The Role of Radio and Television in Reducing the Burden and Severity of Cervical Cancer Among Women in Kenya With Special Focus on Kenyatta National Hospital in Nairobi Kenya.

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Abstract

Cancer of the cervix is the second most common cancer among women and the leading killer of women in their reproductive ages. The World Health Organization estimated that 529,409 new cases occurred globally, with 274,883 of the women (52% of cases) dying. Of the total new cases each year, about 86% occur in developing countries, where, unfortunately, 80-90% of cervical cancer-related deaths occur due to, among other things, poverty, cultural beliefs and lack of awareness. In the developed world, the situation is different due to advanced medical care, policies that are enforced to ensure that women go for pap smears at least once every year, coupled with media awareness. The situation is quite different in developing world especially in Kenya; where poverty, lack of awareness, misconceptions and cultural beliefs inhibit the detection, diagnosis, treatment and/or management and prevention of cervical cancer among women. In Kenya, cervical cancer is the second most frequent cancer among women and the leading cause of cancer deaths in women of reproductive age (WRA) with a rate of 300,000 deaths per year. Data from hospital-based registries in Kenya indicate that cancer of the cervix accounted for 70-80% of all cancers of the genital tract and 8-20% of all cancer cases. These statistics do not reflect the cases that go unreported and those in the rural areas. It has been reported that there are 10 to 15 new cases of cervical cancer in Nairobi each week. Despite the grave situation in the country, the media, the government and other stakeholders have not made deliberate efforts towards creating awareness campaigns aimed at the prevention of cervical cancer. The main objective of this paper is to examine the influence of radio and television in creating cancer awareness among women in Kenya, with special focus on Nairobi County. The paper is based on an on-going PHD study that is being done by the same authors in Nairobi.

1.0 Introduction

Cancer of the cervix is the second most common cancer among women worldwide and the leading cause of cancer deaths in developing countries. According to (WHO 2010), in 2008, it was estimated that 529,409 new cases occurred globally, with 274,883 of the women (52% of cases) dying. Of the total new cases each year, about 86% occur in developing countries, where, unfortunately, 80-90% of cervical cancer-related deaths occur due to, among other things, poverty, cultural beliefs lack of awareness. With the peak age of cervical cancer being 35-45 years of age, it claims the lives of women in the prime of their life when they may be raising children, caring for the family, and contributing to the social and economic life of their community (Williams et al., 1994; Gatune & Nyamongo, 2005). It has been estimated that the average life years lost due to cancer of the cervix is 25.3 years, (Huchko *et al.*, 2011; McKenzie *et al*, 2011). In 2002, an estimated 11 million new cancer cases and 7 million cancer deaths were reported worldwide; nearly 25 million persons were living with cancer, (Tiro, Meissner, Chollette 2007).

As high-income countries enjoy the benefit of early cancer screenings due to high awareness, policy enforcement, drug therapies and vaccines, the burden of cervical cancer is shifting to low-income countries in Africa and Asia where women are developing cervical cancer during their reproductive years, adding more pressure on societies already suffering from high rates of infectious disease and child mortality. The problem in developing countries is more compounded because of lack of awareness, policy enforcement and poverty, (The Guardian. Co.uk on Cervical cancer, retrieved on 22/10/2013). According to Parkin, *et al* (2003), cervical cancer in Sub-Saharan Africa accounts for 22.2% of all cancers in women and it is also the most common cause of cancer deaths among them. About 60–75% of women in sub-Saharan Africa who develop cervical cancer live in rural areas.

Many of these women go untreated, mostly due to lack of access (financial and geographical) to health care facilities, lack of awareness on its symptoms and prevention, unlike in the developed world where awareness is high, coupled with health policies which are enforced and availability of medical care. Women in sub-Saharan Africa lose more years to cervical cancer than to any other type of cancer. Unfortunately, it affects them at a time of life when they are critical to the social and economic stability of their families (Parkin *et al.*, 2003).

According to Chokunongaet al., (2002), the true incidence of cervical cancer in many African countries is unknown as there is gross under-reporting or misreporting. Only very few countries have functional cancer registries and recordkeeping is minimal or non-existent in many countries. And to compound the problem, it is only a small fraction of women who access medical facilities while majority cannot access hospital care and end up dying at home. This is a contrast of the developed world where mortality rates are low with successful screening programs seldom exceed 5 per 100,000 women, adequate knowledge and policy regulations, (Chokunonga et al., 2002). The problem in Sub-Saharan Africa is compounded by a number of reasons among them: not feeling at risk, lack of symptoms, carelessness, fear of vaginal examination, lack of interest and test being unpleasant while others have no reason at all for not going for screening but others were afraid of the procedure and others feared going for the test for fear of bad results, (Urasa Dar 2011).

According to Arnolu (2007), some of the few women who have access to screening do not get themselves screened because they have wrong beliefs about cervical cancer. He further argues that there are very few cervical cancer screening services in Africa and many of them are based at secondary tertiary health care facilities located in urban centers where majority of women from the rural areas cannot access because of poverty.

Arrosi et al (2010) agrees with Arnolu (2007) that screening in most developing countries in Sub-Saharan Africa is characterized by an estimated low coverage, and an absence of quality control procedure makes the problem grave. Policies for cervical cancer screening in most countries vary and in most often non-existent. Formulation and ensuring compliance with national program guidelines is an essential step towards significantly reducing the burden of cervical cancer but this is not happening. He further asserts this type of service does not reach women most at risk, i.e. those aged between 35 and 60 years especially those who live in the rural areas and who face various challenges like poverty, cultural beliefs, gender-based issues and so on. Cytology-based screening, which is used in developed countries, is resource intensive, and difficult to realize in very many countries in Sub-Saharan Africa because of poor health care infrastructure and lack of resources. Moreover, there are very few specialists in this area and some have inadequate training. Quality control is inadequate and screening services are extremely limited in many countries and it is compounded by lack of awareness (Arrosi, et al., 2010).

However, Lewis (2004), observes that cervical cancer is fully preventable and curable, at low cost and at low risk, when screening to facilitate the timely detection of early precursor lesions in symptomatic women is available early enough, together with appropriate diagnosis, treatment and follow-up. This is usually a challenge in many developing in Sub-Saran Africa due to poverty, lack of adequate knowledge and resources. Other issues that compound the cancer problem in many African countries include cultural beliefs, misconceptions and poverty, lack of awareness, lack of policy and or enforcement, (Lewis, 2004).

In Kenya, cervical cancer is the second most frequent cancer among women and the leading cause of cancer deaths in women of reproductive age (WRA) with a rate of 300,000 deaths per year, (Kenya Ministry of Public Health, 2009). Data from hospital-based registries in Kenya indicate that cancer of the cervix accounted for 70-80% of all cancers of the genital tract and 8-20% of all cancer cases and these statistics do not reflect the cases that go unreported and those in the rural areas. It has been reported that there are 10 to 15 new cases of cervical cancer in Nairobi each week, (Kenya Cancer Registry, 2009).

Despite the magnitude of the problem in Kenya and the world over, and the fact that cancer is easily preventable once detected early, there is no deliberate effort to treat cervical cancer with the seriousness it deserves. The cervical cancer screening coverage by the media more so radio and television in Kenya for all women 18 to 69 years of age is only 3.2%, (Gichangi *et al.*, 2003).

2.0 Risk factors

2.0.1 Sexual behaviour

Despite the paucity of well designed studies on risk factors for cervical cancer in Kenya strong evidence points to sexual behavioral patterns and possibly sexually acquired infective agents as the main contributory factors to the high incidence of cervical cancer. This is a finding of great public health importance because it implies that incidence of cervical cancer may be much decreased through educational programs aimed at behavioral change.

Other factors contributing to high risks of cervical cancer among Kenyan women include multiple pregnancies, early age of first intercourse, hormonal contraceptives, smoking and HIV infection (Williams *et al.*, 1994; Gatune& Nyamongo, 2005). For a woman living with HIV, a Human Papilloma Virus (HPV) infection can develop into cervical cancer more quickly than for a woman who is HIV negative, (Yamada *et al.*, 2008). The relatively high incidence of HIV in Kenya is an important consideration when developing a strategy against cervical cancer. A Kenyan study conducted from 2007 to 2010 found that in order to target vulnerable populations, it is effective to combine cervical cancer screening with HIV testing as a matter of policy. The study further noted that campaigns on awareness on facts about cervical cancer is minimal or non-existent, hence leading to poor responses towards its prevention and management, (Huchko *et al.*, 2011; McKenzie *et al.*, 2011).

2.0.2 Smoking and Contraception

Smoking has been shown to increase the risk of cervical cancer in women even after controlling sexual behavior (12). Smoking may act either directly or through immune- suppression and promotion of effects or other carcinogens (13). In Kenya smoking among women is yet as infrequent, and it is unlikely that it has contributed significantly to the burden of cervical in the country.

The relationship between contraceptive use and cervical cancer is confounded by the difficulty in controlling for sexual behavior. Kenya participated in the large WHO Multicentre study on steroid contraception and neopalsia, which showed a slight.

2.0.3 Socio-economic factors

Worldwide women of low socio-economic status have a greater risk of having cervical cancer. Cervical cancer is often referred to as a disease of poverty and of poor women. A recent study in Mali in West Africa showed that within a population widely infected with HPV, poor social conditions, high parity and poor hygienic conditions were the main cofactors for cervical cancer (Palacio-Mejia et al., 2003). Sub Sahara Africa also has widespread conditions that encourage sub standard living conditions. These include wars, political chaos, internal conflicts, natural disasters, famine and drought. These often lead to large populations being displaced externally and internally for long periods of time. Under this refugee- like conditions, social vices like rapes, prostitution and multiple marriages and cohabitation prevail encouraging the transmission of HPV. War is associated with male sexual promiscuity, which in turn contributes to the development of cervical cancer among sexually monogamous women. In 1996, a case-control study sponsored by Stanford University documented that the Vietnam War had contributed substantially to the problem of cervical cancer in contemporary Vietnam, and the Vietnam/American Cervical Cancer Prevention Project was established as an all-volunteer non profit organization. Publication of data linking war to disease was delayed for 8 years in an attempt to ease the process of reconciliation by offering what most would acknowledge to be a remedy in advance of what some will perceive to be an accusation. (Suba et al., 2006).

High rates of invasive cervical cancer was noted in coastal areas of Coasta Rica and this was attributed to difficulties in having access to treatment. Most countries of Sub Sahara Africa are located within the Tropical Rain Forest with difficult terrain as there are lots of swampy areas and thick and mountainous forests. This makes access to screening, health education and treatment difficult. Poverty and logistical challenges make cervical cancer cases grave especially in developing economies.

2.0.4 Biological factors

Poor nutritional status and infections, e.g. malaria, HIV and TB, are ravaging sub-Saharan Africa and have made many people immuno-compromised. Several studies have demonstrated the association of HIV with HPV. The prevalence of CIN has been estimated to be as high as 20-40% in HIV-positive women (Wright et al 1994). HIV-positive women are more likely to have persistent HPV infections than HIV-negative women. In a study of 2,198 women who attended gynaecological clinics in Abidjan, Côte d'Ivoire, HIV-positive women had a significantly higher prevalence of squamous intraepithelial lesion (SIL) (La Ruche et al., 1998). Temmerman et al (1999) reported a five-fold increased risk of high-grade SIL among 513 HIV-positive women in a family planning clinic in Kenya. Other reports from the region show that women with HIV develop cervical cancer at an earlier age than women who are HIV-negative (Moodley 2001). Gichangi et al (2003) in Kenya found that young women under the age of 35 who had invasive cervical cancer were 2.6 times more likely to be HIV positive than controls of similar age. A recently published study from Tanzania showed that the prevalence of HIV-1 was much higher among the cervical cancer patients (21.0%) than among the controls (11.6%). HIV-1 was a significant risk factor for cancer of the cervix, (Moodley et al., 2006) Sub-Saharan Africa harbours 67% of the world's population of people living with HIV and AIDS (Buga G 1998).

Besides the socio-economic-biological factors, human papillioma virus (HPV) has been isolated in most cases of cervical cancer in all parts of the world. Epidemiologic studies have shown that the association of genital human papilloma virus (HPV) with cervical cancer is strong, independent of

other risk factors, and consistent in several countries. The International Biological Study on Cervical Cancer (IBSCC) Study Group led by Bosch, F. in 1995 reported that HPV DNA was detected in 93% of the tumors, with no significant variation in HPV positivity among countries. HPVs, which are transmitted sexually, as the central etiologic factor in cervical cancer worldwide. The report concluded that the results confirm the role of genital HPVs, which are transmitted sexually, as the central etiologic factor in cervical cancer worldwide (Bosch F *et al.*, 1995).

3.0 Women's vulnerability to cervical cancer

Besides HPV, other factors have made women more vulnerable to cervical cancer. Worldwide women of low socio-economic status have a greater risk of having cervical cancer. Cervical cancer is often referred to as a disease of poverty and of poor women. A recent study in Mali in West Africa showed that within a population widely infected with HPV, poor social conditions, high parity and poor hygienic conditions were the main cofactors for cervical cancer (Palacio-Mejia et al., 2003). Sub Sahara Africa also has widespread conditions that encourage sub standard living conditions. These include wars, political chaos, internal conflicts, natural disasters, famine and drought. These often lead to large populations being displaced externally and internally for long periods of time. Under this refugee- like conditions, social vices like rapes, prostitution and multiple marriages and cohabitation prevail encouraging the transmission of HPV. War is associated with male sexual promiscuity, which in turn contributes to the development of cervical cancer among sexually monogamous women. In 1996, a case-control study sponsored by Stanford University documented that the Vietnam War had contributed substantially to the problem of cervical cancer in contemporary Vietnam, and the Vietnam/American Cervical Cancer Prevention Project was established as an all-volunteer non profit organization. Publication of data linking war to disease was delayed for 8 years in an attempt to ease the process of reconciliation by offering what most would acknowledge to be a remedy in advance of whatsome will perceive to be an accusation. (Suba et al., 2006). High rates of invasive cervical cancer was noted in coastal areas of Coasta Rica and this was attributed to difficulties in having access to treatment. Most countries of Sub Sahara Africa are located within the Tropical Rain Forest with difficult terrain as there are lots of swampy areas and thick and mountainous forests. This makes access to screening, health education and treatment difficult.

Women and girls are particularly vulnerable to sexually transmitted diseases, HIV and cervical cancer included due to a combination of biological factors and gender-based inequalities particularly in cultures that limit women's knowledge about sexually transmitted diseases and their ability to protect themselves and negotiate for safer sex. Violence is an additional significant risk factor to women's sexual and reproductive health and other chronic health problems, (WHO 2009). Lack of access to information and services, social norms and values that undermine their ability to protect themselves is a major hindrance to women's health and cervical cancer prevention, (WHO 2009).

Women's vulnerability may increase during humanitarian crises and emergencies when economic hardships can lead to increased risk of exploitation such as trafficking and increased reproductive health risks related to the exchange of sex for money and other necessities and sexual abuse, (Women and Health WHO 2009).

A combination of social and biological factors make women more vulnerable to HIV/AIDS and other sexually transmitted infections and cervical cancer due to having multiple sexual partners coupled with the non-availability of protection. Because the symptoms tend to be less evident in women than men, and because women overall have more limited access to diagnosis and treatment

services, women's infections are detected late and thus go longer without treatment. This, coupled with women's greater biological vulnerability to complications from untreated infection, result in women suffering far greater morbidity due to sexually transmitted infections which expose them to the risk of cervical cancer infection. Majority of the cases are reported at an advanced stage when cure cannot be guaranteed and thus leading to multiple deaths that could otherwise have been prevented if the cases were detected early enough, (Women and Health WHO 2009).

Human papillomavirus (HPV), the necessary cause of cervical cancer, is endemic in Africa. In a study to investigate the prevalence of and the risk factors for cervical infection with human papillomavirus (HPV) in an inner-city area of Ibadan, Nigeria, Thomas *et al.*,(2004) interviewed and obtained a sample of cervical cells from 932 sexually active women aged 15 years or older. Unlike most populations studies so far, HPV prevalence was high not only among young women but also middle and old age. Single women and illiterate women also showed increased HPV positivity.

Many of the factors that increase both HPV acquisition and promote the oncogenic effect of the virus are also very widespread in Africa (Schmauz *et al* 1989). These include: early marriage, polygamous marriages and high parity. Polygamy is reported to increase the risk of cervical cancer two-fold and the risk increases with increasing number of wives, (Bayo *et al.*, 2002). This is part of the male factor in addition to prostitution that lead to the high prevalence of HPV in Sub Sahara Africa. High parity, which is the norm in some cultures in Africa, is also a recognised, HPV-related co-factor for the development of cervical cancer (Brinton *et al* 1989).

The prevalence of HPV has been shown to be higher in uncircumcised men than in circumcised men. In a study to investigate the association between male circumcision (MC) and high risk human papilloma virus (HR-HPV) prevalence, Auvert and colleagues (2009). So women who have sex with uncircumcised men are at greater risk of being infected with cervical cancer.

(IRIN/PlusNews 2010).

4.0 The strength of radio and television in cervical cancer awareness

The media, especially the radio and television have tremendous power to influence knowledge, attitudes, and awareness of an issue and can thereby influence behaviors and inform health policy. Media-worthy events can create an opportunity for communicating public health messages. Media coverage has been shown to increase public interest in a subject, such as disease risk factors, prevention and management, (Metcalf *et al.*, 2010). The radio and television can play an important role in communicating information about HPV and its link to cervical cancer as well as increasing awareness about the HPV vaccine, with a view to reducing the burden and its severity among vulnerable women, (Kaiser Daily Women's Health Policy, 2007).

According to One TV World Booklet (2012), the television has tremendous strengths that can be harnessed to create awareness on any issue such as politics, government policies, and even cervical cancer. Its intrusive impact, audio-visual characteristic, persuasively uses of sight/sound/motion, maximum reach, ability to target the consumer, and the fact that it can leave a lasting impact in the viewer's mind makes it relevant in creating awareness of on any issues and medium of choice for this study.

The various strengths of radio as well are enormous and hence make a suitable medium of communication in awareness creation and relevant to this study. The radio can target selective audience by station format; it is intrusive and local, it has a wide reach, it is cheap to acquire and hence nearly every household in Kenya has a radio set, it has the call-in ability and listeners can therefore participate in the discussions to get clarification on issues of concern, it has low production cost and can rely on the listener's mood or imagination to pass information, (CCAB 2012).

Given the media's potential influence among the relevant audiences in Kenya in regard to issues such as HIV/AIDS, breast cancer, politics, family planning, it is important to examine how the electronic media is creating awareness about cervical cancer symptoms, mode of infection, prevention and management. As things stand now, news media coverage especially by radio and television on the issues surrounding cervical cancer is still low and some of the information is still riddled with misconceptions, fear culture and stigma, (Calloway *et al*, 2006).

Steele *et al.*, (2005) argues that any incidences on cervical cancer are only reported as news items, just like any news story with no particular aim of creating awareness targeted at any particular audience. Unfortunately the implications of such acts may not have any meaningful impact on the vulnerable women in terms of awareness creation. Issues on vulnerability to cervical cancer infection and sexually transmitted diseases are never brought to the fore in the form of a media campaign strategy as witnessed in other areas such as family planning, HIV/AIDS, malaria and so on. This has not been witnessed in the fight against cervical cancer leading to high prevalence levels and mortality rates witnessed in Kenya, (Kenya Cancer Registry 2009).

There is therefore need for various stakeholders, the government, the UN agencies, women's organization to step up effort and use the strength of the electronic media to create awareness about cervical cancer with a view to reduce its negative socio-economic effects among women and other populations.

5.0 Theoretical framework

Several theories of behavior change are relevant to this paper but will for purposes for peculiar discourses the paper has used the Transtheoretical (Stages of Change) Model by (Prochaska, J., Johnson, S., & Lee, P. (1998).

5.0.1 Transtheoretical (Stages of Change) Model

Transtheoretical (Stages of Change) Model (Prochaska, J., Johnson, S., & Lee, P. (1998). According to this theory, behavior change is a process of six stages: *Precontemplation* is the stage in which people are not intending to make a change in the near future (often defined as the next 6 months) because of one reason or the other. *Contemplation* is the stage where people intend to change (within the next 6 months) as result of being prompted by some stimuli, say awareness creation. People in this stage are aware of the pros of changing but also can identify the cons and hence leading to a certain action. *Preparation* represents the stage where people have a plan of action and intend to take action in the immediate future (within a month) because of being convinced to take action. *Action* is the stage in which people make the behavior change and *maintenance* represents the stage where people work to prevent relapse.

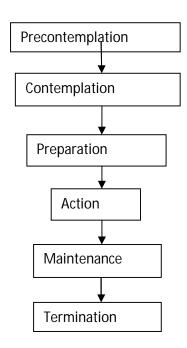


Figure 1: Stages of change

Finally, *termination* represents that stage where individuals have 100 percent efficacy and will maintain their behavior. This stage is the most difficult to maintain, so many people remain a lifetime in maintenance.

It is essential to match behavior change interventions to people's stages. For example, if an individual is in the precontemplation stage it is important to raise their awareness about an issue in order for them to contemplate making a behavior change. Without a planned intervention, people will remain stuck in the early stages due to a lack of motivation to move through the stages. Prochaska, Johnson, and Lee Grizzell, J. (2007, 1/27/2007) suggest a series of activities that have received empirical support, which help individuals progress through the following stages:

- Consciousness-Raising increasing awareness of the causes (providing educational materials, confrontation, media campaigns, feedback, etc.)
- Dramatic Relief producing an emotional experience which is followed by a reduced affect if some action can be taken (personal testimonies, media campaigns, drama)
- Self-reevaluation inviting individuals to make cognitive and emotional assessments of their self image (clarify values, provide healthy models, using imagery).
- Environmental reevaluation assessments of how the presence or absence of a behavior might impact one's social environment (documentaries, personal stories, family interventions).

5.0.1 Application of the theory to the paper

Any theories of behavior aim at achieving certain steps being taken to arrive at a certain desired behavior change. Any steps towards awareness creation must go through the six stages as proposed by the Transtheoretical (Stages of Change) Model. The main assumption of the study is that women

are dying of cervical cancer because of inadequate information or misconceptions about cervical cancer. The electronic media has the role to communicate the right information about cervical cancer which will lead to behavior change. Majority of the targeted women could be at any of the six stages as pointed out in the theory e.g. precontemplation, contemplation, preparation, action, maintenance and termination. In the first stage, the women are not taking any step towards going for screening because of inadequate information, misinformation, fear, stigma, cultural beliefs and so on. So the status quo remains the same.

In the second stage (contemplation), the women are contemplating going for screening within six months or so because awareness on the pros and cons has been created by radio and television. The next stage is preparation whereby the women are getting ready to perform behavior within a very short time as a result of being convinced by radio and television messages about symptoms, prevention, management and control. The next stage is preparation where the women plan to go for screening within a short period, say, one month because proper information has been communicated which has convinced them on the need to go screening and lastly maintenance whereby they will agree to go for routine screening periodically as a result adequate provision of information by radio and television. Lastly is termination whereby the women will reach 100 percent efficacy and will maintain behavior. The theory therefore will enable establish the stages of the women which will contribute to the establishment of the knowledge levels, the effects of the messages on women's behavior towards cervical cancer prevention.

6.0 The power of radio and television in cervical cancer awareness

Radio and television have tremendous power to influence knowledge, attitudes, and awareness of an issue and can thereby influence behaviors and inform health policy. Media-worthy events can create an opportunity for communicating public health messages and media coverage has been shown to increase public interest in a subject, such as awareness on disease presentation, prevention and control, (Metcalf *et al.*, 2010). However, studies have shown that radio and television have not played an important role in communicating information about HPV and its link to cervical cancer as well as increasing awareness about the HPV vaccine and hence the many incidences of cervical cancer being reported and high mortality rate as a result of lack of information or wrong information. Information about and advertisements for the vaccine, as well as stories that touch on the status of HPV vaccination policies, have not been covered adequately in the media—television help reduce the burden of cervical cancer in Kenya, (Kaiser Daily Women's Health Policy, 2007), News and other television programming, and radio. Given the media's potential influence, it is critical that it communicates messages around cervical cancer symptoms, prevention and control.

7.0 Conclusion

Cervical cancer is proving to be more deadly than any other life-threatening diseases the such as HIV/AIDS but there has not been a deliberate effort by the media to give it the attention that it deserves given its serious implications and many more women continue to die every day as a result of the disease. There is need for all national control programs to direct their efforts toward the prevention cervical cancer because its effects are more devastating than any other terminal illnesses. There is need for cervical cancer managerial guidelines for screening programs to be provided, accompanied by appropriate, well sustained awareness campaigns targeted at the vulnerable groups, Hemisphere 1998, Hakana M. 1982).

Screening with the cervical smear plus adequate follow-up therapy can achieve major reductions in both incidence and mortality rates, (Miller AB et al 1990), Report on Workshop on VICC Project on Evaluation of Screening for Cancer (International Journal of Cancer 1990, 46:761-769).

In the National Cervical Cancer Prevention (NCCP) screening programs should be organized to ensure a large target group is screened and that those indiviuals in whom abnormalities are observed receive appropriate diagnosis and therapy in good time and appropriate follow. For Public information may be effected through radio, television, movies and the print media, including pamphlets and posters. Direct personal communications with knowledgeable and respected members of the community, the health care providers and the community leaders, are very important. However, this has not been witnessed in preventive messages, if any, in Kenya despite the fact that cervical cancer is becoming a leading killer among women and its serious negative implications.

The radio and television have tremendous power to change perception, create awareness and lead to positive behavior change among vulnerable groups. There is therefore need to use the electronic media to disseminate messages that are relevant and targeted at the particular audience in order to reduce the incidences of cervical cancer among women in Kenya.

References

- 1. General Assembly of the United Nations, President of the 65th Session. <u>High-Level Meeting</u> on Non-Communicable Diseases 19-20 September 2011.
- 2. International Agency for Research on Cancer and Cancer Research UK (2012). World cancer factsheet. Cancer Research UK: London.
- 3. World Health Organization (WHO) Comprehensive cervical cancer control: A guide to essential practice. 2006.
- 4. American Cancer Society. (2008). *Cancer Facts & Figures 2008*. Atlanta, GA: American cancer society.
- 5. American College of Obstetricians and Gynecologists. Guidelines for women's health care: a resource manual. (2009). Washington, DC: ACOG

6.

- 7. Amstrong, E. P. (2010). Prophylaxis of Cervical Cancer and Related Cervical Types: A Review of the Cost-effectiveness of Vaccination Against Oncogenetic HPV Types. *A journal of Managed Care Pharmacy*, 217-230.
- 8. Anaeto, S., Onabanjo, O., and Osifeso, J. (2008). *Models and theories of communication*. Lagos African Renaissance Books.
- 9. Anorlu, R. I., Orakwue, C. O., & Oyeneyin, L. (2004). Late presentation of cervical cancer in Lagos:what is responsible? *European Journal of Gynaecology Oncology*, 729-732.
- 10. Anorlu, R. I., Rabiu, K. A., & Abudu, O. O. (2007). Cervical cancer screening practices among general practitioners in Lagos, Nigeria. *Journal of Obstetrics and Gynaecology*, 181-184.
- 11. Aronowitz, G. R. (2010). A vaccine against cancer and a drug to reduce risk. In three shots at prevention: The HPV vaccine and the politics of medicine's simple solution (1st Edition ed.). (K. Wailoo, J. Livingstone, S. Epstein, & B. R. Aronowitz, Eds.) USA: John Hopkins University press. Atara, N. (2012). Cervical Cancer in Sub Sahara Africa, Topics on Cervical Cancer With an Advocacy for Prevention. (R. Rajamanickam, Ed.)

12. Atran, S., Medin, D. L., & Ross, N. O. (2005). The cultural mind: Environmental decision making and cultural modeling within and across populations. *Psychological Review*, 744-776

- 13. Ayayi, I. O., & Adewole, I. F. (1998). Knowledge and Attitude of Outpatients' Attendants in Nigeria cervical cancer. *Central African Journal of medicine*, 41-44.
 - 14. Kenya Departmental Committee on Health . (2011). *Policy Brief on the Situational Analysis of Cancer in Kenya*. Retrieved December 21, 2014, from Kenya parliament: http://www.parliament.go.ke/index.php
 - 15. Kerr, D. (2009). *Kerr, David* (2009). "Towards Prevention of Cervical Cancer in Africa —. Oxford: St. Catherine college.
 - 16. Kothari, C. R. (2004). *Research Methodology*. New Delhi.: New Age International Ltd. Publishers.
 - 17. Folarin, B. (1998). Theories of mass communication. Ibadan, Nigeria: Sceptre Publishing
 - 18. McCombs, M. E., and Shaw, D. L. (1972). The agenda-setting function of mass media. *Public Opinion Quarterly*, *36 (Summer)*, 176-187.
 - 19. Medical News Today. (2005, September 5). "Kenya's Pharmacy And Poison Board Approves Marketing GlaxoSmithKline's HPV Vaccine Cervarix. Retrieved December 21, 2014, from Medical news today: http://www.medicalnewstoday.com/releases/81239.php
 - 20. Mitchell, S., Gina, O., Malcolm, S., Musa, S., Christine, B., & Deborah, M. (2011). "Assessing women's willingness to collect their own cervical samples for HPV testing as part of the ASPIRE cervical cancer screening project in Uganda.". *International Journal of Gynecology and Obstetrics*, 243-255.
 - 21. Parkin, D. M., Ferlay, J., & Hamdi-Cherif, M. (2003). *Cancer in Africa: Epidemiology and Prevention*. Lyon: IARC Press.
- 22. PATH . (2004). Western Kenya Cervical Cancer Prevention Project (WKCCPP). Seattle. Nairobi: WKCCPP.
- 23. University of Nairobi, University of Antwerp. (1994). *Human Papilloma Virus and Cervical Cancer, Epidemiology, Prevention and Control.* University of Nairobi; University of Antwerp. Nairobi: University of Nairobi
- 24. WHO/ICO. (2010). Information Centre on HPV and Cervical Cancer (HPV information center): Human Pappillomavirus and related cancers in world. Nairobi: WHO.
- 25. World Health Organization . (2010). *Cytology screening*. Retrieved June 12, 2014, from WHO: http://www.who.int/
- 26. World Health Organization. (2010). *Human Papillomavirus and Related Cancers*. Retrieved August 11, 2014, from WHO: http://apps.who.int/hpvcentre/statistics/dynamic/ico/country_pdf/KEN.pdf