Media Intervention in Managing Breast Cancer

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A b s t r a c t

The study examines the media intervention in managing breast cancer. Breast cancer is a disease that is characterized by the abnormal growth of cells in the breast. It is the most common malignant disorder affecting women and the leading cause of death among them: mass media is an important vehicle in promoting health campaign. The study situated within the theory of health belief model and diffusion of innovation theory. Survey research method was adopted. Findings revealed that: majority of respondents uses mass media messages to address their problems relating to breast cancer. Majority of respondents have access to any form of the mass media. Findings also revealed that majority of respondents believed with mass media messages and considered it to be very effective in providing them with valuable information on breast cancer. The study recommends that: the campaign on breast cancer should be comprehensive to include jingles, dramas and consisted health talks which should be repeated every week; both Federal Government, State and Local Government should put more hand together in the fight against breast cancer. Mixed communication campaign would help in addressing the issues of breast cancer.

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Background to the Study

Mass media play significant role in enlightening and educating the people about issues that are meaningful to their lives. There is no issue that can be as important as health awareness campaign especially in developing countries. One key functions of health communication are to increase knowledge and understanding of health information. Health communication covers mass media and other communication channels in addressing health related issues and highlighting on its importance (Sharma, 2008).

Breast cancer is a disease that is associated with abnormal growth of cells in the breast (CDC, 2021) it is the most common malignant disorder normally affecting women which can easily cause their death. It is terminal disease if it is not detected at early stage. That is why mass media information is needed to enlighten the people about the danger of the disease.

The most common types of breast cancer according to American Cancer Society is:
Ductal Circinona in Situ (DCIS). These types of breast cancer is considered as a non-invasive or pre-invasive breast cancer. It is usually called intraductal carcinoma or stage 0 breast cancer. It is characterized by cells lining the duct turning into cancerous cells and not spreading into breast tissues especially around the walls of the duct. This is an early stage of breast cancer and can easily be cured at this stage.

The second stage is triple negative breast cancer which according to American Cancer Society is a type of breast cancer in which the cancer cells have no estrogen or progesterone receptors. It grows and spreads faster than other forms of invasive breast cancer and accounts for about 10 – 15% of all breast cancer.

The invasive breast cancer is among cancer that have dominated the surrounding tissues. It is the most common breast cancer.
Inflammatory breast cancer is associated with blocking the lymph vessels in the skin which make the breast inflamed. This is rare and account for only 1 – 5% of all breast cancer. There is paset disease that affects the nipples and areola of the breast it is also rare form of breast cancer. There is phyllocles tumor that normally develops in the connective tissue of the breast. It mostly occurs in women that are at their 40s.
Major causes of breast cancer
1. Smoking – most women engage seriously in smoking have an increased risk of developing breast cancer (Luo et al, 2011 Xue et al, 2011).
2. Overweight – researchers discovered that there is correlation between obesity and breast cancer. High level of insulin has the chances to stimulate the growth of cancer cells (Lahmann et al, 2004).
3. Pregnancy – majority of women who have their first child especially at older age are likely to have breast cancer (Hisham 2004).
4. Alcohol – too much consumption of alcohol can increase the risk of breast cancer. There is correlation between alcohol consumption and hormone receptor positive and negative tumours in several studies (Hisham 2004).

Statement of the Problem

Breast cancer is among the terminal diseases that is always increasing especially in developing countries like Kano State due to inadequate information about the danger of the disease. According to WHO (2015) 12:5% of all deaths across the globe are associated by cancer. Most of the women especially in semi urban areas do not have the knowledge of early detective measures of the disease.

Improvement of community awareness has helped to reduce the disease. The use of mass media has become an inevitable part of human life and has been used in spreading information especially in managing breast cancer. The study has the following objective.

1. To evaluate the role play by mass media in creating awareness on breast cancer to the women attending Nuhu Bamalli Hospital.
2. To determine whether the women attending Nuhu Bamalli Maternity Hospital in Kano Municipal has gained awareness about breast cancer through the mass media.
3. To examine the effect of mass media in creating awareness among the women of Kano Municipal about the danger of the disease.

Research Question

1. To what extent do mass media create awareness on breast cancer among the women attending Nuhu Bamalli Maternity Hospital?
2. Do the women attending Nuhu Bamalli Maternity Hospital in Kano Municipal gained awareness and knowledge of breast cancer through the mass media?
3. Does the media influence their attitude towards managing breast cancer?

Brief literature

Media Information in reducing Breast Cancer

Mass media messages help to motivate women to detect the cancer at early stage by undergoing screening mammography. Screening of asymtematic patients for breast cancer is recommended for the early detection. Mass media messages help to boost the pap smear uptake especially when there was an efficient screening services.

Mass media messages are important screening exercise that provide quick access to screening services in various channel of communication to enlighten people on its importance. In the area of mammography, the media campaign messages were extensively used and many people participated in the screening exercise due to the campaign.

The mass media continued to enlighten and educate people not only in breast cancer but skin cancer included. A study that assessed sun protection behavioral change for 15 years in Australia due to mass media messages, has shown improvement in attitudinal changes, also the incidence of melanoma was noticed due to the mass media awareness campaign (Saraiya, Glantz and Briss 2004). Women who are given information about breast self-examination are supposed to show high knowledge of breast cancer more than

those who have little knowledge about the disease (Oluwatosin and Oladapo 2011; Popoola, Igwilo and Sowummi 2013).

Concept of Health Communication

Health communication help a lot in changing people's behaviour towards healthy living. A lot of public health campaign are channeled and rooted in human behaviour by combining efforts. Health communications have the capacity and greatest opportunity that provide meaningful input in improving health attitudes and even saving lives of the citizen globally (Williams, Matthews, Rutt, Napolitano, Marcus, 2010).

Health communication in centered on the transmission function of information, exchange and also have the capacity through which intervention messages are attributed and how audience responded to the information. These effort reflects the essential elements that communication have in changing people behaviours. They include: process at first place, followed with channel, source, receiver and messages (Piotrow, 1997). The messages must be centered direct to the target audience whom are the members of the social network and who interact with one another, engage in social activities and even derive meaning from the habitual behaviour.

Health communication focused on the transmission function of information exchange, and how audience in different society responded and the features of messages that have greatest impact.

Most women in Nigeria do not have knowledge about dangers of breast cancer, thereby reporting late to hospital for treatment. Most women in Nigeria treat breast cancer with apathy, and would most probably not talk about it, or seek medical attention, even if they noticed signs of breast cancer (Ogbodo 2010).

It is important to enlighten women on the need to monitor the changes they might experience around their breast and report such cases to medical experts. Since early detection of breast cancer is the key to positive treatment, especially if opportunity is given to people to access information on preventive measures, and breast screening and self-breast examination, these will allow early detention and intervention and a change is created for longer survival of breast cancer patients, as is obtainable in most developed countries (Salaudeen, et al. 2009, Oluwatosin, et al, 2011).

Empirical Review

Oluwatosin and Oladepo (2011), studied knowledge of breast cancer and its early detection measures among rural women in Akinyele Local Government Area, Ibadan, Nigeria. It was found out that the majority of the respondents do not have knowledge of early warning signs of breast cancer; overall knowledge of treatment of breast cancer among rural women were poor; result indicated that none of the respondents acknowledged mammography as an early detection measure. It was found that few of the respondents acknowledged Breast Self-Examination (BSE) as an early detection measure.

Other findings also showed that the recommended clinical examination once a year was not popular, and that the major source of knowledge of breast cancer among rural women were elders, neighbors and friends.

Salaudeen, et al. (2009), studied on knowledge and attitudes to breast cancer and breast self-examination among female undergraduates in University of Ilorin and Kwara State Polytechnic, Ilorin the results of his findings revealed that respondents heard of breast cancer as a disease but the knowledge that breast cancer could be cured if detected at early state was low. The result also showed that few respondents were willing to undergo mastectomy as they considered it non-feminine to have one breast or lose both; some considered it unacceptable, while others emphasized on the psychological effect after surgery. The study also showed that very few respondent seek information on breast self-examination.

Bello et al. (2011) also studied on the relationship between knowledge and practice of breast cancer screening. These included nurses at the LAUTECH Teaching Hospital, Osogbo, and non-health professional women from the 35 local government areas of Osun state, Nigeria. The study discovered that few women have responded to the breast cancer screening due to the information they received.

In a study conducted by Omotara, et al. (2012) to determine the level of awareness, the attitude and practice of rural women regarding breast cancer, in four local government areas of Northeastern Nigeria, namely, Konduga, Bama, Gwoza and Madagali, revealed that only 58.2 per cent of them have heard of breast cancer, out of these, only 28.2 percent perceived the cause to be medical condition, 21.4 percent said it was spiritual, 20.8 percent believed breast cancer was caused by use of brassieres and 2.3 percent said it was caused by excessive breastfeeding. Only 38.7 percent knew of breast self-examination, 9.1 percent said they had done breast self-examination before, 58.8 percent said they may do it, if it will be beneficial, 19.9 percent said they will perform breast self-examination if their husbands agree and 4.2 percent agree to it if there is known cure. The study therefore suggested critical and urgent need for more awareness campaign on breast cancer.

Popoola, et al. (2012) evaluated the five-year survival rate pattern of disease presentation to determine some predictive factors of five years' survival among patient diagnosed and management for breast cancer at the Lagos State University Teaching Hospital, Nigeria. The result of the study revealed that at the point of coming to the hospital for treatment women with state III breast cancer were 45.6 percent, followed by women with stage IV (25 percent), stage II (16.6 percent), and state I (2.4 percent).

The overall five-year survival in the population studied was 25.6 percent, and the five-year survival rates for the patient were; stage II (45 percent), stage III (15 percent) and stage IV (5 percent). The five-year survival rate for early stage (I and II) was 45 percent, while that for advanced stage (III and IV) was 16 percent.
The study concluded that patients most times came to the hospital in advanced stages of

the disease and with aggressive tumour, which may have resulted in poor survival outcome due to lack of information about the danger of the disease.

To determine the level of awareness of mammography and mammographic screening among women in Lagos, Nigeria, Akinola, et al (2011 conducted a research to determine the level of awareness of female patients who visited various clinics at the Lagos State University Teaching Hospital, Ikeja, from January 2009 to June, 2009. The result showed that majority (59.6 percent) of the patients had a tertiary education. A family history of breast cancer showed 6 percent and less than 20 percent had under gone mammography. Only 20 percent of all subjects were aware of the recommendation that they should receive routine mammography and mammographic screening on an annual or biannual basis, depending on their age, and of the side effects associated with the procedure. The mass media was their main source of information, and majority (67.6 percent) of the patients had performed breast self-examination, but less than 5 percent of them had their breast examined by mammography. The result also showed low level of awareness about mammographic screening showing the urgent need to educate women about the risk of breast cancer as well as the relevance of screening for the early detection and treatment of the disease.

In order to assess the current level of knowledge of breast cancer and its early detection measures, Irurhe, Olowoyeye, Adeyomoye and Onajole (2012), studied knowledge and awareness of breast cancer among female secondary school students in Nigeria. The result revealed that respondents' knowledge of breast cancer and breast self-examination were high (97.3 percent). Majority of respondents knew how to carry out breast self-examination and 58.6 percent received their information from radio and television. The attitude of respondents to breast self-examination was good, and most (98.5 percent) thought that breast self-examination was necessary, while 84.3 percent claimed to have carried out breast self-examination before. The study therefore concluded that the level of awareness of breast cancer and breast self-examination were high among the female secondary school students in Nigeria.

Theoretical Framework
The study is within the framework of health belief model which was developed in the year 1950s by social psychologist Hochbaum, Rosenstock and others working in the United States Public Health Service. It is one of the oldest social sciences theories. It is one of the most widely used models for understanding health behaviours. The model defines the key factors that influence health behaviours as an individuals perceived threats to sickness or diseases, belief of consequence, benefits of action, exposure to factors that prompt action and confidence in ability to succeed. The theory assume that people desire to avoid illness or get well and people believe that a specific health action that is available to him or her will prevent illness (Becker, 1974). The theory is relevant to this research because people will change their behaviour by believing with what will cause them.

The study also adopted information diffusion theory. According to the theory founded by E. M. Rogers in 1962, information through the mass media can reach a wide and heterogeneous audience. Simultaneously and the information is highly influenced by the nature of the messages. The information requires the use of mass media for dissemination to the audience (McQual, 2005).

The mass media are powerful instrument of information that have to be adequately utilized during public campaign.

Methodology
The research adopts descriptive research design while the population of the study consisted the entire pregnant and breastfeeding women attending Nuhu Bamalli Maternity Hospital in the year 2021. Nuhu Bamalli Maternity Hospital is a Primary Healthcare Centre (PHC) that is located in Yakasai Ward which is an area of Kano Municipal, Nigeria.

The hospital provides several services including maternity care services to pregnant and breastfeeding women, antenatal and post-natal care and delivery. They provide child health services including immunization. Two hundred women were randomly sampled, using simple random techniques. The respondents were randomly sampled using sampling frame from the hospital resister. Questionnaire were chosen as research instrument. The data were collected through the use of well-structured questionnaire which was administered to the respondents. Data analysis was conducted through the use of simple percentages and tables were used for analysis. The result was presented in a tabular format.

Analysis of the Result
The research make use of two hundred (200) questionnaires administered on the respondents one hundred and eighty-five questionnaires were returned. The simple percentage was used to analyse the responses gathered from the questionnaires.

Table 1: Gender of the respondents

Gender	Respondents	Percentage
Female	185	100%
Male	0	0%

Source: Field report 2021

The table above indicated that all the respondents are female with percentage of 100% since the scope of the study is limited to women.

Table 2: Age of the respondents

Responses	Frequency	Percentage
18 – 25 years	45	24%
26 – 35 years	86	46%
36 – above years	54	30%
Total	185	100%

Source: Field report 2021

The above table shows the age brackets of the respondents those that fall within the range of 18 – 25 years are 45 respondents representing 24% and those respondents with 26 – 35 years of age are 86 respondents with 46% and those with age bracket that falls within 36 years and above are 54 respondents representing 30%.

Table 3: Do you use mass media as a source of information?

Responses	Frequency	Percentage
Yes	94	51%
No	55	30%
Sometimes	36	19%
Total	185	100%

Source: Field report 2021

Table 3 indicated that 94 respondents representing 51% use mass media as their source of information, 55 respondents representing 30% said no only 36 respondents representing 19% uses mass media on rare occasions.

Table 4: Respondents access to any form of mass media

Responses	Frequency	Percentage
Yes	185	100%
No	0	0%
Total	185	100%

Source: Field report 2021

The above table shows that almost all the respondents have access to any form of the mass media with percentage of 100%.

Table 5: Mass media influence on managing breast cancer

Responses	Frequency	Percentage
Yes	125	67.57%
No	60	32.43%
Total	185	100%

Source: Field report 2021

The above table shows that 125 respondents representing 67.57% are highly influenced with mass media messages on breast cancer. Only 60 respondents representing (32.43%) were not influenced.

Table 6: The mass media is a tool for communicating early stage of breast cancer

Responses	Frequency	Percentage
Strong agree	62	34%
Agree	13	23%
Strongly disagree	31	17%
Disagree	49	26%
Total	185	100%

Source: Field report 2021

Table 6 revealed that majority of respondents strongly agree on the media messages in detecting early stage of cancer by providing relevant information on the sign. Only 26% disagree with the above fact.

Table 7: Effectiveness of the media messages in managing breast cancer

Responses	Frequency	Percentage
Very effective	98	52.97%
Effective	36	19.46%
Not effective	51	27.57%
Total	185	100%

Source: Field report 2021

Table seven revealed that 98 respondents (52.97%) believed with the effectiveness of the mass media messages in managing breast cancer. 51 respondents representing 27.57% did not believed with the effectiveness of the messages.

Table 8: Distribution of respondents according to major source of information on breast cancer

Responses	Frequency	Percentage
Radio Channels	78	42.16%
Television stations	40	21.62%
Other sources	50	27.03%
Newspaper	8	4.32%
Breast cancer billboard/posters	2	1.08%
Internet	7	3.78%
Total	185	100

Source: Field report 2021

Table 8 revealed that Radio channels appear to be the highest medium through which respondents listen as their source of information on breast cancer with highest percentage of 42.16%, television stations with 40 respondents representing 21.62%. other sources with 50 respondents representing 27.03%. internet has the least percentage with 7 respondents representing 3.78%.

Findings
The study examined the level of awareness the various channel of communication used by the respondents in managing breast cancer and the effectiveness of the mass media messages. Findings revealed that majority of respondents uses mass media messages to address their problems relating to breast cancer. Some of the respondents even attested that it is through the mass media that they know the early sign of breast cancer. These helped them to address the issues promptly in the hospital. Findings also revealed that majority of respondent have any access to any form of the mass media and they received their messages in any of form of the media. Respondents also attested that the media messages influenced their attitude in managing breast cancer. Findings also revealed that majority of respondents believed with mass media messages and considered it to be very effective in providing them with valuable information on breast cancer. The findings is in line with the theory adopted as individual perceived threats to sickness or diseases and belief of consequences, benefits of actions, or expose to factors that prompt action and confidence inability to succeed. Mass media are powerful instrument of information that have to be adequately utilized to avoid threat to sickness or diseases.

Conclusion
Mass media is an agent of change which helps in providing necessary information on issues relating to our health. Mass media have the capacity of reaching homogenous audience and impacts on their lives.

Breast cancer caused 488,503 deaths worldwide. Cancer is the uncontrolled growth of abnormal cells in the body. Breast cancer is a type of cancer originating from breast tissue, most commonly from the inner lining of milk ducts or the lobule that supply the ducts with milk. Awareness is campaigns important in managing breast cancer as majority of the findings revealed that media messages are very effective in providing valuable information to the women in Nuhu Bamalli Maternity Hospital.

Recommendations
Based on the findings of the study, the following recommendations are offered:
1. The campaign on breast cancer should be comprehensive to include jingles, dramas and consistent health talks which should be repeated every week.
2. Both Federal, State and Local Governments should put more hand together and be involved in the fight against breast cancer.
3. The mixed communication campaign would help in addressing the issues managing of breast cancer.

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