosing, and constitutive in the realm of health meanings (Airhihenbuwa, 1995; Dutta-Bergman, 2005;

Dutta & Basnyat, 2008). The proposed culture-centered approach actively engages the agency of cultural participants and recognizes their contributions to the health communication process (Dutta-Bergman, 2005; Dutta & Basnyat, 2008). The approach is a useful criterion for audience segmentation (Sha, 2006); enables exploring cultural factors that contribute to health problems; determines health literacy levels of each population segment; and uses that information to best design and deliver relevant messages that meet the unique needs of individuals and to effectively communicate complex health information to a diverse population (Kreps, 2009).

The goal of the current study is to provide some insights from the older adults' perspectives on HIV/AIDS prevention strategies that could inform culturally sensitive health communication campaigns in rural Kenya. Older adults in Kenyan cultures play various leadership and influential roles, specifically in the social, economic, and political arenas. Many also hold decision-making positions within social institutions such as families, churches, schools, and community organizations, influencing people's everyday lives at various levels. Such leadership and community-based dialogues are necessary in addressing social issues affecting society. There is, however, limited documentation on the older adults' leadership role in the fight against the HIV/AIDS epidemic in rural societies, particularly in African communities that suffer the impact of HIV/AIDS and where contributions of elders in influencing societal and behavioral change is recognized. Their contribution is critical in defining the problem as it affects their communities and finding solutions that are relevant to particular cultural situations.

Within the Kenyan context, studies have addressed various aspects of the HIV/AIDS epidemic including the contributing factors to the widespread epidemic, its impact on various demographic segments (e.g. UNAIDS, 2009), risk perceptions (e.g. Agha, 2003), HIV/AIDS stigma and disclosure (e.g. Miller & Rubin, 2007), and the communication gaps (e.g. Cherie et

al, 2005; Muturi, 2005), among other issues. Limited systematic studies exist that address HIV/AIDS in older adults (e.g. Kyobutungi, Ezeh, Zulu, & Falkingham, 2009), and no studies were found that explore the application of the culture-centered approach within the African context. Limited knowledge also exists on the application of a participatory communication approach in HIV/AIDS communication within the African context in spite of the model application in other development-related topics (e.g Ascroft & Masilela).

Community participation and engagement

As literature demonstrates, engaging dialogues with cultural participants brings forth local articulations of health that attend to the complex webs of meanings within which health is understood and constructed, often challenging the linear assumptions of the dominant Westcentric models of health communication (Dutta & Basnyat, 2008). The involvement of communities and individuals as active agents or participants in defining health problems and developing solutions that are relevant and culturally appropriate is a key emphasis in the culturecentered approach (Dutta & Basnyat, 2008; Dutta & Basu, 2007; Yehya & Dutta, 2010). Similarly, the participatory communication approach views communication as a process of creating and sharing knowledge, understanding, and meanings among stakeholders, and where the project beneficiaries (targeted for change) are actively engaged in the design and implementation of project activities at various levels to achieve the desired goals (Jacobson & Storey, 2004; Muturi & Mwangi, 2009; White, 1994). Habermas's theory of communicative action also emphasizes bringing the issues into the public sphere (Jacobson & Storey, 2004), where people engage in communication of a particular— and widespread— kind to reach intersubjective agreement as a basis for mutual understanding so as to reach an unforced

consensus about what do in the particular practical situation in which they find themselves (Habermas, 1984; Kemmis & McTaggart, 2005).

From the perspective of Habermas's theory, both culture-centered and participatory approaches view dialogue as the key tenet and a revolutionary concept that de-emphasizes the transfer of information and expertise, and concerns itself with existing knowledge at the grassroots. Concerns have, however, been raised with regard to involvement of communities in the decision-making process. In Africa the voices of the poor, the rural, and those affected most are not heard, rather their views are represented by the more educated and affluent community members who might not have similar experiences (Ascroft & Masilela, 1994). Similarly, in Nepal what is missing in the process is people's voices (Dutta & Basnyatt, 2008). Participatory-based studies emphasize listening to the voices of cultural members as they understand their specific health issues to ensure representation, which offers an alternative entry point to the biomedical model that offers a universal approach without attending to the local contexts and understanding of health (Dutta & Basnyat, 2008; Yehya & Dutta 2010). This current study uses both community engagement and cultural centeredness frameworks to engage older adults as key stakeholders in HIV/AIDS prevention within the context of Kikuyu culture in rural Kenya.

Cultural Context: Older Adults in the Kikuyu Culture

The Kikuyu community in central Kenya where this study was conducted has an elaborate system of social organization based on kinship and age group systems. Made every 10 years, age sets are determined by male and female circumcision as a rite of passage, and they determine social status and the role each group plays in society during certain periods of time in their lives. Age sets, for example, act as agents of gender-specific social control, monitoring the behavior of their own members (Davidson, 1996). Studies have shown that the Kikuyu, as an

oral society, considers older adults as keepers of societal memories and custodians of culture, transmitting it through narratives and story telling across generations. Additionally, age is associated with wisdom and social status where older adults are entrusted with certain responsibilities that include conflict resolution and issues management, particularly those in the council of elders (Ahlberg, 1991; Kenyatta, 1978) who play the opinion leadership role in their communities.

Aging in Kenya, like in other African countries, is, however, occurring against the background of social and economic hardship, widespread poverty, impact of the HIV/AIDS pandemic, and the rapid transformation of the traditional extended family structure (Gachuhi & Kiemo, 2005). Contrary to common beliefs that the disease only affects the youth, literature shows that older adults are increasingly being infected by or living with it (Chiao, Ries, & Sande, 1999; Levy-Dweck, 2005; Martin, Fain & Klotz, 2008; Simone & Appelbaum, 2008). However, their HIV symptoms may be hard to detect because of co-morbidities related to aging. Older adults are affected directly through sexual contacts and indirectly through interaction with persons living with HIV and AIDS, including family and friends (Whipple & Scura, 1989). The use of sex enhancing medications such as Viagra and other herbal products commonly used in less developed nations contribute to high risk of HIV infection in older adults. In addition to risky sexual behaviors, advances in medicine, specifically the highly active antiretroviral therapy (HAART), have brought a dramatic change in mortality related to HIV infection and transformed HIV from a fatal to a chronic illness (Simone & Appelbaum, 2008; Vianna et al, 2006). As a result, those infected live longer and consequently age with the disease.

In spite of the impact HIV/AIDS has on older adults, they have not been adequately involved as key stakeholders in the fight against the HIV/AIDS epidemic in Kenya. According

to situational theory, people are likely to communicate actively in situations where they perceive a pertinent problem, feel sufficiently involved in assessing the problem, and unconstrained in attempting to resolve the problem (Grunig, 1997; Sha, 2006). As such, given the impact the disease has in rural Kenyan communities, the older adults who carry the burden of taking care of those infected, the orphans, and who are themselves infected are more likely to take the initiative in addressing the epidemic. Literature shows that culturally appropriate health communication is essential for providing vulnerable consumers with relevant information about various health risks, prevention, early detection, treatment, and survivorship (Betancourt, et al., 2003; Kreps, 2009). This paper asserts that given the role older adults have in society as cultural leaders, community influencers, teachers, and change agents, they have the potential to act as behavior-change communicators within their communities, offering a cultural perspective that has been missed in mass media information dissemination campaigns.

Research Questions

This paper is part of a larger study that sought some insights on the risk factors in HIV/AIDS infection and the culturally appropriate prevention strategies from the perspectives of young men, women, and older adults. This paper focuses on the older adults and is based on two communication-related research questions: (1) what are the views of older adults on the current HIV/AIDS communication and prevention efforts, and (2) what recommendations would they make for effective behavior change and prevention of the widespread epidemic in their own communities?

Methods and Procedure

A qualitative approach was found appropriate for this study because of the need to explore, understand, and explain the HIV/AIDS situation in rural Kenya and the perspectives of

the older adults on possible solutions. The intent of qualitative research is to develop insights into the deeper structure of the phenomena within cultural and contextual situations, with the desire to uncover the story behind the statistics (Trauth, 2001). Qualitative research is stressed in health communication studies particularly where self-reporting data from in-depth interviews and focus group discussions will lead to increased knowledge and understanding of the communication challenges in the delivery of health care and the promotion of health (Kreps, 2009).

Qualitative research is also viewed as a means for dialogue and community engagement on serious health challenges. Guba and Lincoln (1994) referred to qualitative research not only as a set of interpreting research techniques but also a discursive space or meta-theoretical discourse. Dutta and Basu (2007) also emphasized the role of qualitative research in a culture-centered approach where the researcher becomes "a listener and a participant, who engages in dialogue with members of the community" (p.39). A culture-centered approach suggests the relevance of dialogic research methodologies that construct meanings of health through in-depth interviews with cultural communities (Dutta & Basu, 2007; Dutta-Bergmann, 2004). Such qualitative techniques seek to decode, describe, translate, and otherwise come to terms with the meaning, not the frequency, of certain naturally occurring phenomena in the social world (van Maanen, 1983).

Data Collection

Data collection was conducted through six focus group discussions conducted over two months following approval by the Institutional Review Board (IRB) committee on research involving human subjects. Focus groups are used to exploit group solidarity and interaction as the engines for encouraging participants to be maximally forthcoming (Carey, 1994). They have

also been efficacious in promoting discussion of sensitive topics (Lindlof & Taylor, 2002), in this case sexuality and sexually transmitted diseases including HIV/AIDS. Participants were men and women in the 55–75 age group. Though 60 is the cut-off reference point to older adults determined by the WHO and the United Nations (WHO, 2006a), there is also recognition that this age does not adapt well to the situation in Africa due to the impact of HIV/AIDS and other diseases and in countries with lower life expectancies. In Kenya, for instance, 55 is the mandatory retirement age within the government sector while life expectancy is 51 for men and 50 for women (WHO, 2006b). In that context anyone above the life expectancy would qualify as elderly.

Thika district, one of the most densely populated agricultural areas in central Kenya, was selected for the study based on the high HIV prevalence—about 20 per cent of all AIDS cases in the country (UNAIDS, 2004). The greatest AIDS impact is experienced in the agricultural sector, the backbone of the Kenyan economy and the source of livelihood for about 80 per cent of Kenyans who reside in rural areas. The district was also selected due to the researchers' familiarity with the culture and ethnic language used in the study. This cultural familiarity is critical in not only interpreting verbal and non-verbal cues but also in enabling participants to speak for themselves, and to approach their singular experience through the meaning and the vision of the world they possess by offering "dense description," which is impregnated with their culture (Geertz, 1987).

Participants were recruited through faith- and community-based organizations that were purposively selected based on their prominence and accessibility. Members of 10 organizations were contacted in person, provided details on the study, and each asked to help mobilize a group of 10 people over age 55, based on gender. They were given the researcher's contact

information to call when they were ready for the study. Four faith-based organizations (FBOs) and one community-based organization (CBO) responded by calling the researcher to set a date and time for the focus group discussions. Groups of 8 to 10 participants were organized by gender to allow free and open conversations. The CBO had put together a group of 20 people, 16 men and 4 women. The women were added to other focus groups while the men's group was broken into two groups to form the sixth group. In total, 56 people participated in the focus group discussions that lasted about two hours each. The discussions, moderated by the first author, were held at the homes of group coordinators who offered space but did not participate. The purpose of the study was explained to participants and they were assured of confidentiality. Informed consent was verbally requested and audio recording started after introductions to ensure that participants' names were not recorded.

Analysis

Data for this study were analyzed qualitatively using constructivist and interpretive techniques. This approach assumes that methods that are open to refinement can illuminate how subjects construct reality with the aim of identifying the meaning people construct as they interact (Chesobro & Borisoff, 2007). Denzin (2001) refers to this interpretiveness as "thick description that gives rigor to qualitative analysis" and "presents detail, context, emotion, and the webs of social relationships that join persons to one another" (p. 83).

Qualitative data were translated from Kikuyu ethnic language and transcribed verbatim immediately after the focus group discussions by a native speaker recruited from a local university who assisted in organizing the focus groups, taking notes, and operating the tape recorder while the researcher moderated the focus group discussions. While considering the original research questions, respondents' statements from the transcripts were read, categorized

by color-coding, and information arranged by recurring themes (Krueger & Casey, 2000). This type of analysis involves focusing on the general agreement among participants in each group (e.g. was this attitude or belief held by other members in the same focus group?) (Mathews, Berrios, Darnell, & Calhoun, 2006). Both authors also checked transcripts alongside recorded tapes several times for accuracy before coding to identify the emerging themes and for greater reliability and validity of data (Lincoln & Guba, 1985).

A co-constructivist grounded theory method of analysis was suited for this study (Charmaz, 2000; Strauss & Corbin, 1990). Grounded theory suggests that theory emerges inductively from the data or from the ground up, while the data collected are co-constructed by the researchers and subjects studied (Chesebro & Borisoff, 2007). This method recognizes the mutual creation of knowledge by the viewer and the viewed, and aims toward interpretive understanding of subjects' meanings. A co-constructivist method is also essential in the participatory approach due to its emphasis in dialogue based on the act of listening to the voices of cultural members and where the researcher becomes a facilitator (Basu & Dutta, 2007; Charmaz, 2000; Chesebro & Borisoff, 2007; Jacobson & Storey, 2004; Muturi & Mwangi, 2009). In this study we listened to the participants discuss the impact of HIV/AIDS in their communities, their perspectives on why current prevention interventions have failed to contain it, and their views on appropriate prevention strategies for their communities. Member checks were used and achieved through probing and repeating statements to participants during focus group discussions for clarification of what they meant in their statements.

Results

This study sought the perspectives of older adults on HIV/AIDS prevention and their recommendations on appropriate strategies for their communities. Emerging themes from the

discussions include the communication gaps related to HIV/AIDS messages, communication context, and recommended solutions for effective HIV/AIDS prevention. These themes are discussed in the following sections.

Gaps in HIV/AIDS communication

HIV/AIDS is associated with risky sexual behaviors while education to enhance understanding and effective communication for behavior change is viewed as the solution. Participants were asked to provide reasons for the spread of the disease in their community despite the communication and prevention efforts.

Lack of understanding of HIV/AIDS messages.

One of the major themes that emerged from the discussions was the lack of understanding of the disease. Despite the national HIV/AIDS awareness campaigns that emphasize behavior change, promoting HIV testing and condom use, there is inadequate understanding of the disease in rural communities. One male participant stated that, "AIDS is spreading because people don't believe there is anything like AIDS. They don't believe it. They are ignorant!"

The inadequate understanding was demonstrated in questions many participants asked in the focus groups. For instance, many women thought they could get it from saliva and would not share dishes with any HIV-positive person, but they did not know that HIV was transmitted to infants through breast milk. Men also asked questions related to washing their genitals right after unprotected sex or using the withdrawal method rather than a condom to avoid infection.

Indeed, a few men agreed with one participant's statement that "you can get AIDS from condoms because before condoms there was no AIDS." Some thought that it was the rubber used in making them that causes AIDS.

Though some awareness and prevention campaigns are implemented at the national level, participants noted that rural communities have less access to information and other communication about AIDS is limited. One woman pointed out that:

People might know about it out in the towns and big cities, but in the rural areas, we don't talk about this disease. We know it is there, but if you ask anyone to tell you more about it, they can't tell you because they don't know any better."

Understanding about HIV/AIDS is critical in influencing attitude and behavior change and in preventing the epidemic but such effectiveness requires a combination of mass media and interpersonal channels (Singhal & Rogers, 2003) in addition to services necessary to reinforce and maintain behavior change. The IEC approach used in media campaigns fails to motivate the desired change in understanding about HIV/AIDS, risk perception, and behavior

Low HIV/AIDS literacy.

When asked what contributed to the lack of understanding, participants attributed it to the low general literacy level in rural communities and to the missing education component in mass media HIV/AIDS messages. In one focus group it was noted:

The problem is with education. If one has gone to school and is educated, they will know how the disease is contracted and the signs of infection. But many of us are not educated and do not know anything about AIDS so when we get it, we give it to someone else without knowing. They don't know how people look like when they have AIDS.

To address the epidemic there was a general consensus on the need to improve people's general literacy levels as part of an integrated approach to prevention. There is also a need for health literacy specifically on HIV/AIDS. Women noted the need to enhance AIDS education through interpersonal communication and within small groups that are interactive. One woman noted:

When we talk with someone who has the knowledge better than we do, we can ask questions and talk about many things like we are doing sitting here. But when they put something on radio they talk about what we already know. They may talk about condoms and we don't want to hear that. I want to hear what I can do so I don't get it, but I can't wear a condom.

Another woman added:

If it is about condoms, I want to hear about the female condom that we talked about earlier, but I have not heard about it and that is something that I would like to know and see if someone came to talk to us. They never talk about it in the radio. We get tired of hearing the same thing, 'protect yourself! protect yourself!' how can we protect ourselves if we don't have the weapons to do so?

Overall, all groups identified HIV/AIDS education targeting different age groups as a key step toward: increasing understanding about the disease, addressing AIDS-related stigma and discrimination, and enhancing knowledge on effective prevention strategies. They indicated the need for interpersonal communication strategies to reinforce media messages, enhance understanding, and address specific gender- and age-appropriate concerns.

Minimal risk perception

Risk perception is a component of health promotion and disease prevention, while precaution-taking behavior is related to personal concern for contracting a behavior-related illness. In HIV/AIDS communication, the perceived vulnerability and high risk perception are necessary in motivating behavior change. However, participants noted that though mass media campaigns have managed to increase awareness, the information provided fails to influence the perceived risks. Several participants noted that the agencies, including the government, have not

been forthcoming on information regarding the real impact of the disease in their communities.

As such, community members do not understand its severity or consider themselves as vulnerable. As one man noted:

We need to know the real truth about AIDS. Now, since there are vaccines for animal illnesses, why can't the government do the same with AIDS? Can't they have immunizations for everyone in the communities? Or maybe get everyone to get tested if they think it is that serious. That would be the best idea. But to me, if it is such a serious issue as you and others make us think, then that is why the government has not done much about it and people do not do anything about it either.

The lack of visible government interventions in rural communities where the majority of the population resides was attributed to low severity of AIDS compared to other epidemics, such as polio and animal disease outbreaks, when the government had taken action through immunization and public education campaigns. As one man noted,

Sometime in the 70s they gave all cows some injections to prevent some kind of disease. People were scared and did not eat beef or drink milk for a while. Why can't they do that to people to prevent it? Who is more important, the cows or people? Until they make people believe that AIDS is that serious disease, like they did with animal diseases, they are not doing anything.

The low risk perception was also demonstrated by statements about the increased sexual violence in rural communities where no protection is used. As reported in the women's focus groups:

If you tell a man that you have AIDS he will not believe you. Some of them will force themselves on you even if you warn them. They only believe that a woman has AIDS if

she is very sick and can't take care of herself and then they run away and will not help her.

Men had similar statements, noting that unless someone is physically ill, people don't associate him or her with AIDS. They wanted to know more about HIV symptoms since they are not easily visible and this makes it difficult for people to be cautious about their sexual practices. To address this problem, participants indicated the need for programs that focus more on risk perception, involving those living with the disease to give testimonials, particularly to married women and older adults who are considered at low risk. Listening to such testimonials would affect their attitudes and influence the way they view the disease.

Given the magnitude and the impact of HIV/AIDS in rural Kenya, the common assumption would be the existence of high risk perception based on people's experiences. Researchers have suggested that feeling, affect, and past experiences with a natural hazard are important in influencing risk perception, especially with voluntary hazards (Keller, Siegrist, & Gutscher, 2006). HIV/AIDS is, however, primarily associated with voluntary risks, mainly unprotected sexual practices and intravenous drug use, hence the negative effect. Slovic (1999) also note that risk perception encompasses both objective and subjective qualities and that risk judgments are, to some degree, a byproduct of social, cultural, and psychological influences. In that regard, knowledge acquisition and threat sensitization need to be enhanced by embedding HIV/AIDS information in a culturally and personally relevant context.

Low fear appeal

Health communication campaigns have been the primary vehicle for educating the public about the negative consequences of engaging in risky behaviors, but current HIV/AIDS campaigns have been ineffective in influencing behavior change. All focus groups indicated the

need for increased fear appeal directed toward various age groups. For instance, male participants noted that rural people were never given the opportunity to see the progression of HIV/AIDS or healthy-looking people living with it. Rather, what they see is dying people, particularly when they return to rural communities in their final stages of illness. They suggested testimonials and more direct campaigns that will show people how AIDS impacts them and those close to them. As noted in one group:

We cannot keep lying to people that AIDS is like any other disease. It is not! It is a very serious thing that people should know about, if they don't know. They need to see and understand that their behaviors will affect others, especially their children. Many of them have given it to the children and to others who have not done anything wrong. I believe if we give a clear image of what this disease is all about, we can help people to think before they act.

Women also indicated the need for stronger fear appeal through images and testimonials from those already impacted. In one group it was noted:

I think you are not telling people the truth about this disease because many of them don't think it is that serious. If those who are sick can come out and talk about their lives, living with the disease, people can think about it. If I see someone I knew well coming out and talking about what he goes through each day, I might not say anything but I am sure I will think about it. We can have movies and pictures to teach people what AIDS is and how you get it. It seems like many people don't know yet, though we hear about it.

Strong fear appeal contributes to higher risk perception, particularly in countries with higher infection rates and lower literacy levels. Unlike studies that show moderate fear appeal to be more effective in behavior change (Stephenson & Witte, 2001), participants indicated that

strong fear appeal that demonstrates grim HIV/AIDS visual and audio messages and images would be more effective in rural Kenya. This finding is in line with the Green and Witte (2006) study conducted in Uganda that found stronger fear appeal to be more effective in communities with lower literacy and inadequate understanding of the epidemic. This would require collaboration between local leaders, health professionals, and other advocates all providing the same message.

Communication Context and Communicators

Based on the second research question, several themes also emerged that pointed to the need for interpersonal education channels that allowed discussion on the HIV/AIDS topic.

Participants also discussed various cultural, political, and social contexts for education and communicating about the disease and those they considered appropriate for addressing the topic.

The HIV/AIDS and sex educators

Culturally, older adults counseled the youth on sexuality-related issues within the Kikuyu culture. For instance, during circumcision ceremonies the youth learned about sexuality from older adults and were thereafter each assigned an older-adult as a lifelong mentor who would guide them through difficult and private life issues (Kenyatta, 1978). As such, education in sexuality was passed from the older generation to the youth in intimate settings. Today circumcision is done in hospitals, hence eliminating that educational stage and media has replaced what they learned from their elders. The cultural structure and context for sex education was discussed in detail, where participants felt the need to restore the cultural traditions where they play a more active role as sex educators for the youth. As one woman noted, "I would want to see my grandchildren and other young girls in this village come to me or to any other grandmother for advice." Another woman added "if they come to us we will talk to them, but

they think they know better than anyone else until they get themselves sick and that is when they come home and it is sometimes too late."

In contrast, the use of media in health campaigns violates that cultural code of conduct, reversing the learning process where media replace the cultural sex educators. Throughout the focus group, participants indicated a need to address such cultural disharmony through recruiting individual seniors as sex educators and reproductive health counseling for the youth to supplement what they hear from the mass media and other sources. Sex education within the existing societal structures, including schools, churches and other community organizations was emphasized, but also noted the need to go beyond abstinence only education that religious organizations have offered. In one group a woman noted:

They used to tell us the same thing when we were growing up, but things have changed these days. Children are starting [sex] very early and you have seen it, they don't listen to anyone. If they don't have anything to protect themselves, they will continue spreading it to others. The best thing is to teach them and give them more choices.

Another woman added:

And where else can they get this education? We have to start where they are and you will find them in church, the Sunday school, and youth choir. I would want to see the church do more to help these children before they are spoiled.

When asked who they considered as credible sources of HIV/AIDS education for older adults, participants listed those knowledgeable about the topic, have recognizable credentials, are respectable and viewed as role models such as religious leaders, politicians, community health workers, or other community leaders. As stressed in one group, "if we know that one of us has gone through the training, people will respect him and will listen." This finding is in line with

previous studies that have argued that health educator credibility is linked to providing a positive role model of health attributes that typify a healthy lifestyle (Scott & Black, 1999). Age and gender of the facilitator was found to be critical in effective communication. Participants also emphasized age- and gender-specific HIV/AIDS education programs due to the sensitive nature of the HIV/AIDS topic and the need for free and open communication. For example, the gender-based focus group served as forums for discussing sexuality-related issues where participants shared information and experiences. Some of the discussions continued after the focus groups where participants needed further information or had personal concerns that they needed to share with other men or women.

Communication and Engagement Context

Community engagement and dialogues on the HIV/AIDS epidemic was suggested as a key prevention strategy, with the involvement of local leaders, members, and health professionals. Participants noted that given the widespread epidemic there is a need to address it openly, not only for education purposes but as a way of addressing AIDS-related stigma in their communities. Using the example of focus group discussions, one female participant noted, amid support of other members, that "it is just like how we are talking about it now. I am learning a lot from what everyone is saying. We can do the same thing and have more people come and listen or say what they think."

Speaking openly about the disease at the local *barazas* (public meetings) was proposed as a key tactic for addressing the AIDS epidemic. These public forums are held by local chiefs, other government officials, and politicians when they have to announce something to community members or discuss issues that affect communities. Such public forums would ensure that HIV/AIDS is discussed as a community issue and to be placed on the public agenda, offering an

opportunity for health professionals and local leaders to provide some perspective on the impact the disease has on their communities. As one elderly man noted:

We want every politician and government official who holds a *baraza* to talk about AIDS. They need to urge people to protect themselves and to stop spreading it to others or else they will be apprehended and punished for it. They should even go to jail for that. If they talk at these meetings they are talking to everyone: men, women, and children. People need to know that their leaders are concerned about it and they might start thinking about what to do about it.

In another men's group, it was noted:

If we can openly talk about this disease and if the chief and our member of parliament come and tell people that 'today we are here to talk about AIDS,' people will listen and they will talk about it. But now, it is like a crime to talk about it, nobody, not even in church, does anyone talk about AIDS.

Communicating HIV/AIDS within the political context was specifically singled out as a critical strategy to reach men and the older adults who actively participate in community politics and are involved in various community issues. Politicians' role in addressing HIV/AIDS has been viewed as effective in its prevention. In Uganda, for instance, the leadership of President Museveni in HIV/AIDS awareness with emphasis on behavioral change by raising alarms that the Ugandans are endangered led to the decrease of HIV infection observed in the 1990s (Green & Witte, 2006). The impact of political will observed in Uganda is required in many African countries where politicians play influential roles in people's everyday lives and have the potential to influence behavior change through communication. To do so effectively,

participants noted the need to collaborate with health professionals who understand the health aspects of HIV/AIDS using the same political platform. As one participant indicated:

When you call people for a health meeting they will not come. May be the women will come with their children but you will not find men there. But if you call for a political meeting men will come. So they should put the two together... you will be talking to a more mixed group.

Cultural contexts for HIV/AIDS communication include religious and other faith-based organizations (FBOs). Participants noted that churches and other religious groups were the main source of information and most appropriate health education programs because that is where people gather each week. Collaboration between religious and health organizations was emphasized where religious leaders organize health seminars and invite health officials to serve as resource persons and educators. Other community-based organizations where rural people congregate are the farmers' cooperatives, which were viewed as culturally appropriate communication contexts for HIV/AIDS and other health information. They remembered family planning programs using this approach in 1970s and '80s to disseminate information directly to community members through face-to-face or audio-visual strategies that entertained and educated them. Men also noted that it would be effective to show the impact of AIDS on food production, specifically the tea and coffee production, since that is their livelihood.

Programmatic Recommendations

Also based on the second research questions, participants were asked what they would recommend as solutions to eradicate the AIDS epidemic and motivate behavior change. Several programmatic recommendations were made that ranged from policies requiring HIV testing to establishing culture-based laws and regulations to help contain the epidemic.

Policies on mass HIV testing and disclosure

HIV/AIDS voluntary counseling and testing (VCT) are key strategies in preventing the epidemic from spreading. Throughout Kenya, health campaigns promote VCT through mass media and interpersonal channels. As observed during the study period, several tactics including radio spots, TV advertisements, posters, and roadside signage, are used to encourage HIV testing. These tactics are concentrated in the urban areas with limited knowledge or access to services in rural communities. Only one participant had been voluntarily tested for HIV five years prior to the study because she had a blood transfusion.

Several reasons were discussed for lack of testing that included: fear of needles and infection from blood draws; lack of testing and counseling services in their local communities; the fact that there is no cure and therefore no need to learn their HIV status; and more importantly the stigma and confidentiality issues in the small rural communities. In spite of these concerns, older adults strongly recommended mass HIV testing throughout rural communities as a strategy for prevention, which needs to be accompanied by treatment. Examples were given of how the government dealt with polio and measles outbreaks by requiring immunization for all children. Though they acknowledged the lack of cure and HIV/AIDS vaccine, participants recommended using the same strategy for HIV prevention, requiring mandatory testing and follow-up treatment for all Kenyans, including children.

Recommendations were also made related to policies that require HIV disclosure as a prevention strategy. Participants discussed the need for leaders to speak openly about the disease at funerals, particularly if the cause of death was AIDS-related, taking the opportunity to warn people of the possible risk factors and the need to prevent infection. Involving family members left behind to talk about their experiences would enhance these efforts but would also require the

support of overall government policy on disclosure due to stigma and possible repercussions on those infected or affected by the disease. As one of the religious leaders indicated:

We need something written and sent to us with a government stamp that we can use to tell people why we are doing it. We can't just start revealing it and destroying families, but if it is a government requirement, then we don't have any objection. We can talk to families ahead of time and let them know why we do this and eventually everyone will know it is a government regulation.

Disclosure of HIV status to sexual partners is a key strategy toward fighting stigma and discrimination and the overall prevention (Miller & Rubin, 2007). Stigma, on the other hand, prevents disclosure at a personal and public level. Though participants indicated a need for HIV/AIDS testimonials, they also agreed that such public disclosure would require effort and preparation of community members to change their attitudes and perceptions. Currently, only those who are directly involved in their care are often made aware of the HIV status of those infected.

Community-based laws and regulations

Laws that prevent spreading the virus deliberately were proposed in all focus groups. As older adults who make and safeguard cultural and community laws and regulations, participants noted the need for a system that punishes those who are known to spread the virus in the communities. In one group it was noted that:

It is because of generosity. People here have become extremely generous with AIDS and they want to give it to others. It is like wealth. You get it and you want to share before you die. We see a lot of that happening here and that is something that needs to be stopped.

Across focus groups, participants raised concerns that many of those infected are spreading the disease deliberately, either because of bitterness and revenge, or fear of stigma and, therefore, do not disclose their HIV status to their sexual partners. They suggested community-based laws and other mechanisms that punish those who deliberately infect others. As noted earlier, the Kikuyu cultural structure ensured that societal members monitored each other's activities, particularly age groups (Kenyatta 1978). However, with the erosion of cultural traditions, government support is necessary to reinforce such community-based decisions.

Conclusion

In this study we explore the perspectives of older adults on the HIV/AIDS epidemic in rural Kenya from participatory and culture-centered frameworks that emphasize community dialogues and engagement in finding possible solutions that are culturally sensitive and acceptable. Though the study was exploratory, it identifies several shortcomings in the current HIV/AIDS prevention interventions that fail to achieve behavior change in rural communities.

First, in spite of widespread HIV/AIDS media campaigns, there is still a need for education and understanding of the disease. HIV/AIDS literacy is a necessary component in preventing and containing the disease, particularly in poor and rural communities with low general literacy. Strategies to increase knowledge and understanding may include interpersonal communication through the already existing structures, including churches, schools, and cultural institutions such as families, clans, and age groups. These structures have not been adequately explored with regard to health and HIV/AIDS prevention and in finding possible solutions.

Second, HIV/AIDS needs to be addressed as a disease affecting all segments of the population rather than a few specific segments that are considered at high risk. With studies showing an increasing number of the older adults living with HIV, and several others playing the

caregiver role for those infected and affected by the disease, the implication is that they can no longer be ignored as a key target group in prevention interventions. Strategically targeting all population segments and involving them in prevention interventions increases risk perception, enhances the reduction of AIDS-related stigma and discrimination based on the understanding that no-one is immune from contracting it, and empowers them in the communication and behavior change process.

The study also has several theoretical and practical implications for health communication interventions that apply the participatory and culture-centered approaches. As literature has indicated, not all community members have the same status and therefore their contributions in such dialogues may vary (Ascroft & Masilela, 1994), yet the views of each segment are necessary in the design of strategic communication interventions. Demographic segmentation ensures adequate participation and dialogues where people discuss HIV/AIDS, help each other understand it, and come up with appropriate preventive solutions.

Key recommendations for HIV/AIDS prevention programs and practices included a stronger focus on education and risk perception, use of stronger fear appeal, emphasis on testing, and implementing HIV/AIDS-related policies and regulations that prevent spreading the disease. There is a need to align and harmonize current communication strategies with the cultural context. This involves taking into account the various codes, ethics, taboos, and practices that frame such communication, including age-set rituals and practices, gender differentiations, cultural honors and responsibilities earned with age and seniority, and capitalizing on the credibility bestowed on the elderly. For instance, the Kikuyu culture bestows on older adults an elevated status in their communities as custodians of culture and leaders in various social and cultural institutions. They are widely accepted as influencers at various levels—personal,

community and national levels— and reverting to that role would enhance their responsibility in preventing the epidemic in their communities and among their own age group.

At the theoretical level, this study makes a significant contribution that could develop and enrich participatory and culturally based communication theories and strategies. Whereas these theories are centered on the concept of inclusive dialogue that enables a community to discuss an issue and aggregate its capacities to address it, that concept assumes that participants have the capacity to understand the problem. But where the issue under discussion involves technical or scientific concepts such as HIV/AIDS infection, lack of education has the potential to undermine the participatory process. Our study participants indicated the complexity of HIV/AIDS and the lack of understanding of the topic, which would directly limit the nature of dialogue and level of participation. With low HIV/AIDS literacy in rural communities, we suggest an addition of capacity building for community members as a way of equipping them for meaningful dialogues. As participants indicated, having people with expertise on the topic to teach them and facilitate dialogues would enable them to better understand the disease and its impact on various population segments and in finding culturally appropriate solutions including symbols, props, and contexts to make complicated issues accessible.

Furthermore, in addition to awareness and education, there are legal and policy issues related to HIV/AIDS that makes it different from other diseases. As people hold dialogues about finding solutions for preventing the epidemic, understanding national HIV-AIDS-related laws and policies related to sex education, among various age groups, HIV testing disclosure, confidentiality, treatment, and how to apply or implement them within rural and cultural settings is necessary in preventing further spread of HIV. Health communication practitioners as dialogue facilitators could assist in harmonizing such national policies with community-based regulations

to make them more culture-oriented with the input of the local residents. This would require research to incorporate a rigorous anthropological understanding of the socio-cultural systems related to power and control, and incorporating them into health communication interventions.

As Jacobson & Storey (2004) observe, Habermas's theory has been elaborated to include the notion of multiple public spheres and is also extended to include an analysis of the relationship between cultural plurality and law. As we found in this study, there are several spheres and contexts for HIV/AIDS dialogue in rural communities. HIV/AIDS topic involves sexual and individual private behaviors and practices and is highly stigmatized. Therefore cultural sensitivity becomes more critical compared to the less stigmatized health issues. While this study is exploratory, it focuses on an under-researched area of older adults' perspectives on HIV/AIDS prevention strategies. Given the growing importance of this demographic, both as caregivers and as people living with the disease, and the critical role that older adults play in African communities, this is an area that requires further scientific research. Many of them have contributed in fighting stigma and discrimination but this impact has not been systematically measured or documented. Systematic research is needed in order to document the potential and impact of older adults as agents of behavior change in their local communities. Similarly, the impact of the disease on the aging population in Kenya and other less developed countries has not been properly documented due to lack of reliable data. This is an area that calls for systematic surveillance and documentation to inform age-specific prevention interventions that target the older adults.

References

- Agha, S. (2003). The impact of a mass media campaign on personal risk perception, perceived self efficacy and on other behavioural predictors. *AIDS Care* 15(6), 749-762
- Ahlberg, B. (1991). Women, sexuality and the changing social order: The impact of government policies and reproductive behavior in Kenya. Amsterdam, Gordon and Breach.
- Airhihenbuwa, C. O. (1995). *Health and culture: Beyond the Western paradigm*. Thousand Oaks: Sage.
- Ascroft, J., & Masilela, S. (1994). Participatory decision making in Third World development.

 In S. A, White, K. S. Nair & J. Ascroft (Eds.). *Participatory communication, working for change and development*, New Delhi: Sage
- Atkin C. (2001). Theory and principles of media health campaigns. In R. Rice & C. Atkin (Eds.), *Public communication campaigns*, (3rd ed., pp. 49-68), Thousand Oaks: Sage.
- Basu, A., & Dutta, M. (2007). Centralizing context and culture in the co-construction of health:

 Localizing and vocalizing health meanings in rural India. *Health Communication*, 21(2),
 187-196.
- Betancourt, J. R., Green, A. R., Carrillo, J. E., & Ananeh-Firempong, O. (2003). Defining cultural competence: A practical framework for addressing racial/ethnic disparities in health and health care. *Public Health Reports*, *118*, 293–302.
- Carey, M. A. (1994). The group effect in focus groups: Planning, implementing, and interpreting focus group research. In J. Morse (Ed.), *Critical issues in qualitative research methods* (pp. 225-241). Thousand Oaks, CA: Sage.

- Charmaz, K. (2000). Grounded theory: Objectivist and constructivist methods. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 509–535). Thousand Oaks, Calif.: Sage.
- Cherie, A., Mitkie, G., Ismail, S., & Berhane, Y. (2005). Perceived sufficiency and usefulness of IEC materials and methods related to HIV/AIDS among high school youth in Addis Ababa, Ethiopia. *African Journal of Reproductive Health*, 1, 66-77.
- Chesebro, J. W., & Borisoff, D., J. (2007). What makes qualitative research qualitative? *Qualitative Research Reports in Communication*, 8(1) 3-14.
- Chiao, E.Y., Ries, K.M., & Sande, M.A. (1999). AIDS and the Elderly. *Clinical Infectious Diseases*, 28, 740-745.
- Davidson, J. (1996). *Voices from Mutira: change in the lives of rural Gikuyu women, 1910-1995.* (2nd ed). London, Lynne Rienner Publishers.
- Denzin, N. K. (2001). *Interpretive interactionism*, Beverly Hills, CA: Sage.
- Dutta, M. J., & Basnyat, I. (2008). The radio communication project in Nepal: A culture-centered approach to participation. *Health Education and Behavior*, 35(4) 442-54.
- Dutta, M. J., & Basu, A. (2007). Health among men in rural Bengal: Exploring meanings through a culture-centered approach. *Qualitative Health Research*, 17(1) 38-48
- Dutta-Bergman, M. J. (2004). The unheard voices of Santalis: Communicating about health from the margins of India. *Communication Theory* 14(3) 237-263
- Dutta-Bergman, M. J. (2005). Theory and practice in health communication campaigns: A critical interrogation. *Health Communication*, *18*(2) 103-122.

- Fisher, J. D., Fisher, W. A., Bryan, A. D., & Misovich, S. J. (2002). Information-Motivation-Behavioral skills model-based HIV risk behavior change intervention for inner-city high school youth. *Health Psychology*, *21*(2), 177-186
- Fisher, W. A., & Fisher, J. D. (1993). A general social psychological model for changing AIDS risk behavior. In J. Pryor & G. Reeder (Eds.), *The social psychology of HIV infection* (pp. 127–153). Hillsdale, NJ: Erlbaum.
- Fisher, J. D., & Fisher, W. A. (2000). Theoretical approaches to individual-level change in HIV-risk behavior. In J. Peterson & R. J. DiClemente (Eds.), *HIV prevention handbook* (pp. 3–55). New York: Kluwer Academic/Plenum Press.
- Gachuhi, J.M., & Kiemo, K (2005). Research capacity on Aging in Africa: Limitations and Ways forward. *British Society of Gerontology*, 15(2) 36-361
- Geertz, C. (1987). La Interpertacion de las culturas. Barcelona: Gedisa
- Green, E. C., & Witte, K. (2006). Fear Arousal, Sexual Behavior Change and AIDS Prevention. *Journal of Health Communication*, 11, 245-259.
- Grunig, J. E. (1997). A situational theory of publics: Conceptual history, recent challenges and new research. In D. Moss, T. MacManus, & D. Vercic (Eds.), *Public relations research:*An international perspective (pp. 3–48). London: International Thomson Business.
- Guba, E., & Lincoln, Y. (1994). Competing paradigms in qualitative research. In N. Denzin & Y. Lincoln (Eds.) *Handbook of qualitative research* (pp. 105-117). London: Sage
- Guerny, J. (2002). The elderly, HIV/AIDS and sustainable rural development. Sustainable

 Development Department, Food and Agricultural Organization of the United Nations

 (FAO). Retrieved from http://www.fao.org/sd/2002/PE0101a_en.htm

- Habermas, J. (1984). Theory of communication action, vol.1 of "Reason and the rationalization of society" (T. McCarthy, Trans). Boston: Beaton press
- Jacobson, T., & Storey, J. D. (2004). Development Communication and Participation: Applying Habermas to a Case Study of Population Programs in Nepal. *Communication Theory* (14)2, 99-121.
- Keller, C., Siegrist, M., & Gutscher (2006). The role of affect and availability heuristics in risk communication. *Risk Analysis* 26(3), 631-639
- Kemmis, S., & McTaggart, R. (2005). Participatory action research: Communicative action and the public sphere. In N.K. Denzin & Y.S. Lincoln (Eds.), *The Sage handbook of qualitative research* (3rd ed. pp. 559-603). Thousand Oaks, CA: Sage.
- Kenyatta, J. (1978). Facing Mt Kenya. Nairobi, Heinemann.
- Kline, K. (2006). A decade of research on health content in the media: The focus on health challenges and sociocultural context and attendant informational and ideological problems. *Journal of Health Communication*, 11, 43–59
- Kreps, G. L. (2009). Strategic use of communication to market cancer prevention and control to vulnerable populations. *Health Marketing Quarterly*, 25(1), 204 216
- Krueger, R., & Casey, M. A. (2000). Focus groups: A practical guide for applied research (3rd ed.). Thousand Oaks, CA: Sage
- Kyobutungi, C. Ezeh, A. Zulu, E., & Falkingham, J. (2009). HIV/AIDS and the health of older people in the slums of Nairobi, Kenya: results from a cross sectional survey. *BMC Public Health*, *9*, 153. Retrieved from http://www.biomedcentral.com/content/pdf/1471-2458-9-153.pdf

- Levy-Dweck, S. (2005). HIV/AIDS fifty and older: A hidden and growing population. *Journal of Gerontological Social Work, 46*, 37-50.
- Lincoln, Y. S., & Guba, E. (1985). Naturalistic inquiry. Beverly Hills, CA: Sage
- Lindlof, T. R., & Taylor, B. C. (2002). *Qualitative communication research methods* (2nd ed.), Thousand Oaks, CA: Sage.
- Linsk, H. (1994). HIV and the elderly. Families in Society, 75, 362-372.
- Martin, C. P., Fain, M. J., & Klotz, S. A. (2008). The older HIV-positive adult: A critical review of the medical literature. *The American Journal of Medicine*, *121*, 1032-1037
- Mathews, A. K., Berrios, N., Darnell, J. S., & Calhoun, E. (2006). A qualitative evaluation of a faith-based breast and cervical cancer screening intervention for African American women". *Health Education and Behavior*, 33, 5: 643–663
- Miller, A. N., & Rubin, D. L. (2007). Factors Leading to Self-Disclosure of a Positive HIV Diagnosis in Nairobi, Kenya: People Living With HIV/AIDS in the Sub-Sahara.

 Qualitative Health Research 17, (5) 586 -598
- Morton, T. A. & Duck, J. (2001). Communication and health belief: Mass and interpersonal influences on perceptions and risk to self and others. *Communication Research*, 28(5) 602-626
- Muturi, N., & Mwangi, S. (2009). Theory and practice gap in participatory communication: A Caribbean case study, *Journal of International Communication*, 15(1), 74-91
- Muturi, N. (2005). Communication for HIV/AIDS prevention in Kenya: social-cultural considerations. *Journal of Health Communication*, *10*(1), 77-98.
- Myre, S. J., & Flora, J. A. (2000). HIV/AIDS communication campaigns: Progress and prospects. *Journal of Health Communication*, 5(Supplement), 29-46.

- National AIDS and STD Control Program (2005): *AIDS in Kenya*. 7th edition. Nairobi, Kenya, NASCOP
- Nguyen, N., & Holodniy, M. (2008). HIV infection in the elderly. *Clinical Interventions in Aging*, *3*(3), 453–472.
- Scott, L.A. & Black, D. R (1999). Health communication and professional preparation: Health educator credibility, message learning, and behavior change. *Health Education and Behavior*, 26(5), 609-620
- Sha, B. L. (2006). Cultural identity in the segmentation of publics: an emerging theory of intercultural public relations. *Journal of Public Relations Research*, 18, 45–65.
- Simone, M. J., & Appelbaum, J. (2008). HIV in older adults. Geriatrics, 63(12), 6-12
- Singhal A., & Rogers, E. M. (2003). *Combating AIDS: Communication strategies in action*.

 New Delhi: Sage Publications
- Slovic, P. (1999). Trust, emotion, sex, politics, and science: Surveying the risk-assessment battlefield. *Risk Analysis*, *19*(4), 689–701.
- Stephenson, M.T. & Witte, K. (2001). Creating fear in a risky world. Generating effective health risk messages. In R. Rice & C. Atkin (Eds.), *Public Communication Campaigns* (3rd ed., 88-101), Thousand Oaks: Sage
- Strauss, A., & Corbin, J. (1990). Basics of qualitative research: Grounded theory procedures and techniques. Newbury Park, CA: Sage
- Trauth, E. M. (2001). Qualitative research in IS: Issues and trends publication: Hershey, PA: Idea Group Publishing.

- Tufte, T. (2005). Communicating for what? How globalization and HIV/AIDS push the ComDev agenda. In O. Hemer & T. Tufte (Eds.), *Media and glocal change: Rethinking communication for development,* (pp.105-119), Suecia, Sweden, Nordicom.
- UNAIDS (2004). Epidemiological fact sheets on HIV/AIDS and sexually transmitted diseases:

 Kenya. Update. Retrieved from http://data.unaids.org/Publications/Fact
 Sheets01/Kenya EN.pdf
- UNAIDS (2007). AIDS Epidemic Update; UNAIDS, December. Retrieved from http://data.unaids.org/pub/EPISlides/2007/2007 epiupdate en.pdf
- UNAIDS (2008). Report on the global AIDS epidemic. UNAIDS. Retrieved from http://www.unaids.org/en/KnowledgeCentre/HIVData/GlobalReport/2008/2008_Global_report.asp
- UNAIDS (2009). AIDS Epidemic Update, December. Retrieved on from http://data.unaids.org/pub/Report/2009/JC1700_Epi_Update_2009_en.pdf
- van Maanen (1983). Qualitative methodology. Beverly Hills, Sage
- Vianna, L.E., Lo. Y., & Klein, R. S. (2006). Serum prostate-specific antigen of HIV infection, HIV Medicine, 7, 471–476
- Whipple, B., & Scura, K.W. (1989). HIV and the older adult: Taking the necessary precautions.

 Journal of Gerontological Nursing, 15(9), 15-19
- White, S. A (1994): The concept of participation: Transforming rhetoric to reality. In S. A, White, K. S. Nair & J. Ascroft (Eds). *Participatory communication, working for change and development*, (pp.15-32), New Delhi: Sage
- WHO (2006a). Definition of an older or elderly person. Retrieved from http://www.who.int/healthinfo/survey/ageingdefnolder/en/print.html

WHO (2006b). Country health system fact sheet, Kenya. Retrieved from http://www.afro.who.int/home/countries/fact_sheets/kenya.pdf

Yehya, N. A., & Dutta, M. J. (2010). Health, religion, and meaning: A culture-centered study of Druze women. *Qualitative Health Research*, 20(6), 845-858.