

EFFECTIVENESS OF BROADCAST MEDIA MESSAGES IN COMBATING HEALTH MISINFORMATION ABOUT BREAST CANCER AMONG WOMEN IN ENUGU METROPOLIS

DR. OZOIMA NWOKEDI

Department of Mass Communication
Faculty of Arts, University of Nigeria
Nsukka

ozoima.nwokedi@unn.edu.ng, 08039244796

&

AMUSHIE SUCCESS IJEOMA

Department of Mass Communication
Faculty of Arts, University of Nigeria
Nsukka

Amushie2010@gmail.com, 08166372057

Abstract

Over the years, breast cancer has claimed the lives of millions around the world. This has necessitated the different health campaigns aimed at combating it. Campaigns have been raised to compel women to go for checkup since early detection leads to its cure. In Nigeria and in Enugu state in particular, a lot of information has been churned out on this topic. A closer look at arrays of information on this subject showcases misinformation on the subject. This misinformation though not intended to harm anybody has really done more harm than good as some women see this misinformation as authentic. This major objective of this study is to evaluate the effectiveness of broadcast media messages in combating health misinformation about breast cancer among women in Enugu metropolis. The population for this study according to 2006 census as projected by Owuamalam population projection rate, (2012) is 662,067. Survey method of research design was used to gather data for this study and a sample size of 364 was drawn using Krejcie and Morgan sample size table. The study was anchored on Health Belief Theory and Agenda Setting Theory. Findings from the study showed that broadcast media messages are effective in combating health misinformation about breast cancer among women in Enugu metropolis. The study recommended among others that women should verify information they heard about cancer from a health professional in order to avoid misinformation about the disease.

Keywords: Effectiveness, Breast Cancer, Combating Health Misinformation, Broadcast Media Messages, Womanhood.

Introduction

Statistics have shown that breast cancer is the second most common cancer around the world. According to World Cancer Research Fund (2024), 2,296,840 new cases of cancer were reported among women in 2022 and non among men. To help women seek medical attention and encourage early detection of the disease, the government, non-governmental organization and every associated organization have embarked on media campaigns or messages to create awareness on breast cancer. As these messages are circulated, so is misinformation on the disease. A lot of women believe in Enugu metropolis believe that you

can get breast cancer only when you have a female relative that have had cancer, but that is a misinformation as a woman can be at risk if a male member of her family has had cancer also. To this end, the broadcast media which include radio and television has been used to create awareness on the disease and at the same time to combat various health misinformation on breast cancer. McQuail (2010) defined broadcast media as a mass medium that transmits information simultaneously to a large audience. It includes radio, television and satellite broadcasting. Broadcast media has been a tool of mass communication since inception, radio as a broadcast medium has the advantage of penetrating into the hinterlands and immediacy. This medium is very appropriate for the dissemination of information on breast cancer which will in turn combat several misinformation on the disease. Television as a broadcast medium has an advantage of sound and vision; no wonder Patil, (2003) stated that television is suitable for mass education. Using television as a medium of mass education will help reach large audience and educate them on breast cancer. Okeke, (2018), argued that many women in developing countries do not survive cancer because late detection and lack of finance, it is worthy of note to state here that misinformation about the disease also contributes to the death recorded due to breast cancer. Because, if people are armed with accurate information about the disease; a lot of women will seek medical help at the right time and at the right place.

Statement of the Problem

In Nigeria, the prevalence of breast cancer is increasing, in 2018 alone; 12 thousand deaths were recorded as a result of breast cancer. Research has shown that 670,000 women lost their lives to breast cancer in 2022. In 2020, 14,274 people died from breast cancer in Nigeria, this is 18.1% of all cancer deaths. These statistics are frightening and disturbing, global estimates has shown clear disparities on the incidence of breast cancer based on human development. The countries with high human development index tend to record lower fatality of breast cancer as compared to countries with low human development index. Research on breast cancer in Nigeria is usually focused on early detection of the disease, breast cancer awareness and cancer diagnosis, little or nothing has been done to dispel certain health misinformation circulating on the disease in Nigeria and in Enugu in particular. If these misinformation about the disease is left unchecked, people will be misled thereby leading to high surge of this disease, and its corresponding fatality rate. From the foregoing, this study sought to evaluate the effectiveness of broadcast media messages in combating health misinformation about breast cancer among women in Enugu metropolis.

Objectives of the Study

The major objective of this study is to evaluate the effectiveness of broadcast media messages in combating health misinformation about breast cancer among women in Enugu metropolis, while the specific objectives are to:

1. Investigate the level of awareness of health misinformation on breast cancer among women in Enugu metropolis.
2. Determine the most dominant medium through which women in Enugu metropolis receive messages on breast cancer.
3. Ascertain the level of exposure to broadcast media messages on breast cancer among women in Enugu metropolis.
4. Evaluate the effectiveness of broadcast media messages in combating health misinformation about cancer among women in Enugu state metropolis.

Literature Review

Concept of Health Misinformation

Misinformation is false information that is spread by people who think that it is true. Though the people that spread misinformation think that the information they are spreading is true, they do so without ill intentions. World Health Organization, (2024) defined Misinformation as the spread of false information without intent to mislead. The proliferation of misinformation has become a problem for people, different organizations and the entire society, Ogale & Deshpande (2024).

Health Misinformation is the spread of false information regarding a health issue that is not intentional. Abrams (2024) stated that health misinformation can put people's lives at greater risk. Health misinformation was at its peak during COVID-19 pandemic as people itched to know everything about the deadly disease. The use of misinformation in breast cancer is not new, Abrams (2024) maintained that when a disease breaks out, uncertainties arise about how it is spread and how people can stay safe, leaving a healthy ground where misinformation can thrive. The following are some of the misinformation about breast cancer according to National Breast Cancer Foundation, (2024);

- i. A breast injury can cause breast cancer: there is no connection between breast injury and breast cancer, unless there was an existing lump in the breast before the injury.
- ii. Breast Cancer is more common in women with bigger breast: although obesity and breast density can increase the risk of breast cancer, women with bigger breast are not at cancer risk.
- iii. Breast pain is a definite sign of breast cancer: though breast pain should not be ruled out completely, but the most common symptom of breast cancer according to American Cancer Society (2024) is a new lump in the breast.
- iv. Underwire Bras increase the risk of breast cancer: there is no link between underwire bras and breast cancer, just as there is no evidence to support that going braless can reduce the risk of breast cancer.
- v. Consuming sugar causes breast cancer: consumption of too much of any food especially sugar can lead to weight gain and health issues, but there is no direct link between cancer and sugar.
- vi. Carrying a phone in your bra can cause breast cancer: carrying a phone may not be comfortable but there is no direct link between cancer and carrying a phone in your bra.
- vii. Antiperspirant and deodorant can cause breast cancer: research has showed that there is no conclusive evidence that links the use of underarm antiperspirants and cancer.
- viii. Men do not get breast cancer; it affects women only: this is pure misinformation because accordingly to National Breast Foundation (2024), approximately 2,190 men are diagnosed with cancer annually. This shows that men are also at risk of breast cancer though at a lower rate than females.

Concept of Breast Cancer

Akuoko, et al (2017) opined that breast cancer is one of the leading cause of death in developing countries. Nigeria as a developing country has a good number of uneducated and

semi educated women in rural and semi urban areas. These women when faced with cancer attribute it to different things.

Breast cancer according to Cleveland Clinic (2024) is when breast cells mutate and become cancerous cells that multiply and form tumours. Breast cancer mostly affects women but can also affect men. Breast cancer becomes invasive when it starts in a woman's milk ducts and spreads to nearby tissue. Early detection of breast cancer leads to its cure.

Most common symptoms of breast cancer Cleveland Clinic include the following

- i. A change in the shape and size of the breast. Women are advised to seek medical help once they notice any change in their breast.
- ii. A lump in the breast which may persist and a lump near a woman's breast or her underarm.
- iii. A blood stain or fluid discharged from your nipple.
- iv. A marble-like hardened area under a woman's skin.

There is no distinctive cause of cancer but experts know that breast cancer happens when breast cells mutate and becomes cancerous cells that divide and multiply to create tumours, Cleveland Clinic, (2024). There are a lot of factors that create enabling environment for cancer to thrive; these factors are also called cancer risk factors.

The following are Lifestyle-related breast cancer risk factors according to American Cancer Society (2024):

- i. Alcohol consumption: the risk of having breast cancer increases with the higher amount of alcohol a woman consumes. A woman who consumes 1 alcoholic drink a day has about 7% to 10% increase in risk compared to a woman who doesn't drink. While a woman who consumes 2 to 3 alcoholic drinks a day has about 20% higher risk, American Cancer Society, (2024).
- ii. Obesity: being obsessed especially after menopause increases breast cancer risk, it is advised that women should indulge in healthy lifestyles that will help to reduce their weights.
- iii. Not being physically active: it is recommended that women especially that past menopause should engage in physical activities to reduce breast cancer risk.
- iv. Not having children: it has been observed that having many pregnancies and becoming pregnant at a young age reduces breast cancer risk in women.
- v. Not breastfeeding: different studies suggest that breastfeeding may slightly reduce cancer risk in women.
- vi. Birth control: it is advised that women stay away from birth control methods that use hormones in order to reduce cancer risk.
- vii. Breast implants: breast implants have been linked to an increased risk of cancer among women.

All the risk factors mentioned above have been proven to increase cancer risk in one way or the other.

Empirical Review

Communicating Breast Cancer in Rural Igbo Community of Southeast Nigeria sought to examine different communication avenues for combating breast cancer in Orba, a rural

community in Enugu state (Okpoko 2019). A sample size of 200 was used and findings revealed that 87% of the respondents were aware of media messages on breast cancer, alarmingly; 74% and 65% of the respondents claimed that they had no knowledge of the disease early detection and prevention respectively. The study also revealed that the respondents prefer radio and religious gathering as communication channels for breast cancer campaign.

While Okpoko (2019) sought to examine the different communication avenues for combating breast cancer, the current study sought to evaluate the effectiveness of broadcast media messages in combating health misinformation about breast cancer among women in Enugu metropolis. Both studies are focused on communication about cancer, while the former sought to get a communication avenue suitable for disseminating information about cancer, the latter sought to assess how broadcast media messages have reduced misinformation about cancer among women in Enugu state.

Nwafor, et al (2022), assess the Influence of Breast Cancer Radio Campaigns on Utilization of screening Services by Women of Vulnerable Age in Tarka Local Government Area of Benue State, Nigeria. Survey method was used with a sample size of 400, findings from the study revealed that there was a high level of exposure to radio campaigns on breast cancer among women of vulnerable age in Tarka Local Government Area.

The research gap lies in the fact that while Nwafor et al sought to assess the influence of breast cancer radio campaigns on utilization of screening services in a particular Local Government Area of Benue state, the current study sought to evaluate the effectiveness of broadcast media in combating health misinformation.

Okeke, N. E.(2018) in the Influence of Mass Media Campaigns on Breast Cancer Knowledge among Women in Enugu State was conducted to ascertain the contributions of mass media to breast cancer knowledge among women in Enugu state. Survey method was used with a sample size of 384, findings from the study showed that radio was the most predominantly used medium by women in Enugu state to obtain information about cancer.

Both the former and the later study dealt with how the media has helped in disseminating information about cancer in Enugu state, although the current study sought to determine how broadcast has helped in combating health misinformation about cancer among women in Enugu state.

Theoretical Framework

The study is anchored on Health Belief Model and Agenda Setting Theory of the mass media. Health Belief theory was propounded by Hochbaum in the 1950s. According to Janz & Becker, (1984) posits that people's beliefs, attitudes and understanding of the illness and health care, usually influence the likelihood that they would seek preventive treatments and screening. The theory is based on five basic postulates according to Nortje, (2024) and they include the following:

- Perceived susceptibility: when people feel that they can't get a particular disease, they tend to ignore the preventive measures. But when they feel that they are at risk of contracting the disease, they opt for preventive measures like vaccines.

- Perceived severity: people tend to stay away from harmful health behaviours if they feel that such health behaviours can impact their lives negatively.
- Perceived benefits: people tend to engage in healthy health practices like exercise because they believe that it can help them to live a healthy live.
- Perceived barriers: this refers to the perceived obstacle or cost associated with taking action to reduce the risk of as health condition
- Cues to action: this refer to a particular push that triggers an individual to take a desired health action like media campaigns, symptoms etc.

Based on the above assumptions of Health Belief Theory, the women in Enugu metropolis tend to avoid seeking medical help because they assume that they are not prone to the disease, and those at risk seek help from traditional healers because they believe that hospital treatment is more expensive.

Agenda Setting Theory of the mass media was propounded by Maxwell McCombs and Donald Shaw in 1972. The theory is based on how the media sets agenda for the audience. Okpoko, (2019) posits that the theory is based on the powerful influence of the media, she argued that the way the media presents something is how much importance the audience will place on it.

When the broadcast media continually enlighten the women in Enugu metropolis, they tilt towards discarding all the health misinformation they have gathered about cancer; and the embrace accurate information disseminated by the media.

Methodology

Survey method was used in this study and instrument of data collection was questionnaire. The population for this study the number of women living in Enugu metropolis.

The population of women in Enugu metropolis as at 2006 census is 468,223. However, to determine the current population of women in Enugu metropolis in 2024; the researcher applied Owuamalam 2012 population projection rate which is 2,3% as recommended by United Nations Development Programme, (UNDP). The projection formula is as follows:

$$P_p = G_p \times P_i \times T$$

$$P_p = 468,223 \times 0.023 \times 18 = 193,844$$

Then, estimated population for women in Enugu metropolis is $193,844 + 468,223 = 662,067$. Using Krejcie and Morgan, 1970 sample size table, a sample size of 364 was derived.

To ensure the reliability of the research instrument, the researcher did both pretest and retest but found no disparity. In pretest, the researcher shared 20 copies of questionnaires to 20 respondents and their answers were recorded. After two weeks, the researcher shared other copies of the same questionnaires to the same respondents and their answers were also recorded. The researcher compared the two responses and discovered that there is no disparity between the retest and retest. This shows that the instrument of data collection is reliable.

The population was clustered into the three senatorial zones in Enugu. Simple random sampling was used to select one Local Government Area from each senatorial zones, the same random sampling was used to select one community from each Local Government Area where the questionnaires were distributed.

Discussion of Findings

Return rate of the Questionnaire

Category	Frequency	Percentage
Returned	360	98.9
Not Returned	4	1.1
Total	364	100%

The table showed that 98.9% of the questionnaire was returned while 1.1% was lost on transit. The sample size used for this study is 360, since it was 360 questionnaires that were returned.

Age Distribution of Respondents

Age Range	Frequency	Percentage
18-26	100	27.8
27-35	150	41.7
36-44	95	26.8.
45 and above	15	3.7
Total	360	100

The table above revealed that 100 women between the age of 18-26 answered the questionnaires. The bulk of the women that answered the questionnaires are between the age of 27 -35. While the women between the age of 36 – 44 are 95 in number, while a paltry sum of 15 women are between the age of 45 and above. This shows that greater percentage of the women that answered the questionnaires are within child bearing age.

Research question 1: what is the level of awareness of health misinformation on breast cancer among women in Enugu Metropolis?

Response category	Very High	High	Very Low	Low	Total
Frequency	200	100	20	40	360
Percentage	55.6%	27.8%	5.6%	11%	100%

The above table showed that 55% of the respondents are of the opinion that the level of awareness of health misinformation is very high. 27.8 % are aware that health misinformation on breast cancer is high. While 5.6% and 11% are of the opinion that the level of awareness is very low and low respectively. This shows that a greater percentage of the respondents are of the opinion that there are various health misinformation about breast cancer available to them.

Research question 2: what is the most dominant medium through which women in Enugu metropolis receive messages on breast cancer?

Category	Frequency	Percentage
Radio	116	32.2%
Television	80	22.2%
New media	60	16.7%
Newspaper	30	8.3%
Peers	40	11.1%
Magazine	20	5.6%
Others	14	3.9%
	360	100%

The table showed that out of all the medium through which women from Enugu metropolis receive messages on breast cancer, radio ranked the highest with 116 respondents stating that they receive information on breast cancer through various radio stations. This shows that a greater percentage of the respondents which is 32.2% of the sample size get information on breast cancer through the radio. 80 respondents which is 22.2% of the sample size said that they receive messages on breast cancer through the television. This shows that a good number of the respondents receive messages on breast cancer through the television. 60 respondents stated that they receive messages on breast cancer through the new media. The new media here include the internet sources, social media, email and others. This means that 16.7% of the respondents receive messages on breast cancer through the new media. 30 respondents which is 8.3% of the sample size stated that they receive messages on breast cancer through the Newspaper while 40 respondents which is 11.1% of the sample size said that they receive messages on breast cancer through their peers. 20 respondents which is 5.6% of the respondents stated that they receive messages on breast cancer through magazine while 14 respondents stated that they receive messages on breast cancer through other mediums. From the table above, it is observed that more than half of the respondents which stands at 54.4% of the sample size receive messages on breast cancer through the broadcast media, this shows that the greater number of the respondents used for the research get messages on breast cancer through the broadcast media.

Research Question 3: What is the level of exposure to broadcast media messages on breast cancer among women in Enugu metropolis?

Response category	Very High	High	Very Low	Low	Total
Frequency	162	123	34	41	360
Percentage	45%	34.2%	9.5%	11.3%	100%

The tables showed that 45% of the respondents are of the opinion that the level of exposure to broadcast media messages on breast cancer is very high, 34.2% of the respondents stated that the level of exposure to broadcast media messages on breast cancer is high. 9.5% of the respondents are of the opinion that the level of exposure is very low while 11.3% of the respondents are of the opinion that the exposure to broadcast media messages on breast cancer is very low. This shows that 79.2% of the respondents are of the opinion that they are adequately exposed to broadcast media messages on breast cancer.

Research Question 4: do you agree that broadcast media messages are effective in combating health misinformation about breast cancer among women in Enugu metropolis?

Response category	Strongly Agree	Agree	Strongly Disagree	Disagree	Total
Frequency	186	124	27	23	360
Percentage	51.7%	34.4%	7.5%	6.4%	100%

The table above showed that 51.7% of the respondents are strongly agreed that broadcast media messages are effective in combating health misinformation, 34.4% agreed that the use of broadcast media messages are effective in combating health misinformation about cancer among women in Enugu metropolis. While 7.5% strongly disagreed that broadcast media messages are effective in combating health misinformation about cancer among women in Enugu metropolis. 6.4% disagreed to the assertion. This shows that 86.1 of the respondents are of the opinion that broadcast media messages are effective in combating health misinformation about breast cancer in Enugu state metropolis.

Findings from the research revealed that women in Enugu metropolis are aware of health misinformation about cancer. They are also aware that the broadcast media are disseminating information aimed at changing the narrative. The respondents also strongly agreed and agreed that broadcast media is changing the narrative. This means that the broadcast media is effective in combating health misinformation about cancer among women in Enugu state metropolis.

Conclusion

Misinformation which is usually spread without ill intend has become a deadly weapon in the hands of ignorant Nigerians. With the advent of new media and citizen journalism, misinformation has found a fertile ground to grow. When people are exposed to unverified information about breast cancer, it can affect their perception of the disease. Breast cancer though a terminal and deadly disease could be cured if detected on time; since the more women than men are at its risk. Women should develop a healthy attitude towards going for a routine cancer checkup. Nigeria as a developing country is faced with the challenge of this disease and combating the misinformation about breast cancer will help a great deal. Different media audiences should be taken into consideration while packaging media messages, this will capture the audience peculiar characteristics and also ensure communication fidelity.

Recommendations

The study revealed how broadcast media are used to combat the spread of health misinformation about cancer in Enugu metropolis, from the foregoing; the following recommendations were made;

- i. Government and non-governmental organizations should lend a voice in creating awareness on breast cancer as this will dispel the rumours and misinformation circulated on the disease.
- ii. Women are advised to always verify any information they heard about breast cancer with a health professional to avoid misinformation on it.
- iii. Media houses are encouraged to churn out information campaign on breast cancer to increase the level of exposure about the disease.

- iv. Other channels of mass communication should join hands in creating awareness and even hosting interactive programmes with a present health professional to entertain questions from the audience.

References

- Abram, Z. (2020). How to Reverse the Alarming Trend of Health Misinformation. *Monitor on Psychology*. www.apa.org, on 15th December, 2024.
- Akuoko, C. P., Armah, E., Sarpong, T., Quansah, D. Y., Amankwaa, I., & Boateng, D. (2017). Barriers to Early Presentation and Diagnosis of Breast Cancer among African Women Living in Sub-Saharan Africa. *PloS one*, 12(2), e0171024. Retrieved from <https://doi.org/10.1371/journal>, on the 13th December, 2024.
- Broad, E. & Stromback, J. (2024). Misinformation, Disinformation and Fake News: Lessons from an Interdisciplinary, Systematic Literature Review. *Annals of the International Communication Association*, 48(2), 139-166. Retrieved from <https://doi.org/10.1080/23808985.2024.2323736> on 16th December, 2024.
- Cleveland Clinic, (2024). Breast Cancer symptoms Types, Causes and treatment. Retrieved from [https:// www.myclivelandclinic.breast-cancer.org](https://www.myclivelandclinic.breast-cancer.org), on 16th December, 2024.
- Kur, J. & Nyekwere, E. O, (2015). Television Broadcasting and the Democratization Process in Nigeria: The Successful and Unsuccessful Story. *Online Journal of Communication and Media Studies*.5(4). Retrieved from <https://www.researchgate.net.DOI:1029333/ojcm/2529> on 15th December, 2024.
- Janz, N. K., & Becker, M. N. (1984). The Health Belief Model: A Decade Later. *Health Education Quarterly*, 11(1). 1-47. Doi: 10.1177/109019818401100101. PMID:6392204.
- McQuail, D. (2010). *McQuail's Mass Communication Theory*. 6th ed. Sage Publications.
- National Breast Cancer Foundation, INC, (2024). Breast Cancer Myths. Retrieved from www.nationalbreastcancer.org on 16th December, 2024.
- Nortje, A. (2024). What is Health Belief Model? An Updated Look. Retrieved from positivepsychology.com, on 17th December, 2024.
- Nwafor, K. A., Faga, V. T., Okpara, N., Nwoba, M. O.E. & Ewa-Ibe, Blessing, (2022). Influence of Breast Cancer Radio Campaigns on Utilization of Screening Services by Women of Vulnerable Age in Tarka Local Government Area of Benue State, Nigeria. *Nigerian Journal of Social Psychology*. Nigerian Association of Social Psychologists.
- Ogale, S. & Deshpande, R. (2024). The Role of Social Media in the Spread of Misinformation and Fake News. Retrieved from www.researchgate.net , on 16th December, 2024.
- Ohaja, M., Senkyire, E. K., Ewetan, O., Asiedua, E., Azuh, D. (2022). A Narrative Literature Review on Media and Maternal Health in Africa. *World Medical & Health Policy*. Vol.15, Issue 2. Pg. 123-147. Retrieved from <https://doi.org/10.1002/wmh3.546> on 14th December, 2024.
- Okeke, N.E. (2018). Influence of Mass Media Campaigns on Breast Cancer Knowledge among Women in Enugu State. *Global Journal of Arts and Social Sciences*. Vol.6, No.3. pg. 103-130. Retrieved from www.eajournals.org on 15th December, 2024.
- Okpoko, C. C. (2019). Communicating Breast Cancer in Rural Igbo Community of Southeast Nigeria. *Journal of Communication and Media Watch*, 10 (1). Retrieved from www.ssoar.ifo.DOI: 10.15655/mw/2019/vli1/49570 on 14th December, 2024.
- Onyema, (2024). Breast Cancer Prevalence in Nigeria: A Growing Concern. Retrieved from <https://www.documentwomen.com> on 15th December, 2024.

- Owuamalam, E. (2012). *Data analysis and project research writing*. Top Class Research Agencies, Owerri.
- Patel, S. (2003). Advantages of Television. Retrieved from <http://www.writework.com/essay/advantages-television> on 25th December, 2024.
- Utalor, J.C. (2019). Influence of Broadcast Media Messages on Awareness, Perception and Attitude of Maternal Health Among Reproductive Women in Ilorin. *African Journal of Social Sciences and Humanities Research*, Vol. 2, Issue1. Pg.57-116. Retrieved from www.academia.edu on 14th December, 2024.
- World Cancer Research Fund,(2024). Breast Cancer Statistics. Retrieved from [www.wcrf.org>preventing-cancer](http://www.wcrf.org/preventing-cancer), on 14th December, 2024.
- World Health Organization, (2024). Disinformation and Public Health. Retrieved from www.who.int on 16th December, 2024.