Breast Cancer Campaigns among Women in Benue State:
When Knowledge Does not Translate to Practice

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Abstract
In Nigeria, 116 out of every 100,000 women have breast cancer. Annually, breast cancer (BRCA) incidence rate is over 1million cases and over 411000 deaths. Survival rate is less than50% in developing countries, in contrast to 90% in developed countries. This, as studies revealed, is due to late detection and diagnosis, poor knowledge of breast cancer (BRCA), its causes, preventive measures and screening techniques. Consequently, campaign managers have resorted to aggressive awareness and sensitization programmes aimed at increasing knowledge, changing attitudes and enhancing the practice of all necessary screening procedures; since success is highly dependent on the influence of these campaigns to increase knowledge, change unhealthy attitudes towards BRCA prevention and treatment and enhance practice of screening methods. The study, therefore, looks at the influence of breast cancer campaigns on knowledge, attitude and practice (KAP) among women in Benue State. Using survey research design, findings revealed that majority of women in Benue State are exposed to breast cancer campaigns and awareness level of women about breast cancer is relatively high. However, it was revealed that knowledge of breast cancer among Benue women is superficial as genetic testing is quite a new subject to most of the respondents and Benue women have negative attitude towards breast cancer early detection campaigns. This led to poor practice among Benue women.
Key words: ***.Influence .Campaigns .Knowledge .Practice .Women***

Introduction
The entire human race is at the brink of total destruction because of the increasing susceptibility to cancer. Statistics emanating from different health organisations and agencies around the world indicate that there are over 16million new cases of cancer globally. This figure, according to World Health Organization (WHO) 2011report, is likely to double in 2020 (Chustecka, 2011,p.1). Over 16 million cancer cases have been predicted to occur in 2020 with 70 percent of these cases likely to take place in developing countries with Africa accounting for over 57 percent incidence rate and one million cases of breast cancer (Chustecka, 2011,p.1).

The International Agency for Research on Cancer (IARC) gave an estimate of over 681,000 and 512,400 new cases of cancer in 2008 alone. These figures have increased to 1.4 million cases and 714 thousand deaths in 2010 (IARC Report 2010,p.3). Unfortunately, it is projected by IARC that these numbers will double before 2030 because of the aging and growth of the population; unhealthy behaviours associated with lack of exercises, dieting, smoking, economic development and urbanization. According to this report, the factors mentioned above result to different types of cancers such as cancer of the stomach, lungs, liver, uterus, kidney(renal cell carcinoma), blood cancer known as leukemia, sinuses and breast cancer. Breast cancer ranks

the second most prevalent of all cancers worldwide after cancer of the lungs (World Cancer Report 2011,p.4).

Globally, there are over 1.2 million cases of breast cancer with 411,000 deaths annually. More than 56-60 percent of these deaths occur in developing countries including Nigeria (Akpo, Akhator &Akpo2010,p.3). It is estimated that in every 100,000 Nigerian women, 116 of them have breast cancer and that more than half of the number has a very high generic risk status and as such are vulnerable to the disease (American Cancer Society 2009,p.6). In addition, Akpo, Akhator and Akpo(2010,p.4), report that a recent oncological review of cases in Nigeria revealed that, breast cancer survival rate is less than 50 percent in Nigeria in contrast to 90 percent in developed countries. The good news however is that experts believe that the high incidences of this disease can be reduced through aggressive enlightenment campaigns.

To this end, campaigns on breast cancer have been widely organized, not just in Benue State but in Nigeria, Africa and the world over. Worthy of note are the step-down workshops at state levels developed by the wives of the governors of the 36 states of the federation, as a follow up on the action plan by the United Nations Population Fund (UNFPA) in April 2008 at the Federal Capital Territory Abuja. The need to preserve lives and ensure a steady decrease in the level of maternal mortality resulting from breast cancer has been very salient. Also, the pet project of the Miss University Nigeria (MUN) which was an awareness and sensitization campaign against breast cancer was hosted in Makurdi, the BenueState capital in December 2010. In fact, the MTN foundation has breast cancer screening centers located within Teaching hospitals, Federal Medical Centers (FMCs) and state general hospitals across Nigeria (MTN Foundation 2011 Report).

It is however, disheartening to note that despite several awareness and sensitization campaigns on the need for regular self examination as a preventive measure for breast cancer; so many women are still victims of the dreaded disease. As a matter of fact, breast cancer statistics indicate an increase, especially in developing countries that previously enjoyed a low incidence of the disease. It therefore means that, accessibility to campaigns, awareness and knowledge level of risk factors, attitude towards campaigns and practices are highly questionable. If women are aware and exposed to campaigns, whether or not they practice what they are taught is a determinant of the level of success of these campaigns.

A look at these significant campaigns organized by the *National Breast Cancer Coalition,* tagged "Not Just Ribbons" with emphasis on substantive issues such as *genetic discrimination,* access to medical care, *patient rights,* and anti-pollution legislation as against, undue emphasis by business men on the pink ribbons; and *Breast Cancer Action*'s "Think Before You Pink" campaigns, gives an understanding of what influence a well structured campaign canexert on people (Sulik 2010,p.366).

Campaigns must be structured in such a way as to accommodate factors which are vital in the fight against breast cancer. When access to the campaigns has been ensured, exposure at the right time and place is the next consideration after which the structuring of the campaign messages is done. These messages are meant to be the basic units of positive influence in the campaigns as they will determine the knowledge level, attitude and practices of the target audience. It is the messages that will inform the women of the factors that cause breast cancer, the types of breast cancer, the need for self examination and early detection, the symptoms of breast cancer, treatment for it at the early stage and so on.

A good number of people might therefore underestimate or overestimate their generic risk status based on their level of awareness of the possible genetic mutations that can result in breast cancer. People who are not aware of generic factors will not understand that if a member of the family is diagnosed of breast cancer, every other female member stands a risk of developing breast cancer thus the emphasis on periodic generic testing at the hospital, besides the prescribed self examination.

This brings us to the efficacy of awareness in the campaign against breast cancer; with the view that efforts at raising awareness will lead to greater knowledge and invariably lead to earlier detection and a greater survival rate. This awareness level however has the information angle where according to a Chinese proverb: "the road to health is the road to knowledge and ignoring knowledge is sickness". Then there is the psychological angle where too much of

awareness causes guilt, fear, anxiety, depression and negative attitudes of self isolation in breast cancer patients.

Statement of Problem

Several campaigns have been organized in the bid to fight breast cancer, yet the current statistical data of maternal mortality resulting from breast cancer shows an increase.

For this reason, campaign managers do not know whether to attribute this increase in death rate to inefficiency in campaign message delivery or timing for target audience in campaign slots. Also, they do not know whether to blame it on audience members' predispositions towards vital instructions and teachings adopted in the breast cancer campaigns. However, some observers believe that any campaign aimed at fighting this deadly disease must have all it takes to increase knowledge, change attitude and enhance practice of screening methods among the audience. According to them, except there is a significant change in the attitude of those exposed to breast cancer campaigns, the entire exercise will amount to futility. This is the crux of the study. The study therefore seeks to find out the extent to which Benue women are exposed to breast cancer campaigns. It will also find out whether or not they know the factors that can make them vulnerable to breast cancer, and how they can prevent it. Again, it will ascertain their attitude and practice towards campaign messages, on prevention, early detection and treatment of breast cancer.

Research Questions

The following research questions were directly drawn from the objectives of the study.

1. To what extent are women in Benue State exposed to breast cancer campaigns?
2. What is the level of awareness among women in Benue State, about campaigns on the causes, prevention, early detection and treatment of breast cancer?
3. Has the knowledge level of women in Benue State on breast cancer risk factors, prevention, early detection and treatment increased due to their exposure to the campaigns?
4. What is the attitude of women in Benue State towards breast cancer campaigns on the prevention, early detection and treatment?
5. To what extent do they practice Breast Self Examination (BSE), Clinical Breast Examination (CBE), Mammography and Genetic testing as a result of exposures to breast cancer campaigns?

Literature Review

Awareness, Knowledge and Exposure to Campaigns against Breast Cancer.

Breast cancer is a dreaded disease and a principal cause of cancer mortality among women worldwide and in Nigeria. It is the most common cancer among women and some men who are hypogonadic (men with BRCA1 and BRCA2 genetic mutations). BRCA1 and BRCA2 are human genes that belong to a class of genes known as tumor suppressors. Changes in BRCA1 and BRCA2 genetic cells therefore result in breast cancer (National Cancer Institute 2009,p. 2&4). Cells in the breast begin to grow uncontrollably and invade other normal cells and tissues, spreading to various parts of the body (invasive breast cancer) in such a way that the normal body cells and tissues are obstructed from carrying out their usual functions. When this happens, the normal cells that are being obstructed from performing normally are said to have been strangulated to death. The uncontrollable cells develop into tissues in a collection known as malignant tumours which are fatal. The ones however that grow without spreading (non invasive breast cancer) and overtaking normal cells are called benign tumours because they are not terminal.

The cause of breast cancer has not been completely ascertained. As a result, it cannot be said with all certainty what the cause of breast cancer is. However, medical prognosis has attributed the cause to certain genetic/hereditary factors, environmental factors and life style. From this end, it can be stated categorically that breast cancer can be prevented and that your life is in your hand since an individual's actions play a vital role in making lower cancer risk a reality. This was properly captured in a statement made by Chris & Beng (2010,p.4) citing Marilyn Gentry, the President of the American Institute of Cancer Research.

Know that cancer can be prevented and your actions play a vital role in making lower cancer risk a reality to you and your family . . . there are things you can do today to reduce your risk of cancer. Not quick but basic lifestyle and dietary changes that will mean a lower cancer risk for life

In the same light, perceived susceptibility to the threat of breast cancer, perceived severity, coupled with modifying factors like age, knowledge, ethnicity, sex, personality and socioeconomic factors will determine the likely hood of actions based on perceived benefits minus perceived barriers (Stretcher & Rosenstock 1997,p.34).

In addition, two research studies conducted in 1980 and 1982 respectively by Leathar and Roberts (1985,p. 668), in 1985 gave a more elaborate report on attitudes towards screening practices and made older women its central focus. The study was titled: "older women's attitude towards breast disease, self examination and screening facilities: implications for communication". Using Focus Group Discussion, the study identified appropriate strategies for communication. The results showed that knowledge of breast disease and screening facilities was poor and that many psychological and emotional issues inhibited self examination. It revealed, however, that increased information about BSE, CBE is unlikely to influence attitude and practice unless it is presented together with emotional support, provided by setting breast screening within general health screening rather than emphasizing the single disease through mass media channels.

Results also revealed that, specific beliefs about breast cancer association with breast feeding and pills were underdeveloped and not clear, awareness that women aged over 40 were more at risk was superficial although it was generally accepted that older women were more susceptible to cancer. More so, the terminal nature of the disease dominated their thoughts rather than early detection. And women concluded that any lump found was bound to be malignant. Surgery was the only method of treatment they could mention.

It therefore identified social class, poverty, age, poor knowledge and confusion about the symptoms and extent of the disease, as psychological and emotional issues that inhibit screening practices. The study illustrated that negative or positive attitudes were determined by psychological and emotional issues since the dominant attitude expressed by respondents in the focus group discussion showed that the topic was threatening. The psychology of losing a breast owing to late detection felt abnormal and gave the affected woman a feeling of being incomplete. Also, pity from friends and relations and the fear of possible death from the disease greatly hindered thoughts of practicing screening. The thought of discovering a lump could not be withstood by many because most of them concluded that any lump found was bound to be malignant. There was uncertainty about what to look out for. They were also pessimistic about learning or teaching the correct procedure.

Reasons for not using screening facilities were largely unrelated to factual knowledge, though factual information was incomplete or inadequate. Wrong attitude towards screening is emotionally based. The fear of a negative outcome is strong enough to make women refuse screening.

The implication for communication therefore was that using media channels alone to advocate for screening practices would only increase anxiety unless the means to resolve it are provided; such means as emotional support. The study recommended that screening should be carried out in the context of general health screening rather than emphasizing a single disease. Since the policy that breast screening should be practiced as a single exercise may not be quite appropriate for older women particularly those belonging to the working class.

In a similar light, the knowledge of age factor in higher breast cancer risk is expected to make women devoted to periodic screening and self examinations for early detection. However, knowledge of age as a risk factor in the development of breast cancer is not enough to influence practice of screening but the benefits of screening and threats of late detection without screening, is more likely to prompt adoption of screening at older age. So the link between knowledge, attitude and practice is thick. Knowledge influences attitude and positive attitude culminates into practice.

It is therefore very important that campaigns inform adequately, paying particular attention to barriers that hinder adoption of the desired behaviour.

Practice of Preventive Measures: BSE, CBE, Mammography and Genetic Testing

There are so many things to look out for in BSE, CBE, Mammography, Genetic testing and other screening methods. The following symptoms may suggest the onset of breast cancer. Breast lump(s) or thickness, dimpling or puckering, unusual pain, a sore that does not heal around the nipples, itching or rash, retracted (turned in) nipples, change of shape or size, bloody discharge from the nipple, arms swelling or lump in the armpit (World Cancer Report 2011,p.10).

The essence of screening practices is to detect the symptoms that are not visible to the eyes and those that cannot be detected by mere palpating of the breast. For instance, mammography screening can detect breast lumps but might not pick out other breast diseases like breast fibroid and cysts. In this case a breast biopsy screening test will be required to check for other related diseases. When a lump or other abnormality is detected in the breast, through BSE, or CBE the doctor will use many investigative techniques to arrive at a specific diagnosis as possible. Detecting one or any of these symptoms therefore depends on women's attitude towards detection and practice of screening.

The most successful advancement in the fight against cancer so far has been the early detection of cervical cancer by cytology and of breast cancer by mammography. A recent analysis by an International Agency for Research on Cancer (IARC)working group concluded that under trial conditions, mammography screening may reduce breast cancer mortality by 25-30 per cent and that in nation-wide screening programmes a reduction by 20 percent appears feasible (World Cancer Report 2011,p.9).

The ultrasound scan produces a photographic picture of soft tissues in great details. It is used as a tool to detect lumps in the breasts. It is also widely used in gynecological investigations (Lagos State Ministry of Health 2009.p.6).

Cutting-needle biopsy technique involves removing a small amount of tissue from a lump for further investigation. Under local anesthetic a special needle is inserted into the lump in order to withdraw a fine core of tissue from it. The open biopsy however is an alternative to cutting-needle biopsy. This involves cutting the skin of the breast open to remove the entire lump for further investigation. It is very appropriate for women over the age of 30 years with an obvious breast lump to have it removed for further analysis (Lagos State Ministry of Health 2009,p. 6).

Though cancer can be prevented, it can also be treated. This however depends on the stage of presentation and the extent to which the disease has caused damage to the body. That is why the emphasis of campaigns remains prevention. The extent to which late presentation can destroy is fatal and cannot be overemphasized. When it is detected early before it becomes terminal, it can be treated. The most common modes of treatment have been identified as drugs, surgery, radiation therapy, or a combination of these modes of treatment (Lagos State Ministry of Health 2009,p. 7).

Theoretical Framework

This study is anchored on Attitude-Change Theory. The Attitude Change Theory was developed from propaganda theories in the 1930s during World War II (Baran & Davis 2012,p. 175). The theory explains that there are pre-existing attitudes, whether biological or psychological which have to be changed if selected messages must have any effect on the target audience. Again, it explains that these pre-existing attitudes are core and therefore stand as barriers to effective penetration of messages for desired change. Thus an intellectual and emotional strategy of communication will influence change if properly channeled to do so. Change in evaluations and perceptions of an individual's predispositions will take place if the required modification favours his expectations, if it is tied to someone he admires, or if it is bound to be beneficial to him (Wood, 2000,p.539).

In the campaign against breast cancer, possible barriers to knowledge acquisition, positive attitude and practice of campaign messages may include psychological, emotional and physical. Psychological when women see issues with, opening up to modern medicine when they detect or observe body changes that may be harmful to their bodies and conceal their observations due to shyness or cultural beliefs. Physical, when screening facilities are not

reachable or available, or medical specialists are limited. Emotional, when the fear of being diagnosed of the disease overrides the need for early detection.

The campaign messages must therefore be structured to detect these obstacles to effective communication and assess how effectively, selected messages can overcome them. The strategy must appeal to the attitude of the people as this is a major determinant of effective practice.

Methodology

Research Design

The research design considered apt for this study is survey. This is because the nature of the study requires that the researchers solicit for audience response in order to determine the level of awareness and knowledge among Benue women about the causes of breast cancer, prevention, early detection and treatment.

Personal interviews are, therefore, suitable to generate qualitative data which will substantiate data from the questionnaire; while a well designed questionnaire was used to collect quantitative data, which answered the research questions raised earlier.

Four persons were interviewed; three of them were females that fall within the specified age range and the last was an oncologist. The questions structured for the interview, answered the research questions substantially.

Population of the Study

In this study, the researchers adopt the women in Benue State within ages fifteen and above from the 23 local government areas in the State as the population of study from where a representative sample is drawn. The population of this study therefore is 2,109,598 comprising of all females drawn from the 23 local government areas in Benue State; who are fifteen years and above (National Population Commission Census Report 2006).

Sample Size

Using the Australian Calculator, by the National Statistical Service (NSS) the sample size is 405.

Sampling Techniques

The probability sampling technique was employed in the study, with particular reference to the multiple stage sampling technique. This technique requires that at each stage of sampling, two or more techniques can be employed. In this study, a cluster already exists from the three senatorial zones of the state. From the three senatorial zones A, B and C, where there are 7, 7 and 9 Local Government Areas (LGA) respectively, the researchers selected randomly, three LGAs each from zones A and B; and 5 LGAs from zone C. So from a total of eleven LGAs, the copies of questionnaire were distributed. Thus two major techniques were employed: the cluster sampling and the simple random sampling techniques. The copies of questionnaire per zone were arrived at by dividing the number of LGAs in each zone by the total number of LGAs in the state, multiplied by the sample size. The copies of questionnaire per zone were eventually divided by the number of randomly selected LGAs for each zone. So, the six LGAs from zones A and B had 41 copies of the questionnaire each, since 123.26 copies were the allocation for zones A and B each. The 5 LGAs in zone C however had 31.70 copies of the questionnaire each, since 158.48 copies were meant for the zone.

Measuring Instruments

The questionnaire was carefully designed to accommodate the major variables in the study; the variables being breast cancer campaigns, knowledge, attitude and practice. Personal interviews were also used to substantiate on responses gathered from the questionnaire

Data Presentation, Analysis and Discussion

The researchers sampled a total of 405 respondents; using simple percentages and tables for data analysis. The questionnaire had a total of 31 questions consisting of descriptive data and structured questions on breast cancer awareness and knowledge, attitude and screening practices. Interview was equally held. The discussion was guided by the five research questions

for the study. The following are therefore answers to the research questions drawn from the objectives of the study in chapter one. These answers were reached from the findings of the field survey research.

Research Question 1

To what extent are women in Benue State exposed to breast cancer campaigns?

Responses to this question came from field survey answers to questions seven and eight in the questionnaire. Data under this research question indicate that, 50 or 12.3% of the respondents are exposed to breast cancer campaigns, 350 or 86.4% are not exposed while 5 or 1.2% of the respondents are not sure of their exposure to the campaigns. Evidence of exposure to campaigns is further presented as respondents provide their sources of exposure. As seen in table eight above, 40 respondents representing 10% of the total number sampled referred to friends and street van shows as their sources of breast cancer information, 62 or `15% of the respondents said their relations are their sources, 223 or (55%) named the media-print/electronic as their source of information and 80 or (20%) said medical doctors and medical seminars were their sources of breast cancer information.

These data provide findings that explain that awareness about campaign programmes does not guarantee exposure to programmes but individual disposition to the programmes and disposition to the credibility of sources. As a result, people tend to be selective of sources and of whether or not to participate in these programmes. People also tend to perceive threats and barriers to exposure differently; and depending on the direction that perception takes, the action of exposure to campaign programmes will be defined. Findings also suggest that campaigns through the media are not the only sources of information even though they are the major sources.

Research Question 2

What is the level of awareness among women in Benue State about campaigns on the causes, prevention, early detection and treatment of breast cancer (BRCA)?

Questions six and 10 from the questionnaire were used to elicit for audience response on their level of awareness about BRCA campaigns. The data presented explain that 300 or 74.1% respondents are aware of sensitization campaigns about breast cancer, 45 or 11.1% respondents said they are not aware of the campaigns while 60 or (14.8%) of the respondents said they are not sure whether or not there are campaigns against breast cancer..

As a result of awareness, data presented also showed that, 284 or 70% respondents know that breast cancer is a disease that kills; 61 or 15% know that it can be treated if detected early, 40 or 10% know that it presents as a painless lump and 20 or 5% know that it is an uncontrolled growth of cells in the breast.

The findings here therefore indicate that awareness level about breast cancer campaigns is relatively high and that, knowledge about breast cancer as a disease condition is relatively high. In one way or the other a good number of the people have heard that BRCA is a deadly disease condition that has to be prevented or detected early. So it is quite obvious that the people are generally or superficially aware of the disease and the 'fights' against it.

Research Question 3

Has the knowledge level of women in Benue State on BRCA risk factors, prevention, early detection and treatment increased due to their exposure to the campaigns?

In answering research question three above, questions 9, 11-16, 20, 22, 27-31 were explicit about the knowledge level of women in Benue State on BRCA risk factors, prevention, early detection and treatment due to their exposure to the campaigns.

The figures presented under this research question reveal that, 70 respondents or 17.3% see early detection as the sole aim of breast cancer campaigns, 155 or 38.3% of the respondents say prevention is the aim of the campaigns while 180 or 44.4% of the respondents say both prevention and early detection cannot be separated as campaigns are aimed at achieving any of them.

Also, data show that 284 or 70% of the respondents know that breast cancer (BRCA) can only be treated at its initial or early stage, while 121 or 30% do not know the stage at which

BRCA can be treated. In addition to knowing that it has to be detected early some people showed their understanding of the word early as data show that, 284 or 70% of the respondents know that before symptoms become obvious, breast cancer stage is early and should be given appropriate treatment while 121(30%) respondents do not know when to say it is early or late.

Data above represents the fact that knowledge is superficial as genetic testing is quite a new subject to most of the respondents. The figures indicate that only 162 or 40% of the respondents see the need for genetic testing, 81 or 20% said no and 162 or 40%, said they were not sure that genetic testing should be done. Again, data indicate that 162 or 40% of the respondents are knowledgeable about genetic factors being causative of BRCA while 243 or 60% are not sure whether or not BRCA is caused by genetic factors.

However, it is quite obvious from data presented that 365 or 90% of the respondents have the correct knowledge of the fact that diet is a causative factor of BRCA while 40 respondents representing 10% of the respondents said they were not sure of dieting being a cause of BRCA. As a result of the above knowledge, data also provide that 90 of the respondents or 22% control intake of calories by reducing the consumption of foods high in calories, 94 or 23% reduce their consumption of white flours, 72 or 18% of the respondents consume high amounts of vegetables instead, 68 or 17% engage in regular exercises while 81 or 20% do nothing to control intake of calories.

The most common symptoms known to the respondents are swelling, pains and lumps. This is evident in data from table 20 which show that 300 or 74% of the respondents know that BRCA presents as lumps, pains and swelling, 40 or 10% of them said it presents as reddening of nipples and dimpling of the breast while 65 or 16% of them said they do not know the symptoms of BRCA presentation.

Despite exposures to campaigns, knowledge about the peak age of BRCA presentation in blacks is low. This is as 100 respondents representing 25% of the respondents know the peak age of BRCA presentation in blacks, 150 or 37% of them, do not know and 155 or 38% are not sure of the peak age of BRCA presentation.

Again, result indicates that 300 or 74% of the respondents look out for lumps, pains and swelling during BSE, 20 or 5% of them look out for reddening of nipples, breast dimpling and an orange-like skin texture respectively while 65 or 16% are not sure of what to look out for. 305 or 75% of the respondents said yes to 7-10 days after menstrual period as an ideal time for breast examination, 100 (25%) of them said they were not sure of the most suitable time for breast examination.

Results obtained from the data generated equally reveal that 290 or 72% of the respondents know that mammography is a form of early breast cancer detection technique, 65 or 16% of them said it is not a form of early BRCA detection technique, and 50 or 12% of them do not know whether or not it is a form of early BRCA detection technique.

Figures from the survey also indicate that, 284 or 70% of the respondents know that, removal of breast lump does not alter the risks of breast cancer recurrence, 40 or 10% said no, it alters the risks of predisposition to BRCA while 81or 20% of them are not sure whether or not removal of breast lump alters the risks of predisposition to breast cancer.

Field survey equally shows that, 340 or 84% of the respondents know the signs to look out for when palpating the breast, while 65 or 16% of them do not know what signs to look out for.

Findings show that some people emphasize prevention through avoidable actions while others place value on early detection. Early detection remains important as determinant of a successful treatment. There is the need however, for campaigns to enhance in-depth knowledge among women and emphasize prevention and early detection in all screening procedures to ensure their safety.

Findings also reveal that knowledge about genetic testing is low; as a result most of the respondents seem indifferent about it. Also, that it has not been ascertained that genetic testing is attainable in Nigeria. This explains the reason why most of the respondents do not appreciate the need for genetic testing. It therefore means that knowledge is superficial since genetic testing is quite a new subject to most of the respondents.

Discoveries also reveal uncertainty about the causes of the disease condition as an aspect that is also not known to medical practitioners. As a result they simply restrict it to genetic and environmental causes.

Furthermore, it was observed that despite some levels of knowledge and awareness that consumption of foods high in calories is unhealthy; some group of people will not make efforts to adopt healthy nutritional values. This agrees with the Health Belief Model (HBM) that says health behaviour is determined by ones belief and perception about a disease and the strategies available to decrease its occurrence and that personal perception is influenced by a whole range of intrapersonal factors affecting health behaviour (Taylor et. al 2007, citing Hochbaum 1958). Based on the intrapersonal factors, Individuals adopt certain health behaviours.

Additionally, observations are that, not every female knows how BRCA presents itself. This explains why most females do not know the peak periods when they should expect BRCA presentation and thus look out for symptoms thoroughly. Interestingly, the most common symptoms females have knowledge about are the presence of lumps, swelling and pains. As such only a few of them have knowledge about reddening, dimpling and an orange-like skin texture as symptoms of BRCA presentation.

Field surveys have shown that 7-10 days after menstrual period is ideal to ensure that females do not confuse pains or swelling associated with menstrual periods for BRCA symptoms. More so, findings emphasize the lack of adequate knowledge or the shallow nature of knowledge about the disease condition of BRCA.

Research Question 4

What is the attitude of women in Benue State towards breast cancer campaigns on the prevention, early detection and treatment?

In response to question 17, 284 or 70% of the respondents said that there are people who underestimate their risk status, 40 or 10% said no, people do not underestimate their risk status and 81 or 20% of them said, they are not sure whether or not people underestimate their risk status.

For question 18, it can be interpreted that 365 or 90% of the respondents said that there are people who overestimate their risks status while 40 or 10% of them said they are not sure if people overestimate their risk status. Data also showed that 142 or 35% respondents agree and strongly agree respectively that families that have hereditary syndrome predisposing to BRCA should go for genetic testing while 121 or 30% of them said they are not sure whether or not such families should go for genetic testing.

It was observed that the level of knowledge of the cause of BRCA can make people underestimate their risks status. It was also observed that there are people who do not feel threatened even with the increasing knowledge of susceptibility resulting from genetic factors. Such people seem to have certain beliefs hinged on the fact that they cannot be infected.

From another angle, this result agrees with the opinion by Olson (2002, p. 240); Welch (2010,p.16); and Sulik (2010,p. 74) that too much of awareness causes guilt, fear, anxiety, depression and negative attitudes of self isolation in breast cancer patients. This implies that too much of awareness and knowledge about breast cancer and the threat of susceptibility will agitate people to overestimate their risks status. However, to ease or reduce the fear of overestimating risk status and the anxiety that every female in the family is not safe, it is wise for such families to go for genetic testing. It will reveal risk status and may reduce the need for screening.

Research Question 5

To what extent do they practice Breast Self Examination (BSE), Clinical Breast Examination (CBE), Mammography and Genetic testing as a result of exposures to breast cancer campaigns?

Responses to questions 23-26 provide answers to research question 5. Responses in response to question 23 make it obvious that, 50 or 12% respondents visit health centers for CBE, 10 or 2% very often, 75 or 19% not often, while 270 or 67% of the respondents do not visit health centers at all. Also data show that 324 or 80% of the respondents practice breast self examination while 81 or 20% do not.

Data also showed that 162 or 40% of the respondents do not believe that they are susceptible to the disease, 81 or 20% of them do not practice BSE because they do not remember, 40 or 10% of the respondents do not because they do not attach importance to BSE; 122 or 30% of the respondents do not practice BSE out of sheer levity for the issue of BRCA or

BSE. For question 26 on the questionnaire, 200 respondents or 49% often practice BSE, 124 or 31% practice it very often, and 81 or 20% of the respondents do not practice BSE often.

Findings indicate low practice rate for CBE. These also show that though a good number of females do not visit health centers for CBE, they practice BSE conveniently and most people are not even consistent with the practice of BSE. This clearly portrays high levels of negative attitudinal barriers to the success of BRCA campaigns; and as such, campaigns must appeal to these barriers if success must be achieved.

Summary of Findings

1. Majority of Women in Benue State are exposed to breast cancer campaigns
2. Awareness level of women about breast cancer is relatively high.
3. Data revealed the fact that knowledge of breast cancer among Benue women is superficial as genetic testing is quite a new subject to most of the respondents.
4. Benue women have negative attitude towards breast cancer early detection campaigns
5. Practice among Benue women is low.

Conclusion

In conclusion, the respondents are aware of sensitization campaigns about breast cancer and they are also exposed to breast cancer campaigns, and the media- print/electronic are their major sources of information. Females in Benue State also know that prevention and early detection are vital aims of the campaigns. However, practice of CBE is still on the low side, though some factors seem to inhibit it.

Recommendations

Since the study has revealed that practice of screening methods is highly inhibited by emotional and psychological factors, the study recommends that campaigns should be structured to adequately accommodate these factors and effectively appeal to these negative attitudinal barriers if success must be achieved.

Prevention of breast cancer should be emphasized paying gross attention to factors that are responsible and how they can be effectively handled. This is very important since cure of breast cancer is based on the type of cancer, the stage of diagnosis and the extent of diagnosis; which could start from the last stage (stage IV). If curative measures are taken, survival rates will invariably reduce as cure of cancer is not certain despite medical techniques and treatments available.

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