



INFLUENCE OF MASS MEDIA CAMPAIGNS IN CONTROLLING WATER POLLUTION IN OVIA NORTH EAST LOCAL GOVERNMENT AREA OF EDO STATE

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Abstract

This study examined the influence of mass media campaigns in controlling water pollution in Ovia North East Local Government Area of Edo State. The study also employed survey research method, utilizing questionnaire as the instrument for data collection. Findings show that: (i) relevant government agencies should sponsor the mass media campaigns more and encourage the presenters. (ii) More programmes of developmental benefit should be aired on private, State and National television and Radio. (iii) More platforms should be created for the awareness of the residents of this Local Government Area of water pollution (iv) There should be press freedom, not just as a law but as a practice, to allow media practitioners to effectively carryout their duties without fear or inference from anybody. (v) More of audience enlightenment programmes such as “Man Around Town” to inform them of the dangers associated with consumption of polluted water (vi) More specialized personnel should be employed to anchor such programmes (vii) Medical personnels should be encouraged to participate in mass media programmes on the control of water pollution and some preventive measures to avoid diseases outbreaks associated with consumption of polluted water. (viii) The audience of “Man Around Town” should be educated so as to make meaningful contributions since the programme is a phone-in-programme in which the audience can call and lay their complains, ask questions and make contributions.

Keywords: programme, water pollution, mass media, ovia north east

Introduction

Nigeria has abundant water resources covering an enormity and diverse Land, though they are unevenly distributed in the country (WHO /UNEP, 1997). The space occupied by inland water bodies in Nigeria is estimated at 900km² (Ekiya &Zejiiao, 2010) representing 0.1% of the mass while coastal estuaries and mangrove especially the Niger Delta.

The water bodies in the country are used purposely for fishing, transportation, mining, irrigation, recreation, industrial and domestic purposes as well as electric generation. The contamination of ground water, rivers, lakes wetland, estuaries, and oceans can threaten the health of human and aquatic life, because water is life without pollution, but death when it is polluted. Sources of water pollution has been very damaging to aquatic ecosystem pollution the generally divided into two categories the first point sources pollution, and even humans and may consist of agricultural, urban, and town in which contaminants are discharged from of discrete location.

Water is a colourless, transparent, odourless liquid that forms the seas, lakes, rivers, and rain and is the basis of the fluids of living organisms. Water is one of the most vital natural resources on this planet earth and has been around for a very long time. No one can live without water, and if that water is contaminated, human beings can not survive it. Water is a key component of the environment which its quality must be maintained and free from pollution.

Water pollution is the contamination of water sources by substances which make the water unusable for cooking, drinking, bathing, swimming and other activities. There are many water pollutants which include human excreta, animal dungs, chemicals, industrial wastes, trash, bacteria and parasites. These pollutants make their way to water. Water pollution can also be regarded as the contamination of water bodies like rivers, oceans, lakes, seas, streams, ponds, wells, and even factory produced water if not properly handled. Water pollution occurs when pollutants are discharged directly or indirectly into the water bodies without adequate treatment to remove such compounds. The World Health Organisation (WHO) says that polluted water is water whose composition has been changed to the extent that it is unusable (Ijaaz Rehman). Human beings, animals, plants and other living organisms are usually affected by polluted water.

There are many causes of water pollution in Ovia North East Local Government Area. These may be from household waste, animal waste to industrial waste. The discharge of wastewater from industries has led to a decline in potable water resource (Mogborukor 2012). Now efforts are being made by Nigerian Government to improve the environmental condition of the country especially to control the industrial pollution (Ebiare&Zejiào 2010). Water pollution occurs either by natural processes such as weathering, decomposition of plants and animals remains or anthropogenic activities such as untreated wastewater discharge from agriculture, industries etc.

In this study, we are concern with industries and industrial sites across Ovia North East LGA majorly contribute to water pollution. These industries include:

Industrial Waste: The discharge of wastewater from industries has led to a decline in potable water resource (Mogborukor 2012). Now efforts are being made by Nigerian Government to improve the environmental condition of the country especially to control the industrial pollution (Ebiare&Zejiào 2010). Water pollution occurs either by natural processes such as weathering, decomposition of plants and animals remains or anthropogenic activities such as untreated wastewater discharge from agriculture, industries etc.

In this study, we are concern with industries and industrial sites across Ovia North East LGA majorly contribute to water pollution. These industries include:

(a) Sawmills which are industries where timbers are being sawed into planks for the purpose of building of houses, schools, shops, tables, chairs, etc. The waste product of the sawmill are carried by flood after rainfall, to rivers, streams, etc. and thereby pollute them.

(b) Palm Oil Mills where palm oil is produced in a large quantity for buyers to buy and take to Lagos or other cities in the country. (c) Palm Kernel Cracking Mills which crack palm kernels with cracking engines and thereby separating the palm kernel seeds from their shells. (d) Palm Kernel Oil (PKO) Mills are other types of industries found in Ovia North East Local Government Area where cracked palm kernels are crushed by palm kernel crushing and separating machine and the oil from the kernel is extracted by palm kernel oil extracting machine, after which the oil is being filtered by oil filter machine thereby separating the palm kernel oil (PKO) from palm kernel cake (PKC). Other causes of water pollution in Ovia North East Local Government Area include: Cassava processing industries (Garri factories), Poultry droppings, Improper refuse disposal by household cleaners, Detergents from washed clothes and cars, Fertilizers, Improper disposal of oil paint, engine oil or chemicals, Insecticides, Fungicides, Poorly maintained septic systems, Cattle dungs and Carcasses of dead animals.

Campaigns on controlling water pollution can also be seen as health communication which is defined by the National Cancer Institute (2010), as the study of the use of communication strategies to inform and influence individual and community decision that enhance health (Odoemalam, 2020). It is the art and technique of informing, influencing and motivating individual, institutional and public audiences about important health issue (Costello, 1997), (Odoemalam, 2020), hence this study deals with the influence of mass media campaigns in controlling water pollution which is one of the avenues to disease outbreak.

Mass media refers to a diverse array of media that reach a large audience via mass communication. It is any form of media used in communication to large audiences. It is essential in passing information and incorporates a large audience. Mass media reach large audiences through written, televised or spoken channels. Mass media campaigns influence is the actual force exerted by a mass media message, resulting in either a change or reinforcement in audience or individual beliefs or way of life (Iheanacho et al 2021). The most common platforms for mass media campaign are newspapers, magazines, television, radio and the internet. Though the effect of mass media messages on its audience depend on the audience demographics and psychological characteristics, but the influence of mass

media campaigns in controlling water pollution in Ovia North East Local Government Area is expected to yield a positive result, since is dealing with life and its wellbeing. Some of these common platforms for mass media campaigns are further explained thus: Newspaper is a printed publication, usually issued daily or weekly, consisting news, articles, advertisements and correspondence. It is a printed publication that provides a wide range of news articles from business, sports, entertainment and local to national news created and researched by newscasters and their crew.

Magazine is another form of print media issued mostly weekly or monthly. It provide advertisers and feature story writers invaluable opportunity to tell readers about their products, services and the personalities or organizations that they write about.

Television is a system for converting visual images (with sound) into electrical signals, transmitting them by radio or other means, and displaying them electronically on a screen. It is also a device with a screen for receiving television signals. It can also be called an electronic system of transmitting images with sound over a wire or through space by devices that change light and sound into electrical waves and the change these back into light and sound.

Radio is a mechanical device used for sending and receiving message through the use of audio signals and airwaves to a mass and heterogeneous audience in a community, a town or a state like Edo State that has large rural audience with irregular power supply, the radio remains a very vital tool since it is easily accessible, can be carried about easily (transistor radio) and can be powered by batteries in the event of power outage.

Mass media campaigns in controlling water pollution could be seen as a Development Communication which could be used as a form of communication to promote development. This is using communication to bridge differences and taking action towards development. It is communication for planned change which is intended for conscious human development. Solomon & Margaret Aneato (2012) opines that it is “concerned with the planned use of communication to pursue developmental goals.”

Ohikhokhai(2002) defines development as a “change or transformation into a better states”. Tadoro (2001:3) compliments this statement is not purely an economic phenomeno but a rather multi-dimensional process involving reorganization and reorientation of entire economic and social system.

Development is the process of human lives i.e incomes and consumption levels of food, medical services, educational services, establishment of social, political and economic systems and institutions which promote human dignity and respect.

Development can be examined from different angles. There is development as economic growth. According to Kuzunets as cited by sxirmai (2005:6)”economic development refers to growth accompanied by qualitative change in the structures of production employment generally referred to as structural change”

Statement Oo Problem

Water pollution is a huge issue around the world because it affects everyone. In the world, water pollution is increasing day by day. People are not aware about the harmful effect of water pollution in Ovia North East Local Government Area of Edo State. So there is need of awareness in this Local Government Area and in Nigeria so as to save lives (Ijaaz Rehman 2021). As we have earlier seen that no one can live without water, and if that water is contaminated, human beings can not survive it. Water pollution has led to the outbreak of several diseases in Nigeria. Water that is not safe kills many people yearly than other forms of violence or even an outbreak of war. It causes illnesses. When people consume contaminated water, they can develop serious health problems such as diarrhea, hepatitis A, cholera, typhoid fever etc. which may later lead to death. In Ovia North East Local Government Area of Edo State, many people are not aware of what water pollution means, its causes, and the epidemics that can be caused by drinking polluted water. There are some other consequences of polluted water which include:

- (i) There may be an outbreak of diseases like cholera, hepatitis A, dysentery, gastro-enteritis (diarrhea), typhoid fever, etc.
- (ii) Polluted water introduces toxins into foods which are harmful to human health when eaten.

The main objective of the study is to examine the influence of the Mass Media in controlling water pollution in Ovia North East Local Government Area of Edo State. Again, this study in a broader perspective, will expand the scope of

knowledge on the control of water pollution, by looking at it from the angle of the influence of campaigns that will be made by the mass media. The study specifically seeks, among other things:

- (i) To examine the influence of the mass media campaign in controlling water pollution in Ovia North East Local Government Area of Edo State.
- (ii) To examine the awareness of the residents of this Local Government Area of water pollution.
- (iii) To determine the ways which water pollution can be controlled in Ovia North East Local Government Area through media campaigns.
- (iv) To examine various ways which diseases caused by polluted water can be prevented through media campaigns.
- (v) To find out how the residents of Ovia North East Local Government Area of Edo State would perceive the roles of the mass media campaigns in controlling water pollution.

This study seeks answers to some questions which include:

- (i) What is the influence of mass media campaign on controlling water pollution in Ovia North East Local Government Area of Edo State?
- (ii) Has mass media campaign any impact on people's attitude towards water pollution control?
- (iii) What are the ways which water pollution can be controlled through mass media campaigns in Ovia North East Local Government Area?
- (iv) What are the various ways which diseases caused by polluted water can be prevented through mass media campaigns in Ovia North East Local Government Area?
- (v) How will the residents of Ovia North East Local Government Area of Edo State perceive the roles of the mass media campaigns in controlling water pollution

Literature Review

A conceptual definition means defining a concept in terms of other concepts, usually by making reference to how other social scientists and theorists have defined those concepts in the past. Hence, this chapter reviews some existing studies in existing literature to study the dominant conception of this research subject matter.

Diffusion of Innovation Theory talks about a model which is used in research to explain the adoption of a new technology by users. Rogers' Everett (1995) defines diffusion as the process by which an innovation is communicated through certain channels over time amongst the members of a social society (Rogers Everett, 1995). An innovation represents an idea or an object that is perceived to be new (Rogers Everett, 1995). According to this theory, the diffusion rate is affected by a relative advantage of an innovation, complexity, compatibility, trial-ability and observability.

Empirical analysis is an evidence-based approach to the study and interpretation of information. Empirical evidence is information that can be gathered from experience or by the five senses. In a scientific context, it is called empirical research.

A review of the literature on the influence of mass media campaigns in controlling water pollution shows that the definition water pollution and its control differs from country to country, and even state to state.

It is also based on the concept of sustainable water management (SWM). SWM is a critical component of sustainable development, and accounts for similar issues as sustainability. Mays (2006) defined SWM as meeting current water demand for all water users without impairing future supply. More specifically, SWM should contribute to the objectives of society and maintain ecological, environmental, and hydrologic integrity (Loucks and Gladwell, 2002). A more holistic objective of water management is provided in Agenda 21 (United Nations Conference on Environment and Development, Rio de Janeiro, Brazil, 3–14 June, 1992) which ensures that adequate supplies of water of good quality are maintained for the entire population of the planet, while preserving the hydrological, biological and chemical functions of ecosystems, adapting human activities within the capacity limits of nature and to combat vectors of water-related diseases.

Onyegeme Okerenta and Ogunka Nnoka (2017) conducted field research on seasonal variations in physicochemical and bacteriological parameters of Ulasi River, Okija, Anambra State and stated that high value of biological oxygen demand (BOD) and Coliform count in dry season indicated deterioration of water quality which was due to the effluents which showed that for drinking purposes, the water is not of an ample quality in the absence

of any purification; but for other leisure activities like swimming and industrial use, the river water was still of an adequate quality.

Available literature on environmental monitoring of surface water indicated that streams and rivers in the country are also increasing trend of water pollution due to increase population, industrialization and urbanization. Wastes generations by the industrial and house hold have continued to increase this waste are indiscriminately disposed off into the water bodies. These lead to pollution of inland water bodies and subsequently increased water quality parameters such as heavy metals, urgent attention is therefore necessary to meet water pollution problems in Nigeria through monitoring as well as enforcement of standard by industries (Ekiye & Zejio, 2010). According to national Bureau of statistics (2009) at least 27% Nigerians depended absolutely on streams, ponds and rainwater for the drinking water some Research as shown high prevalence of water borne diseases such as cholera, dysentery, hepatitis etc. among Nigeria's (Ogontoke et al, 2009; Raji & Ibrahim 2009).

Theoretical Framework

Uses and Gratifications Theory suggests that media users play an active role in choosing and using the media. Blumler & Katz's uses and gratification theory also explained that media users take an active part in the communication process and are goal oriented in their media use. This theorist said that a media user seeks out a media source that best fulfills the needs of the user. Uses and gratifications assume that the user has alternate choices to satisfy his or her need (Blumler & Katz, 1974). Hence the influence of Mass Media Campaign in controlling water pollution in Ovia North East Local Government Area will produce healthy result in the lives of the residence if majority of them choose to listen to radio and television news or read news papers. (Blumler & Katz, 1974).

Communication Competence Theory can be regarded as the ability to choose a communication behavior that is both appropriate and effective for a given situation. Interpersonal competency allows one to achieve his or her communication goals without causing the other party to lose face. According to Spitzberg & Cupach in 1984, The model most often used to describe competence is the component model (Spitzberg & Cupach, 1984) which includes three components: (1) knowledge (2) skill and (3) motivation. Knowledge simply means knowing what behaviour is best suited for a given situation. Skill is having the ability to apply that behaviour in the given context while Motivation is having the desire to communicate in a competent manner. (Spitzberg, & Cupach, 1984). This theory is also suitable for this study because the Mass Media uses its knowledge and skill to motivate the residence of Ovia North East Local Government Area to control water pollution through its campaigns.

Methodology

The Survey research design was used for this study. This design was suitable for this research work because it enabled the researcher to collect information from a pool of respondents by asking multiple questions via questionnaire. This method allowed the researcher to collect data from respondents without a complete enumeration based on the random sampling as it gave target population equal chances of being chosen. Another reason for using survey method was that, it saved time, energy and also minimized loss of the research, (Okolo, 2011).

The population of this study was drawn from 500 residents out of the 78,000 population of Okada town (Internet source, Population Census 2006) in Ovia North East Local Government Area of Edo State. As at 15th April, 2022, this Local Government Area has an area of 2,301 km² and a population of 153,849 (Internet source – Population Census) and presently has an estimated population of 155,344 (National Institute of Health). 500 residents, out of 78,000 population of Okada formed the sample size, since it was difficult to sample the whole Nigerian population. (National Institutes of Health (.gov) <https://www.ncbi.nlm.nih.gov/articles/PMC3216180>), (F.O. Akinbo, 2010).

The sample size was 500 residents out of the entire population of Okada town, consisting of 100 married men, 150 married women and 250 youths. These sample was selected across the residents of Okada town including those in the Crown Estate, though these figures did not include the children and the aged. Again, the sample size was about 10% of the selected population.

This study employed the random sampling method. The application of random sampling method brought unbiased result. This was a method of selecting a sample from a population so that all members of that population would have equal chances of being selected, and the selection of one case will have no influence on the selection of

any other member or case in the population. The sample of 500 was selected from 78,000 residence of Okada in Ovia North East Local Government Area.

The measuring instrument that was used for this study was the questionnaire. Questionnaire is a data collecting instrument consisting of a series of questions for the purpose of gathering information from respondents.

Validity of the instrument refers to the extent which an instrument accurately measures what it intends to measure. The research instruments which was used for the study was validated by an expert who checked the items in the instrument critically like the space sizes between the boxes of the questionnaire and whether the researcher asked relevant questions that were brief and straight to the point which were in line with what the study was investigating. Grammatical construction of the sentences, chronological arrangement of the sentences, box sizes and font sizes were checked by the researcher's supervisor to ensure apt validity.

. For the reliability of the instruments used, a pilot study was carried out ahead of the main study and 10 copies, based on the format of the original questionnaire were administered in the chosen area to enhance thorough re-evaluation of the original questionnaire in terms of adequacy.

The copies of questionnaire were collected and sorted out. The data were collected and presented in frequency tables, percentages were generated by Statistic Package for Social Science (SPSS). The analysis was done extensively on the basis of the data that were obtained.

This section involves the data presentation and analysis from the copies of questionnaire distributed to the sampled in the course of this research. It is important to note that in the course of administration of the questionnaires, a total number of five hundred and twenty (520) were administrated to respondents and five hundred (500) were collated and used to answer the aforementioned research question. This analysis was based on the respondents in Okada and the numbers of questionnaires that were administered at different locations in Okada, Ovia North East Local Government Area for the purpose of this research work.

The total number of respondents who listened to radio, television or read newspapers and magazines were 450 which was 90 percent while those who did not listen to radio, television or read papers were 50 which was 10 percent, showing that the majority of the residents of Okada has access to Mass Media. Therefore, Mass Media campaigns in controlling water pollution had a great influence on the residents of Ovia North East Local Government Area of Edo State.

Discussion of Findings

The findings drawn from this research study showed that:

- (i) The Mass Media Campaigns in the control of water pollution had a maximum influence on residents of Ovia North East Local Government Area of Edo State
- (ii) More than 60 percent of the residents of this Local Government Area were aware of water pollution.
- (iii) That water pollution can be controlled in Ovia North East Local Government Area if the residents apportion more time to listen to radio and television programmes on burning issues that affects human lives.
- (iv) Diseases caused by polluted water could be prevented through media campaigns if medical personnels were encouraged to participate in mass media programmes on the control of water pollution and some preventive measures to avoid diseases associated with it.
- (v) The residents of Ovia North East Local Government Area of Edo State perceived the roles of the mass media campaigns in controlling water pollution as very vital and necessary

Conclusion

The mass media, which is a form of media used in communication to a heterogeneous and large audiences, is one of the most powerful tools of attitudinal and behavioural change. The mass media has a vital role to play in creating awareness through campaigns on the need to control water pollution and to prevent the outbreak of some diseases associated with the consumption of polluted water especially in Ovia North East Local Government Area of Edo State.

Mass media campaigns influence is the actual force exerted by a mass media message, resulting in either a change or reinforcement in audience or individual beliefs or way of life. The most common platforms for mass media

campaign are newspapers, magazines, television, radio and the internet. Though the effect of mass media messages on its audience depend on the audience demographics and psychological characteristics, but the influence of mass media campaign in controlling water pollution in Ovia North East Local Government Area is expected to yield a positive result, since is dealing with life and its wellbeing.

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