

Vol. 14 No. 27: 47

A Re-Appraisal of Media Campaign for **Eradication of Ebola Virus in Nigeria**

Essien CF* and Yusuf A

Department of Information and Media Technology, Federal University of Technology, Minna, Nigeria

Abstract

Campaigns through the mass media serve as reliable means of inducing people to act in certain ways. Thus, government and other relevant agencies often engage in various media campaigns geared towards protecting and improving public health and general wellbeing of the people. As a matter of fact, such campaigns, due to a variety of factors, often record success or failure. While most of these campaigns reach the populace via a combination of two or more channels, the focus of the study is on television, radio, traditional media and newspaper as channels of disseminating campaign messages. Having closely studied past public health campaigns in Nigeria, the researchers explored strategies that can be implemented for optimal utilization of the powers of media in the production and effective dissemination of information for public health campaigns to curb the menace of Ebola Virus and other tropical diseases in Nigeria.

Keywords: Re-appraisal; Media campaign; Eradication; Ebola virus; Nigeria

*Corresponding author: Essien CF

colemanessien@futminna.edu.ng

Department of Information and Media Technology, Federal University of Technology, Minna, Nigeria.

Citation: Essien CF, Yusuf A. A Re-Appraisal of Media Campaign for Eradication of Ebola Virus in Nigeria. Global Media Journal. 2016, 14:27.

Received: August 01, 2016; Accepted: November 01, 2016; Published: November 10, 2016

Introduction

The place of good health in the overall development of a nation has been given priority in view of the recent health threats posed by the Ebola Virus Disease (EVD) and other tropical diseases. In a bid to tackle health concerns, governments worldwide have resolved to the use of communication driven campaigns to reach out to the teeming populace with the aim of influencing their behaviour towards positive health practices. In 2015, the fear of the dreaded Ebola Virus in Nigeria threw goose pimples in the body of the citizens to the extent that every available health information that was meant to aid its prevention was taken hook, line and sinker, not minding the side effects of the overall workings on the human body. Unlike the HIV virus, the rate of transmission as well as the mode of getting infected with the Ebola Virus received numerous strategic health campaign approaches aimed at making the average citizen extremely cautious of its infection. The rapid dissemination of this public health information on the prevention of the Ebola virus and the immediacy of its demand made some individuals took certain unverified precautions without proper public health education through the media. This no doubt, caused more harm than solve the problem.

The proper channel of campaign communication has always been through the mass media and other interpersonal channels or mass mediated channels. The mass media have however gained popularity because of their ability to reach a vast majority of people within a short time [1]. This had made government and other relevant agencies invest huge amount on public health campaigns through the media. The aim of public health campaigns should be to induce the required behavioural change in the target group of people. In view of this, Dejong [2] posits:

Television, radio and print advertising can entice people to buy a wide range of products and services and television entertainment programs and movies exert enormous influence over our ideas, values and behaviour. Therefore, according to conventional wisdom, it should be possible to use mass communication to get people to act on behalf of their own health and well-being or to "do right" by important social change...

Public health campaigns shown regularly through the media include those by various agencies such as the Federal and State Ministries of Health, National Agency for Food and Drug Administration and Control (NAFDAC), National Agency for the Control of AIDS and States Action Committees on AIDS, National Orientation Agency as well as other non-governmental organisations in Nigeria. These campaigns take the form of jingles/advertisements, Public Service Announcements and Education Entertainment (Edutainments) like dramas or soap operas. It is also important to note that these campaigns make use of additional channels of communication such as traditional media etc.

Outbreak of Ebola Virus Disease (EVD) in Nigeria

The Ebola virus disease was first declared in Nigeria on 24th July, 2014 by the Federal Ministry of Health following the arrival of a male passenger from Liberia (Patrick Sawyer) whose condition degenerated in flight and necessitated evacuation to a hospital on arrival in Lagos Nigeria. Laboratory tests subsequently confirmed that the traveller from Liberia had the Ebola virus disease [3].

Meanwhile, as at September 23, 2014 the Federal Ministry of Health had reported a total of 19 confirmed Ebola cases in Nigeria including the imported case from Liberia. Of the 19 cases, 15 were from Lagos while four cases were reported in Rivers State. It was also reported that since the first case, a total of 891 contacts had been listed (i.e. 365 in Lagos and 526 in Rivers State). The number of contacts that had completed the 21 days monitoring and were discharged stood at 847 (i.e. 349 in Lagos and 498 in Rivers); the remaining 24 contacts under observation as at September, 2014 were (0 in Lagos and 24 in Rivers). It was reported that since the epidemic began, there were seven deaths (five in Lagos and two in Rivers), Eleven survivors were discharged in Lagos and one in Rivers with no confirmed case currently in isolation. As a matter of fact, there was no more confirmed case in Nigeria in the last 18 days and the remaining contacts being followed up completed the 21 days by 24 September, 2014.

The Ebola virus disease response in Nigeria took a leaf from the good practices implemented in the Polio programme by the government establishing an Emergency Operation Centre (EOC) using an Incident Management System (IMS) to coordinate the response and consolidate decision making. The EOC/IMS structure served as the overall implementation arm of the response for the Ministry of Health and the Nigerian Centre for Disease Control (NCDC). All partners, donors and response teams worked through the EOC structure. Another practice adopted from the Polio programme is the use of Dashboard to measure performance and Smartphone for the contract tracing as well as House-to-House teams.

The lessons from the response to the eradication of the Ebola virus in Nigeria was not more of a scientific prescription, but the speed at which a significant segment of the population caught the bug and to a reasonable extent acted in accordance to the prescribed antidote [4]. This indicates media strength in the social-media-age as revealed in the surveillance function of the mass media with regard to disease control.

Review of Related Literatures

Issues of public health have found its way in the domain of public discourse especially in the academic environment due to the ravaging negative effects of the recent Ebola Virus Disease (EVD) in Nigeria. Sherpa (2014) noted that the EVD which was formerly known as the Ebola haemorrhage fever is fatal for humans and non-human primates.

According to WHO (2014), the virus is believed to have originated from contact with infected animals (i.e. Chimpanzees, Gorillas, Fruit Bats, Monkeys, Forest Antelopes and Porcupines) whether

dead or alive and is transferable through human-to-human transfusion occasioned by direct contact with blood, body-fluid, objects that have been contaminated with infected fluids.

McQuail [5] submits that:

In appraising mass media influence, it is important to establish that the mass media do have important consequences for individuals, for institutions and for society and culture; but that we cannot trace precisely the causal connections and make reliable predictions...

Meanwhile, the focus should be to compare media reality and social reality in certain situations since the diatribe of influence stream from source of media content, consumers of media contents to shape of media contents [6]. Hence, issues that will define the influence of the media could arise from the source, the consumer predisposition and the nature of the message itself. For the EVD in Nigeria, the extent of media attention could be attributable to the palpable risk it creates for the larger public of the media stakeholders that are not immune from it than for public-concerned-driven reasons. The media is radically concerned with issues that portend danger to the greater number of the populace. On another platform, Wright highlights three indicators to defining the influence of mass media on sexual behaviour [7]. These indicators regarded as multi-components are: Acquisition, Activation and Application of the media content.

However, exposure to the mediated content on sex was seen as negative suggesting that influence could be positive and negative when certain issues are trusted forth in the media-sphere. According to Keating, et al. [8]:

Evaluation findings of a VISION project mass media campaign in Bauchi, Enugu and Oyo States that focused on reproductive health and HIV/AIDS confirmed the media's effectiveness in increasing awareness about HIV and AIDS.

In another related public health issue, United Nations Population Fund (2002) found that:

While previous programmes on HIV/AIDS have failed, "I Need to Know" a 30-minute 52 episode television series on adolescent health issues is successful due to its detailed content.

There is a general believe among scholars that a lot of improvement need to be made in public health campaigns. Udoakah and lwokwagh [9] describe several communication strategies such as the use of radio and television jingles, drama, enlightenment programmes and multi-media materials as not effective enough and leaving too much to be desired in the sphere of eradicating public health diseases.

Raji [10] in his study also found that texts, to a large extent, lack potency of communicative efficiency. He further submits that communicating through language should go beyond mere information exchange; rather attempts should be made to anticipate the background, mood and psyche of the decoder(s), that is, the recipient of the message.

Nature of Health Campaigns in Nigeria

Communication campaigns

The nature of the Ebola virus disease gave rise to several health campaigns that was aimed at informing, educating and enlightening the general public on the right attitude towards preventing and avoiding the spread of the virus. Communication campaign, however, was one of the approaches adopted to stem the tide of the spread of the Ebola virus. According to Rogers and Storey [11]:

A communication campaign can be described as an organised set of communication activities geared towards generating specific effects in a relatively large number of people within a prescribed period of time.

In view of this, such campaign can take the form of public information campaign meant to benefit the public on health or safety issues; election campaigns for political parties or candidates; advocacy campaigns for a particular cause or campaigns meant for commercial advertising.

In dealing with disease control, World Health Organization [12] outlined communication actions for outbreak readiness where essential knowledge is disseminated before an outbreak; actions needed in terms of communications during outbreaks; tools and templates for data collection and analysis and other essential resources and fact sheet. The very essence of these outlined communication strategies were to ensure successful communication for behaviour impact. This, according to WHO is a planned framework and implementation method for communication based on behavioural models and communication theories and practices to achieve behavioural results in public health programme. This kind of communication was expected to focus on the risky aspects of outbreaks, to be proactive, definite towards health education, health promotion and health literacy. Hence, the levels of communication expected to drive the dynamics towards behavioural change include: interpersonal, intrapersonal, group, organisational and social communications with the media agents providing relevance for all level through the surveillance function. Information was expected to align with these principles in design and execution when it deals with diseases.

It is a general notion that campaigns can be traced from a collective source like the government or any other organisation; they are designed to meet certain socially approved objectives transmitted through several channels and consist of many messages. In his description of the key features of the general campaign process, McQuail posits:

The degree to which the target audience of campaigns is actually reached should be considered, while other factors such as filter conditions (attention, perception and motivation) and information processing also determine the public reached and the campaign's success. Other aspects of the process include the kind of effects (interests campaigns seek to serve) and evaluation (assessment) of the campaign effort.

There is need for a guideline that can be used to stimulate ideas, manage the process of campaign development and implementation as well as evaluate campaign results which involves: launching a strategic planning process, selecting a strategic objective (of which media campaign is one part), selecting a target audience, developing a staged approach, defining a key message source, selecting a mix of media channels, maximizing media exposure conducting formative research with

target audience and conducting process and outcome evaluation. The above guidelines provides a variety to deliberate and conscious as well as result-oriented steps which when adopted gives the desired result of public enlightenment and education on ways to prevent or avoid the spread of any epidemic like the Ebola virus disease in a country.

Consistent with Dejong's guideline, Salem, Bernstein and Sullivan [13] provided a 5-step check list that can be used for behaviour change communication program. This situates the programmes as beginning with an analysis, which is done through formative at stake; the audience and other potential participants. It is important to note however, that the results from this analysis can be used for the strategic design and campaign (which has to do with developing the programme objective and deciding on how to achieve it). After this is done, development of messages and materials to be used takes place and then a pilot study is conducted on the audience with a view to revising the messages and materials based on the findings of the study. With all preparation complete, actual development and implementation of the programme plan, monitoring of such and finally, an evaluation of programme outcomes and impacts take place. However, it would be observed from the foregoing that communication campaigns are multi-staged and carefully planned programmes carried out to achieve stated objectives of influencing the recipients towards holding certain views or taking certain actions.

Television and public health campaigns

Studies have shown that public health campaigns do not rely on Television alone but combines with other channels to disseminate health-related information.

According to Abone [14]:

Television has the power of imprinting messages on the mind and as such it performs an important function in dealing with social change especially attitudinal change that could bring about healthy living.

In view of the above submission, and relating this to the campaign against the spread of Ebola virus disease, television has the potential to disseminate health-related or any type of information such that the recipient of the information will be influenced into displaying the desired attitudinal or behavioural change prescribed or contained in the message received. However, plausible as television could be as a campaign medium for public health communication, not all public health campaigns necessarily need to be disseminated through the television. Also, the use of television does not imply automatic success. This means that not all television campaigns are successful and not even all the successful ones are absolutely effective.

Studies have also shown that the ineffectiveness of some campaigns are due to various reasons. According to Kim [15]:

Analyzing two public service announcements, promoting breastfeeding in the United States, the campaign conveys "guilt-ridden" rhetorical message capable of misinforming the target audience while it also fails to promote breast-feeding thus making the campaign ineffective.

Also, Trafton [16] identified another campaign "KNOW HIV/AIDS" (which has television as one of its message channels) as failing to change the behaviour and increase the knowledge of many deaf and hard of hearing. This is due to the fact that the campaign message did not cater adequately for this category of recipient. According to Trafton:

Changing a person's behaviour goes beyond simply disseminating information. Thus basing a campaign solely on this premise would render it ineffective.

Need for a strategic health campaign

The nature of the Ebola virus disease in Nigeria necessitated the need for a systematic health communication strategy with a view to re-orientating and conscientising them so that they could move with the tide of time and jettison their counter-productive age-long beliefs.

It is important to note that Nigerians need to be guided to make decisions that would ensure their healthy living as individuals and members of a society. Communication at all levels (personal, family, community and mass media), therefore plays a major role in that decision-making [17]. Essentially, communication is a tested and trusted process of enhancing changing in knowledge; of safe contraceptives; fertility control, new ideas and new health behaviour, etc. Communication can be spontaneous or deliberate. Planned communication can initiate, accelerate or reinforce change [18]. Also, communication can convey the advantages and disadvantages of smaller families, for example. It can inform women of their greater role in reproductive and sexual decision. Communication can help to legitimise discussion on family planning and present it as a positive behaviour with rewarding consequences. From the foregoing, therefore, the role of communication especially through the mass media cannot be over-emphasized. The major reason that broadcast mass media were not considered important in the early 1970s was that they were not yet accessible in most developing countries. There has been a dramatic change in the last 25 years, in the area of global telecommunication revolution [19,20].

According to Piotrow et al, systematic communication strategy must make provision for the following to be effective:

- (i) An assessment of the communication needs of the society.
- $(ii) \, \mbox{\it Relevant} \, training, communication skills and management.$
- (iii) Specific seminar, workshop, symposia and conferences.
- (iv) Technical assistance to communication and community mobilization projects.
- (v) Specific products like posters, videos, brochures, etc.
- (vi) Development of national communication strategies and campaigns.

Furthermore, a strategic health communication programme must contain the following basic elements from the studies of Chaffee; Piotrow et al:

(a) A scientific or empirical approach that builds on conceptual models in behavioural sciences, persuasion theory, social learning and social marketing to achieve realistic objectives.

- (b) Recognition that behavioural change is as much a societal process as it it an individual decision-making process and to identify and evaluate changes at the levels of the individual, couple, family, village and nation.
- (c) Use of mass media and multi-media channels as well as new horizons in mass media and electronic communication like E-mail and the internet to increase awareness, influence community norms and to provide specific information, legitimisation and cues to action for individual behaviour.
- (d) Emphasis on audience involvement and participation throughout the project planning, implementation and evaluation process.
- (e) Appreciation of the crucial role of entertainment, through mass media and at community level to capture the attention, interest and emotion of the audience.
- (f) Increase focus on sustainability for communication activities through sharing costs with other donors and through institution building and skills development.

Evaluation of Media Campaigns for the Eradication of Ebola Virus Disease in Nigeria

Behaviour change communication and mass media

The aim of every media health campaign is to engender certain behavioural change that would aid the prevention of the spread of such health epidemic. According to Family Health International (2005): Behaviour Change Communication is:

An interactive process with communities (as integrated with an overall program) to develop messages and approaches using a variety of communication channels to develop positive behaviour; promote and sustain individual, community and societal behaviour change and maintain appropriate behaviours.

In the context of eradicating the spread of the Ebola virus disease, Behavioural Change Communication (BCC) entails the use of communication approaches and tools to foster positive change in behaviour aimed at engendering certain behavioural practices that will limit the spread of Ebola virus disease as well as improve knowledge and attitudes about the scourge and its infections. Behavioural Change Communication (BCC) also aims at empowering individuals and communities to make informed choices and decisions about their health and well-being and to act on them. Behaviour change approaches recognize that presenting facts alone does not ensure behaviour change and that interventions are, thus, designed to accommodate the stage of behaviour adoption by an individual or group and to cultivate the skills needed to enable and sustain change [21]. Behavioural Change Communication (BCC) must go beyond an informational or purely cognitive approach to one that combines both informational and emotional appeals to be able to promote the eradication of the spread of Ebola virus and other diseases in Nigeria.

In this regard, the following elements were identified as being crucial to the success of eradicating the spread of the Ebola virus disease in Nigeria and other parts of Africa:

- (i) The rational element, based on knowledge: People need to know the basic facts about how the Ebola virus disease can be spread from one person to another.
- (ii) The emotional element. Based on the intensity of attitudes or feelings: Individual need to feel an intense and personal vulnerability to the virus in order to develop an emotional commitment to the behaviour needed to avoid it.
- (iii) The practical element, based on personal skills in the new behaviour: People need to be competent in practising the new behaviour and be confident in their ability to do so. They need a sense of self-efficacy to adopt new health protective behaviours.
- (iv) The Interpersonal element, or social networks: People need to associate with and be supported by their significant others (such as family members and peer-groups) whose knowledge, emotions and skills can reinforce healthy changes.
- (v) The structural element or the social, economic, legal and technological context in which behaviour takes place: People need to have access to necessary supplies and services (such as hand-gloves and hand sanitizers as well as counselling and testing facilities) and to live in an environment where safer behaviour are accepted and promoted while risky behaviours are discouraged.

Based on numerous efforts aimed at eradicating the spread of the Ebola virus disease in most developing countries of the world, the US Centres for Disease Control and Prevention (CDCP) has identified best practices in mounting innovative behaviour change interventions. According to the US CDCP, successful interventions tend to:

- (a) Be personalized: Individually targeted action works best and in the case of successful large-scale public health projects, the public messages are re-enforced interpersonally and in concert with other services and sectors.
- (b) Be emotionally compelling: Successful intervention programmes go beyond simply providing information to also creating an emotional stake that motivates individuals and people to act positively.
- (c) Make extensive use of role models: It is a generally held belief that role models motivate individuals to change their behaviours by providing concrete examples of behaviour that can be emulated, increasing their confidence in their ability to change their behaviours, persuading them of the positive benefits of change and showing them how to change.
- (d) Demonstrate sensitivity to social and cultural norms and expectations: To make sense and be useful to target populations, information must be easily integrated into the target audience's social expectations, norms and values, as well as their political and economic circumstances. The information must also be applicable to their daily lives.
- (e) Recognize the environment's unique impediments and facilitating factors: Successful Behavioural Change Communication (BCC) activities recognize the environmental variables that can impede or facilitate the

desired behaviour change. The above submission gives credence to that fact that BCC is more of participatory than the "teacher-student" syndrome of normal school setting. The mass media have been seen as a veritable tool in engendering BCC in eradicating the spread of the Ebola virus disease in Nigeria.

The media habits of Nigerians are such that a good proportion can be reached through well packaged mass media programs, particularly radio programs. The success recorded with the use of mass media techniques in family planning in Nigeria [22-24] lends credence for their use in eradicating the spread of the Ebola virus disease in Nigeria.

Summary

Educating and enlightening the public about Ebola virus disease (its transmission and prevention) was a critical part of the efforts to contain the outbreak and spread of the virus in Nigeria. The mass media was in the fore-front of this public enlightenment and sensitization approach and a variety of strategies were adopted between July and September, 2014 while the scourge lasted. The formal declaration by the World Health Organization (WHO) towards the end of 2014 that Nigeria is free of Ebola virus disease can be traced to the combined efforts of the mass media and other civil society organizations.

The approach the media gave to public enlightenment and education on the eradication of the spread of Ebola virus disease was quite commendable and that such approach should continue even after the formal declaration by World Health Organisation (WHO) that Nigeria is an Ebola-free nation; to avert further outbreak because the other neighbouring African countries like Liberia, Sierra-Leone and Guinea still experience some Skirmishes of the virus presence. The role of the mass media in using Behavioural Change Communication (BCC) and other techniques paid off in the fight against the spread of Ebola virus disease in Nigeria.

Conclusion

One cannot under-estimate the potency of communication campaigns aimed at engendering behavioural change in individual members of the society towards preventing the spread of Ebola virus disease in Nigeria. A synergy of entertainment and education in public health campaigns suffices to impact positive attitude in individuals towards an expected health behaviour, which was targeted at eliminating the spread of EVD in Nigeria. The readiness of every nation (from the experience in Nigeria) to manage effectively the importation of a particular disease will go a long way in ensuring its eradication using mass media strategic health campaigns that aim at influencing positive health behaviour in individuals in the society.

Recommendations

In view of the role of the mass media in the campaign against the spread of the Ebola virus disease in Nigeria, the following recommendations are suggested:

1. The general willingness of individual members of a given society to adopt multiple methods in regard to disease

Vol. 14 No. 27: 47

- prevention and control should be encouraged by the government.
- Personal hygiene should be a daily approach to life not just because of an impending disease spread but as a normal approach to healthy living. For examples, the use of hand sanitizers and other germ control mechanism should be encouraged.
- 3. Information on disease control and prevention should be strategically designed and not left at the mercy of citizen journalists or purveyor of user generated content.
- 4. In view of residents in rural areas, information on disease prevention and control should be disseminated with the

- slightest notification of such disease in other land or likely occurrence of such outbreak within the country.
- 5. Mass media messages on disease prevention and control should direct specific actions at a time that the citizens should adapt with and subsequent messages to evaluate the level of compliance.
- 6. Religious and other civil society groups should be integrated into the process of message design for the eradication of the spread of the EVD in Nigeria.

Models should also be effectively used in mass media health campaigns to give credence to the anticipated behaviour change which will help stop the spread of the EVD in Nigeria.

Vol. 14 No. 27: 47

References

- 1 Omoloso AI (2009) Lessons and implications of public health television campaigns: A Review. Journal of Communication and Media Research 1: 183-192.
- 2 Dejong W (2002) The role of mass media campaign in reducing highrisk drinking among college students. Journal of Studies on Alcohol 14: 182-192.
- 3 UNICEF (2014) Nigeria Ebola Humanitarian situation report.
- 4 Obukodata OP, Abuah FA (2014) Media surveillance function within the context of the Ebola outbreak in Nigeria: Influences and perceptual frames. International Journal of Scientific Research and Innovative Technology 1: 53-66.
- 5 McQuail (2005) McQuail's Mass Communication Theory (5thedn) London: Sage Publications.
- 6 Shoemaker PJ, Reese SD (1996) Mediating the message: Theories of influence on mass media content (2ndedn) NY: Longman Pub.
- 7 Wright PJ (2011) Mass media effects on youth sexual behaviour: Addressing the claim for causality. In: Salmon CT (ed.) Communication Yearbook 35: 343-385.
- 8 Keating M, Meekers D, Adewuyi A (2006) Assessing effects of a media campaign on HIV/AIDS awareness and prevention in Nigeria: Results from VISION project.
- 9 Udoakah N, Iwokwagh S (2008) Communication and HIV/AIDS prevention among adolescents in Benue State. The Nigerian Journal of Communication 6: 44-58.
- 10 Raji SM (2008) Public awareness and sensitization campaign on HIV/ AIDS in Nigeria.
- 11 Jeffres LW, Perloff RM (1997) Mass media effects. Illinois: Waveland Press.
- 12 WHO (2014) Ebola virus disease factsheets.
- 13 Salem RM, Bernstein J, Sullivan TM (2008) Tools for behaviour change communication.

- 14 Abone C (2008) Mass media: Effective instrument for promoting health programmes in Africa. In: Nwosu IE, Soola OE, Nwodu LC (eds.) Communication for health and sustainable development in Nigeria. Enugu: Rhysc Kerex Publishers.
- 15 Kim E (2006) Television campaign strategies ineffective in promoting breastfeeding due to failing to employ social and behavioural science principles.
- 16 Trafton W (2006) Reinventing HIV/AIDS public health campaigns for the deaf community: Addressing the role of barriers and stigmatization.
- 17 Adejimola AS, Ayenigbara GO, Orimogunje T (2010) Language and health communication strategies towards effective public health communication programmes in Nigeria. Journal of Media and Communication Studies 2: 111-117.
- 18 Winslow CEA (1923) The evolution and significance of the modern public health campaign, Boulder: West view Press.
- 19 Kincaid DL (1988) The convergence theory of communication: Its implications for international communication. In: Kim YY (ed.) Theoretical perspectives on International Communication. International and Intercultural Annual 8. Beverly Hills, CA: Sage.
- 20 Piotrow PT, Kincaid DL, Rimon JG, Rinehart W (1997) Health communication. Westport: Praeger Publisher.
- 21 Jimoh F (2010) The roles of Behaviour Change Communication and Mass Media. AIDS in Nigeria.
- 22 Ogundimu E (1990) Nigeria: Problems in communicating population control. Working paper No 33 Bloomington, Indiana: Population Institute for Research and Training, Indiana University.
- 23 Ramon P, Kincaid W, Convisser H (1990) Mass media family planning promotion in three Nigerian cities. Studies on Family Planning pp: 265-274.
- 24 Bankole A (1994) The role of mass media in family planning promotion in Nigeria. DHS working paper No 11 Calverton, Maryland: Macro International Inc.