Impact of the 'Pink October' campaign on breast cancer awareness levels and screening uptake among students of Masinde Muliro University of Science and Technology in Kakamega County, Kenya

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ABSTRACT

This study investigated the extent to which the annual Pink October campaign influences knowledge levels and breast health-seeking behavior among students of Masinde Muliro University of Science and Technology (MMUST) in Kenya. The study employed a mixed-method research design that was both quantitative and qualitative. A semi-structured questionnaire was administered to a representative sample of 400 students, selected through multi-stage cluster sampling and proportionate stratified sampling from the target population of university students at MMUST. The questionnaire aimed to assess the levels of breast cancer awareness and screening practices among university students after the campaign month of October 2024. This study was undertaken between the 4th and 24th of November 2024. Data analysis was carried out using the Statistical Package for the Social Sciences (SPSS) version 19. Findings indicated that the Pink October campaign was effective in improving general awareness levels among the targeted audience. Challenges such as lack of awareness about screening, limited access to screening equipment, and the financial costs of the procedure, however, limited its effectiveness with regard to the uptake of breast cancer screening. The study concluded that the Pink October campaign is a useful tool in raising awareness, but uptake of screening was very low despite it being the primary intervention measure, as it increases chances of early detection and treatment. There is thus a need for consistent engagement with the target audience and the use of audience-focused communication strategies alongside policies that facilitate free screening services throughout the year.

Keywords: Breast Cancer Awareness, Health-Seeking Behavior, Pink October Campaign, Screening Uptake, University Students

I. INTRODUCTION

Breast cancer (BC) accounts for 23% of all cancer cases in Kenya, making it the most prevalent form of cancer. Despite the many campaign strategies for BC awareness creation, which are mainly communicated during Breast Cancer Awareness Month, globally recognized as the *Pink October* campaign, including BC screening, breast self-examination, and social media campaigns, BC remains prevalent, with the majority of cases presenting at late stages (III and IV) when the disease is already advanced and most difficult to treat. The most common communication strategy used by national governments and health service providers in creating BC awareness is the *Pink October* campaign, yet information about its suitability in creating the expected awareness for early detection and treatment is scarce. Previous studies have focused on BC survivors, BC patient statistics, and Google Trends-based research about prevalence and mortality rates. In addition, traditional mass media (print, radio, and television) coverage of BC has focused on survivor testimony and treatment options, which goes against the World Health Organization, (WHO, 2025) recommendation through the Global Breast Cancer Initiative (GBCI) that emphasizes awareness creation as the primary means of managing the disease. There are very few documented studies that investigate the utilization of the *Pink October* campaign as an awareness tool in BC. It is against this background that the study seeks to fill this knowledge gap by investigating the utilization of the *Pink October* campaign as an awareness tool in BC awareness among students of Masinde Muliro University of Science and Technology in Kakamega County, Kenya.

BC, the leading and most common cancer type, affects people of all ages and is most prevalent among women. Despite the many campaign strategies for BC awareness, it still accounts for 23% of all new cancer cases in Kenya. BC is the most common type of cancer among women globally, but many people remain ignorant of the most basic self-inspection techniques that can help women detect BC early, when it is most responsive to treatment. BC is a non-

communicable disease that does not exhibit obvious symptoms in the early stages (I and II), resulting in over 6,000 new cases and approximately 3,000 fatalities annually (Ministry of Health, 2021; Sayed et al., 2019). Furthermore, 70% of patients in Kenya are diagnosed in stages III and IV, when it is most difficult to treat (Wambalaba et al., 2019).

Early detection and awareness creation are thus the key strategies to manage the disease, and this requires that the population be informed on the significance of regular and voluntary screening even when there are no symptoms or health complications (WHO, 2025). These concerns regarding awareness led to the development of the *Pink October* campaign, whose origins can be traced back to 1985, when former United States First Lady Betty Ford, a BC survivor, launched the National Breast Cancer Awareness Month (NBCAM) in partnership with the American Cancer Society and Imperial Chemical Industries. Their objectives were to promote BC awareness and screening for risk reduction and early detection (Kumar et al., 2023). Despite these annual efforts and their success in Western countries, the incidence and mortality rates of BC patients in Third World countries continue to rise. It is against this background that this study aims to assess the impact of the *Pink October* campaign on BC awareness levels and screening uptake among students of MMUST.

1.1 Research Objective

The objective of this study is to **assess** the impact of the Pink October campaign on breast cancer awareness levels and screening uptake among undergraduate students at Masinde Muliro University of Science and Technology (MMUST) in Kakamega County, Kenya.

II. LITERATURE REVIEW

2.1 Theoretical Review

This study was underpinned by the Health Belief Model (HBM) and the Elaboration Likelihood Model (ELM). The ELM describes the two routes that influence how recipients process information they are exposed to: the appeal to logic and the aesthetic appeal of the presentation format (El Hedhli & Zourrig, 2022). The HBM, on the other hand, proposes that an individual's decision regarding their health is influenced by perceived susceptibility, benefits, severity, barriers, cues to action, and self-efficacy (Nortje, 2024). Whereas the ELM focuses on the format and content of awareness messages, the HBM focuses on the psychological factors that influence an individual's health decisions. When used together in this study, they assist in establishing how audiences process awareness information and the psychological processes that drive behavior change regarding health after exposure to awareness messages during the *Pink October* campaign.

2.2 Conceptual Review

Over the past three decades, the *Pink October* campaign has evolved into a special event marked in countries across the world every October. It has become a global call to action that seeks to raise awareness, promote early detection, and offer support to those affected by BC while advocating increased access to screening, treatment, and research funding. The event helps to increase attention and support for awareness, early detection, treatment, and palliative care of the disease. A variety of activities are undertaken during this period to encourage public participation in awareness creation, including but not limited to public educational lectures, walks, sporting events, "wear pink" days, and free screening campaigns (Mattos et al., 2024; Breast Cancer Awareness Month – Pink October, 2023).

The *Pink October* campaign has had relative documented success in other parts of the world, such as Brazil. A five-year study of its impact on audiences every October from 2017 to 2022 established that it resulted in an increase in the number of mammograms performed. There was also an increase in demand for mammograms by up to 39% during October, November, and December, after which demand decreased by up to 20% in the subsequent nine months until the next campaign period (Antonini et al., 2022).

In a related study by Luna-Abanto et al. (2022) on the impact of cancer awareness campaigns in Peru, it was established that *Pink October* was the most widely recognized cancer awareness campaign. The qualitative study, conducted over a five-year period using Google Trends, also registered increased demand for screening and online interest in BC during the months of October, November, and December. Declining interest was observed from mid-January, and this consistent decline continued until October, when the cyclical pattern repeated itself.

Similar results have been documented in other countries such as Malaysia, the United States, and Finland during the *Pink October* campaign month. The results of these studies highlight the positive influence of BC awareness campaigns on target audiences. This is supported by the increase in online searches for information about BC and the increased demand for mammograms during the campaign period. The data from these studies document the impact of *Pink October* on screening uptake in the populations of these countries during and after the campaign period (Luna-Abanto, 2022).

Despite all these awareness efforts, Africa still has the highest BC mortality rate, yet the continent does not lead in incidence rates compared with Western countries. In 2012, for example, Nigeria recorded 27,304 BC occurrences and 13,960 deaths, resulting in a mortality rate of 51% (Salako et al., 2017). Prevention should therefore be the primary strategy in combating BC before incidence rates reach or surpass the current statistics from developed countries. This will enable prioritization in the face of limited resources, as is currently the case (Azubuike, 2016; WHO, 2024).

Sub-Saharan Africa, for example, has a survival rate of 40% compared to the United States, which has a survival rate of 86% within the first five years. According to the IARC, with prevalence rates on the rise, the implementation of early detection policies and preventive measures are key factors in combating the disease. BC in African women tends to be the aggressive triple-negative subtype, which is non-responsive to commonly used therapeutic drugs. Unless medical care and screening practices are dramatically improved in Africa, BC mortality rates can be expected to remain disproportionately high (Koech et al., 2024).

Despite being the leading cause of death among women in Africa, accurate BC statistics are still lacking, as most African countries, especially in Sub-Saharan Africa (SSA), do not have national cancer registries to aid in this objective. Furthermore, ignorance about risk factors and symptoms places women in SSA at high risk not only of developing BC but also of late diagnosis when they do (Tsoka-Gwegwenia et al., 2017).

Information from reliable sources is vital in educating people about the characteristics of the disease, as this places them in a position to identify symptoms, understand causes, and know how best to access treatment. As a key component in addressing such a challenging health issue, the importance of information should not be downplayed. When individuals are armed with relevant knowledge, they are able to make informed decisions about their health and choose the best treatment options. In developing countries, ignorance about preventive healthcare has been established as a major factor that discourages individuals from vaccinations and screening procedures, which are among the best modes of cancer prevention (Koech et al., 2024; Igwilo, 2013).

Kenya is among the 20 African countries with the highest incidence and mortality rates of BC, indicative of challenges facing timely diagnosis and treatment. Over 60% of those affected are below 70 years old, with statistics indicating that only one in ten children diagnosed with the disease survives (WHO, 2022; Azubuike, 2018).

BC is not necessarily a fatal disease, and the probability of successful treatment is highest when it is detected at the early stages. Effective awareness communication on signs and symptoms will lead to early diagnosis and increase the chances of prevention and successful treatment. This can only happen when people are aware of the significance of screening, even when they are not displaying any symptoms. Furthermore, the causes of BC are still under research (WHO, 2024). Therefore, early detection remains the best method of control, as it increases the probability of successful treatment. This study therefore aimed to assess the impact of the *Pink October* campaign on BC awareness levels and screening uptake among MMUST students in Kakamega County, Kenya.

III. METHODOLOGY

3.1 Research Design

The study adopted a descriptive cross-sectional research design to assess BC awareness among undergraduate students at MMUST. This design was appropriate because it allowed for the collection of data from a large population at a single point in time, enabling the researcher to describe and analyze the current level of awareness, knowledge, and preventive practices related to BC. The approach facilitated the identification of patterns and relationships between demographic characteristics and awareness levels without manipulating any study variables.

3.2 Study Area

The study was conducted at MMUST, located in Lurambi Constituency, Kakamega County, Kenya. MMUST is among the 30 public universities in Kenya. It was established in 1972 as the Western College of Arts and Applied Sciences and was upgraded to a fully accredited university in 2007. The university has approximately 16,580 students and covers an area of about 133 acres (0.538 square kilometers). Students come from all parts of Kenya, representing the national demographic, and are the target audience of BC awareness campaigns, which aim to sensitize susceptible populations about preventive measures that can be employed to manage the disease.

3.3 Study Population

The study population consisted of Undergraduate students of MMUST in Kakamega County, Kenya. This population was estimated at 16,580 students, according to the records based on the data from the University's registrar's office records for the academic year 2024/2025. The study excluded students who were yet to join or had deferred and focused on those students that were in session during the period the study was undertaken.

3.4 Sampling Procedure

When it is not possible to study an entire population but the population is known, a smaller representative sample is taken and categorized using the proportionate stratified sampling technique. The Slovin's formular (Tejada & Punzalan, 2012) was used to establish the number of students in the sample population and was calculated as follows:
Equation: N/ (1+Ne2) Stephanie (2013)

n= Sample size

N= Total population

e= Margin of Error (0.05)

Where N is 16578

$n = 16578/(1+16578\times0.05^2)$

n = 16578/41.44=399.9. Therefore, the sample size will be 400 respondents.

We employed the multi-stage cluster sampling and proportionate stratified sampling techniques to ensure the distribution of the 400 study participants was a fair representation of the population under study. Three out of the eleven Schools at MMUST—School of Arts and Social Sciences (SASS), School of Education (SEDU), School of Public Health, Biomedical Sciences and Technology (SPHBST) were initially selected as they had unique characteristics relevant to this the study. SEDU and SASS were chosen due to their shared characteristics as well as the large number of students pursuing undergraduate programs there. SPHBST was picked for the perceived or expected exposure of their students to health awareness campaigns.

Table 1

Population in the Selected Schools

School	Department	Population
SEDU	Language and Literature Education	1393
SASS	Criminology and Social Work	1600
	Journalism and Mass Communication	797
	Social Science Education	657
	Geography	560
SPHBST	Medical Laboratory Sciences	392
	Optometry and Vision Sciences	250
	Health Promotion and Sports Science	261
	Health Professions	150
	Nutrition and Dietetics	230
Grand Total		**6290**

Source: Masinde Muliro University of Science and Technology Records

Within these selected Schools, multi-stage cluster sampling was further employed to determine the specific departments to be included in the study basing on population size and categorize the participants according to their degree programs. SASS had five departments (Language and Literature Education, Criminology and Social Work, Journalism and Mass Communication, Social Science Education, Geography) SEDU comprised of five departments (Curriculum Institutional Technology, Educational Foundation, Educational Planning and Management, Educational Psychology, Science and Mathematics) while SPHBST contained six departments (Medical Laboratory Sciences, Optometry and Vision Sciences, Health Promotion and Sports Science, Health Professions, Nutrition and Dietetics, Public Health), that provided a structured basis for sampling across diverse demographic contexts within MMUST and also determined the number of questionnaires to be issued per department. Table 3.2 indicates the number of questionnaires to be distributed to each department

Table 2

Proportionate Stratified Sampling According To Departments Selected

Department	Population	%	Number of questionnaires to be distributed to each department
Criminology and Social work	1708	37.52	150
Journalism and Mass Communication	797	17.51	71
Medical Laboratory	392	8.62	35
Health Promotion and Sports Science	261	5.73	24
Language and literary Education	1393	30.62	125
Totals		**100%**	**400**

Proportionate stratified sampling was applied to ensure equal representation across the selected undergraduate courses according to the total number of students pursuing it. Students were further divided into strata based on year of study and the percentage of students in relation to the total number of students per course to determine the number of questionnaires to be issued. For example, criminology had 820 students who represented 18.01% of the sample population which translated to 72 questionnaires out of 400. 1st years in criminology numbered 252 out of 820 which represented 30.2% of all criminology students meaning the number of questionnaires to be issued to 1st year criminology students would be 30.2% of 72 which is 22 questionnaires issued randomly to 1st year criminology students. The same sampling procedure was applied to all the courses that were selected for the study.

Table 3

Proportionate Stratified Sampling According to the Degree Program

Program	Population	%	Number of questionnaires to be distributed per program
Criminology	820	18.01	72
Social work	888	19.51	78
Journalism and Mass Communication	797	17.51	70
Medical Laboratory	392	8.62	35
Health Promotion and Sports Science	261	5.73	23
Language and Literature Education	1393	30.62	122
Totals	**4551**	**100%**	**400**

3.5 Data Collection

Research assistants were trained on the proper method of administering the questionnaire survey collection tool as per the sample size arrived at via Multi-stage cluster sampling and proportionate stratified sampling methods before commencement of fieldwork. Data was collected from the 400 university students using interviewer-administered questionnaires. This resonates with suggestions by Duggal (2023) regarding data collection for a mixed study.

3.6 Data Analysis

This study employed the Statistical Package for the Social Sciences (SPSS) version 19 for data analysis. Descriptive statistics were used to analyze the quantitative data as follows: measures of frequency showing how often a response was given, and measures of central tendency showing the most commonly indicated response using the median and mean. Results were presented in the form of discussions, tables, percentages, and pie charts.

Qualitative data from the open-ended responses were coded into categorical variables, which were then analyzed using the same SPSS software. Manifest and latent content analysis, which included data preparation, reading and reflecting, coding and categorizing, and the development of conceptual models, was used to process qualitative data into themes and patterns. These themes and patterns were then used to explain correlations between variables in the quantitative data analysis (Tenny et al., 2017; Ravindran, 2019).

This approach allowed for the integration of the quantitative and qualitative aspects of the study under a single analytical framework, thereby enhancing consistency in the interpretation of the findings.

IV. FINDINGS & DISCUSSION

4.1 Socio-Demographic Information of the Sample Population

This section presents the socio-demographic characteristics of the respondents who participated in the study. The information includes variables such as gender, age, year of study, and faculty of enrollment. Understanding these characteristics provides important context for interpreting the findings, as demographic factors may influence the level of breast cancer awareness, knowledge, and preventive practices among undergraduate students.

Table 4

Gender Variation of the Sample Population

Male	193/48.5%
Female	207/51.75%
Total	400/100%

Table 4 Indicates the Gender variation of the Population Sample in the study. Out of the 400, 193 (48.5%) were men while 207 (51.75%) were women. Majority were therefore female.

Table 5

Age Variation of the Sample Population

18-28 years	376/94%
29-39 years	24//6%
Total	400/100%

Table 5 Indicates the Age variation of the Population Sample in the study. 94% were aged between 18-28 years while only 6 percent were between 29 and 39 years old. This indicates that majority of the students in the selected schools are below the age of 29.

4.1.1 Awareness Levels about Breast Cancer

When the 400 respondents were asked if they had heard about Breast Cancer, it was established that 92.5%, (370 out of 400) of the respondents had heard and were aware of the existence of breast cancer disease, while 7.5% (30 men out of 400 respondents) heard about breast cancer for the first time during the questionnaire interview. The 7.5% males who were not aware of the existence of breast cancer attributed their lack of knowledge to inadequate information about breast cancer as they were yet to encounter any information regarding the disease

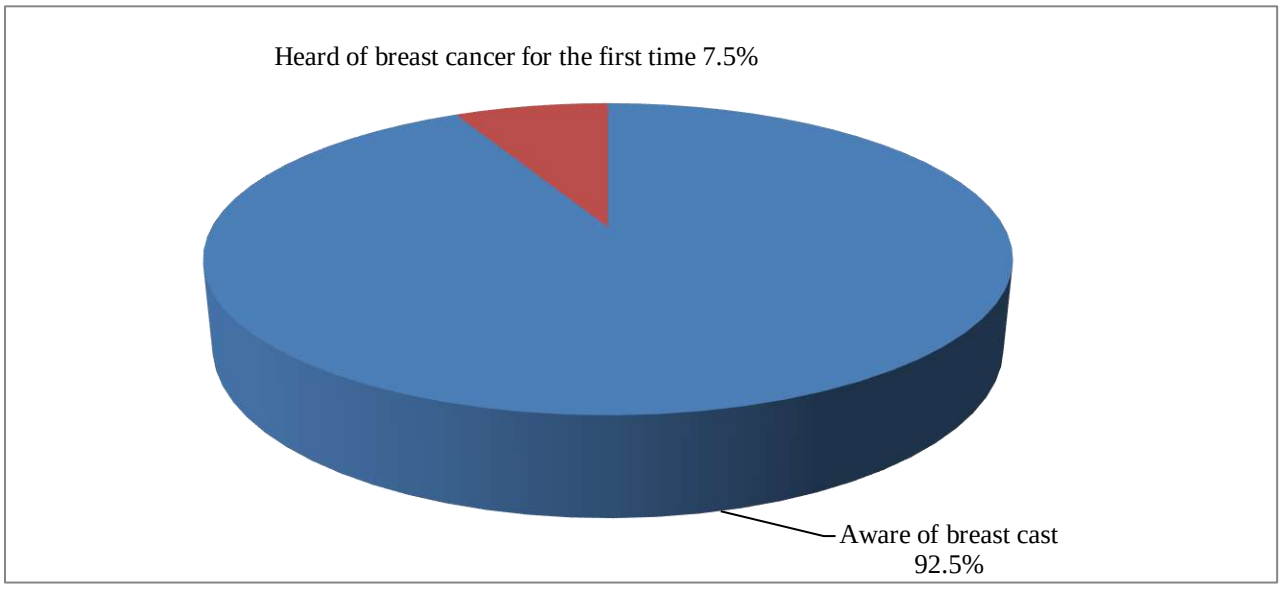

Figure 1

The Percentage of Respondents that are Aware of B.C and that Were Not Aware.

4.1.2 Awareness about Gender Specificity

When the 400 respondents were asked if B.C was gender specific 47% of the sample population were aware Breast Cancer affects all genders, while 21.5% believe it only affects women with 30.5% responding that they did not know which gender was most affected. This means that despite high awareness levels about its existence, information about the actual characteristics of the disease has managed to reach 47% of the sampled population with 53%(22.5+30.5) still unaware about its actual characteristics. It was evident that more than half of the sampled population (53%) did not know or had not been exposed to information that communicates the disease affects all genders as 1% of men account for all global breast cancer cases and male immunity to B.C is not backed by any scientific research (Newman, 2021).

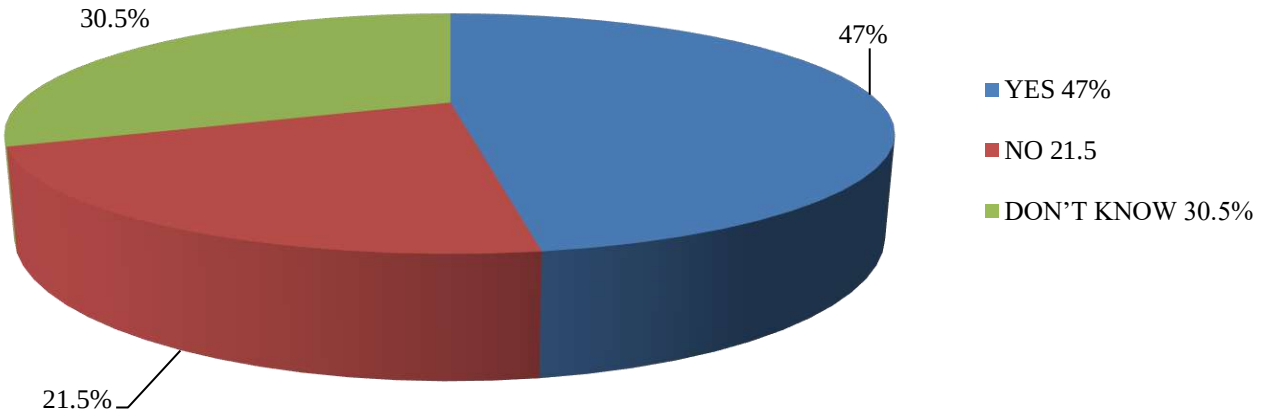

Figure 2
The Respondents' Knowledge about Breast Cancer and Gender Specificity.

The findings in Figure 2 indicates that 47% of the respondents thought breast cancer was gender specific,30.5% did not know if its gender specific and 21.5% was aware it is not gender specific.

4.1.3 Awareness about Symptoms

When the 400 respondents were asked to list B.C signs and symptoms they were aware about, 57% said they did not know any signs, while 16.7% listed lumps in the breast, 11.7% the change in the appearance of breasts, 7.75% knew about pain in the nipple area, 3% knew of discharge from the breast, 2.1% knew of itchiness on the breast, 0.75% listed fatigue, 0.75% listed hair loss while 0.25% listed lumps in the breast, discharge from the nipple and pain on the breast as symptoms. Whereas 57% said they did not know any symptoms, the 0.75% who listed hair loss and the 0.75% who listed fatigue as a symptom also do not know any symptoms as hair loss and fatigue are both side effects of treatment through radiotherapy and chemotherapy This meant that 58.5% (57+0.75+0.75) of the sampled population was unaware of B.C symptoms. Out of these, 1.5% listed the side effects of treatment procedures inaccurately as symptoms.

Of the 42.5% (16.7%+11.7%+7.75%+3%+2.75%) who were aware of the signs and symptoms, 0.25% were the only ones who listed more than one symptom while 42.25% listed one symptom. (Figure 3)

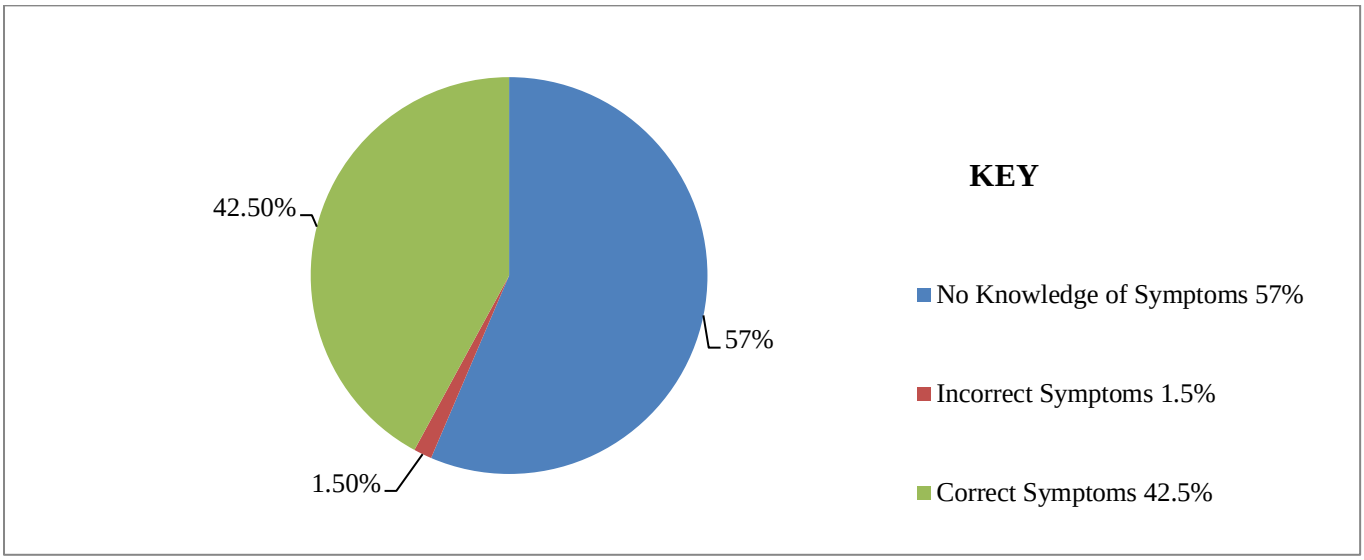

Figure 3
The Percentage of the Sample Population that was Aware of B.C symptoms

Those that had incorrect information and the majority who were not aware of any sign or symptom. These responses indicated that the level of knowledge about the signs and symptoms among the sample population of 400 respondents was below average at 42.5% .This means the content of breast cancer awareness communication should emphasize on the different signs and symptoms which include an increase in size or change in shape of the breast(s), changes in the appearance of one or both nipples, nipple discharge other than breast milk, general pain in/on any part of

the breast, itchiness/tingling sensations and Lumps or nodes felt on or inside of the breast (WHO, 2024). This is because majority of the respondents 58.5% were not aware about any of them. In addition breast cancer is asymptomatic in stage 1 and 2 when the chances of successful treatment are highest hence the significance of including regular screening as the best strategy for early detection and treatment in the awareness messages.

Awareness about screening

Table 6

Respondents' Awareness Levels about Breast Cancer Screening

Respondents that are aware of Breast Cancer Screening		**Respondents that are aware of types of Breast Cancer screening Tests**		**Have you ever gone for Breast Cancer screening?**		**Do you know anyone who has gone for screening before?**		**Are these tests paid for offered for free?**		**Significance of Breast Cancer screening**	
No	79.9%	None	82.25	No	89.2	No	75.5	Yes	37.5	Early Detection & treatment	39.3
Yes	20.1%	Mammograms &Biopsy	15	Yes	9.8	Yes	24.5	I don't know	36	I don't know	37
		Breast Self-Examination (BSE)	1	I don't know	1			Free	16.5	For accurate diagnosis of breast health	23.8
		Both Self Breast Examination, Mammograms & Biopsy	1					Not sure	6.5		
		Testing tissue and discharge samples	0.75					Both free & Paid for	3.5		
Total	**100%**		**100%**		**100%**		**100%**		**100%**		**100%**

Table 6: Indicates the number of respondents from the sample population that had heard of breast cancer screening, types of screening tests, those who had done the screening; know a person who had done it and those who know its significance. When the 400 respondents were asked whether they had heard about breast cancer screening, it was established that 79.9% had not heard about the procedure while 20.1% had heard and were aware of the same.

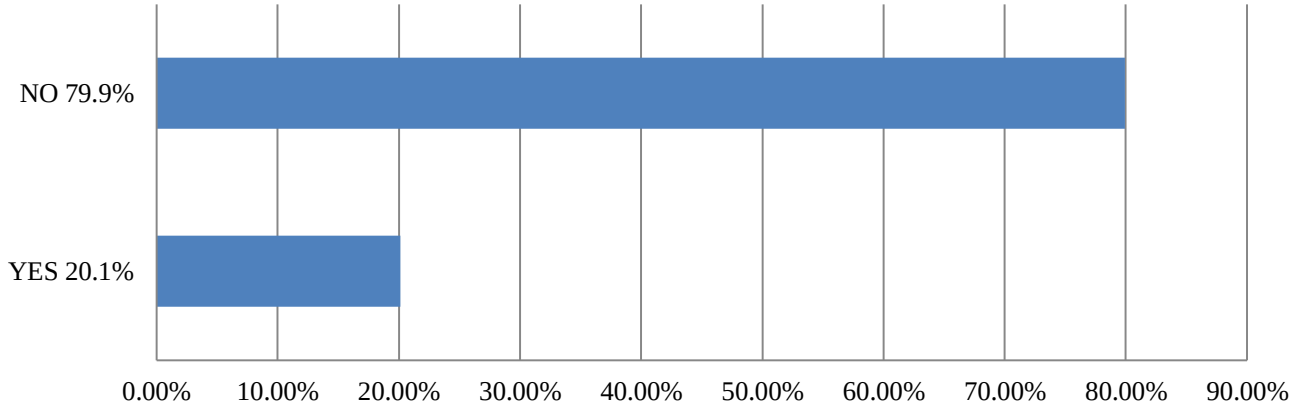

Figure 4

Percentage of Respondents who were Aware about Breast Cancer Screening and those who not yet Aware.

Of those who are aware, 15% knew about Mammograms and Biopsies, 1% knew about self-breast examination, mammograms and biopsies, 1% knew about self-breast examination and 0.75% were aware about testing tissue and discharge samples.

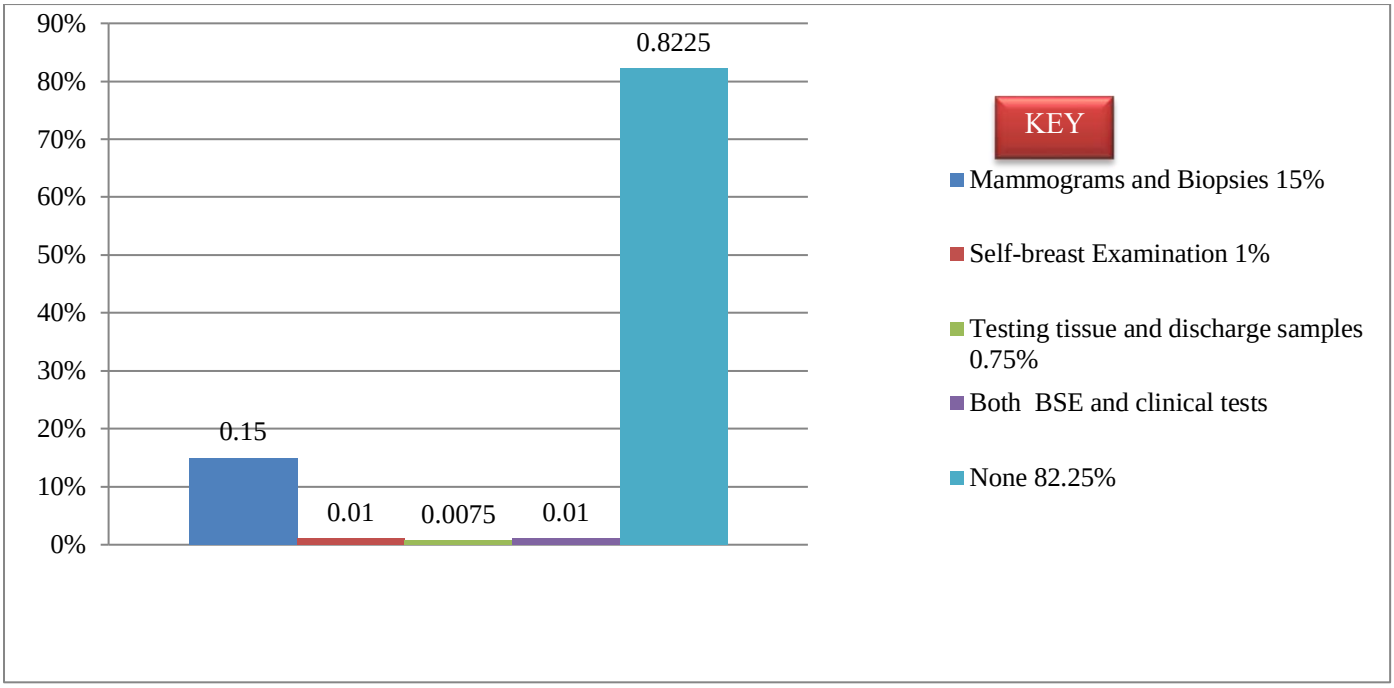

Figure 5

The percentage of respondents that were aware of types of B.C screening tests and those that were not yet aware.

When asked whether they had ever been motivated to go for screening by the information they encountered, 9.8% said yes while 89.9% had not. Furthermore, 24.5% knew a person who had gone for screening while 75.5% did not know of anyone who had done the procedure.

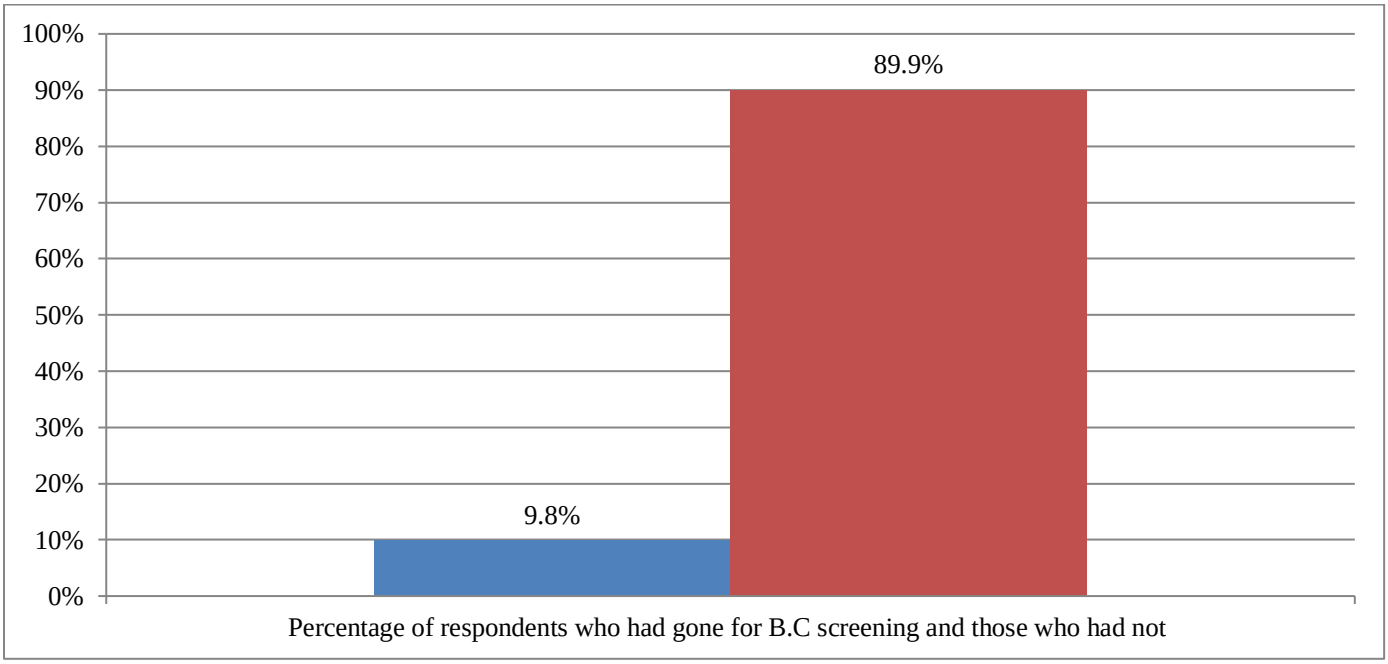

Figure 6

The Percentage of the Respondents who had been influenced to go for B.C Screening and Those Who had not been influenced

When the 400 respondents asked if they had heard about the costs of the procedure, 37.5% had heard that it is paid for hence their reluctance due to financial constraints, 16.5% had heard that the tests were offered for free, 6.5% were not aware about costs or lack thereof as they had never had about it while 3.5% were aware that it was both free and paid for depending on the institution involved. In addition, when the 400 were asked about the significance of screening, 37% of the respondents did not know while 39.3% said it was for early diagnosis and treatment which is partially true in the event one is diagnosed with the disease. The remaining 23.8% stated the screening tests were

important for accurate diagnosis of breast health which is the correct description of the screening test as not all individuals who are screened get diagnosed with B.C.

4.1.4 Barriers to B.C Screening

When the 400 respondents were asked via a Likert scale whether they had seen, heard, read, or experienced any of the listed factors as a hindrance to breast cancer screening uptake and breast health seeking behavior, 90% of the respondents listed lack of awareness as a major hindrance, followed by 79.8% listed Inadequate information about the procedure both of which align with a study in Western Kenya about the impact of educational intervention on B.C by Kisuya et al. (2018) which established that the major challenges facing the fight against Cancer included limited access to information, inadequate Health Facilities from where said information about the disease can be accessed and the illiteracy levels in the rural sections of the country. 67.8% listed limited access to screening equipment and specialized medical personnel which are valid claim supported by the National Cancer Institute Kenya (2023) report which lists the number of Oncologists in Kenya at 58 with 60 oncology nurses and 12 oncology pharmacists in a country of 54 million people. 71% listed fear of outcome from screening as a hindrance due to the perception that it is untreatable, a perception fueled by Broadcast Media reports that focus on incidence rates and fatalities. This supports the results of a related study by Nyambane et al (2015), investigating the influence of radio and television on creating awareness about cervical cancer which established that broadcast media (Radio and Television)have failed to communicate any information related to disease presentation and prevention instead focusing on statistics and victim testimonials.

72.5% of the 400 respondents' listed financial constraints since the procedure was perceived as being costly, unaware that screening tests are offered for free during the BCAM, Cultural and religious beliefs accounted for 50% and 44.5% of the sample population respectively as respondents felt they still had some level of influence on a person's choices, these results align with Sayed et al. (2019) who noted that the beliefs and values of the targeted community of an awareness campaign should be understood and it is only through such a process that these programs can formulate culturally relevant messages that reflect cultural awareness resulting in productive partnerships and interactions with community members that can lead to behavior change. Similarly, Bugshan (2022) noted that the most effective awareness campaigns are those that resonate with the cultures of the target audience as familiarity with the content of awareness campaigns makes it easier for the target audience to relate and embrace the information. 47% listed language barrier as a hindrance especially in rural areas as the awareness messages they had seen were either in English or Kiswahili limiting the reach. This is a challenge Mudogo, (2017) opines can be solved through the use of vernacular radio stations as radio not only transcends the barrier of illiteracy but also has the advantage of transmitting information in local languages understood by a majority of both Rural and urban dwellers.

These responses resonate with the ELM (Petty et al, 2009) theory that posits logical arguments (Direct route) aimed at changing perceptions should be accompanied by peripheral/aesthetic packaging (Indirect route) that relate with the target audience to trigger the subconscious mind into retaining the information for longer periods of time. This combination of logic and aesthetic inclusions in the awareness messages should then result in a logical argument for the direct route and packaged in format familiar to the targeted audience be it through language, beliefs, social norms or a shared cultural identity to aid retention via the indirect route or subconscious which stores information long-term.

V. CONCLUSION & RECOMMENDATIONS

5.1 Conclusion

The results of the questionnaire survey established that the level of awareness about the existence of Breast Cancer in was very high at 92.5%. However, aside from having heard about it or being aware of its existence, the level of awareness about the actual nature of the disease, treatment options and preventive measures against was very low with 42.5%% of the sample population aware of the signs and symptoms. 32.5% were aware of potential causes while 19.9% were aware of breast cancer screening out of which 9.8% (All female) had managed to go for screening. 90% of the respondents stated that lack of awareness about the breast cancer screening was the reason for not doing the test while 79.9% listed inadequate information as the major hindrance towards uptake of breast cancer screening. 71.5% of the respondents also listed fear of outcome as a reason for not going for screening, this was due to the fact that cancer and breast cancer in particular has the unofficial reputation of being a fatal disease.

5.2 Recommendations

The first recommendation is that the framing of the content used in awareness messages should highlight the actual nature of the disease, significance of screening, treatment options, preventive measures and survivor testimonials which offer encouragement to current victims or those yet to undergo screening as compared to the current trend of highlighting incidence and mortality/fatality rates which instill fear in the recipients. Public Health communication

specialists must ensure to develop messages that appeal to both the direct and indirect routes of the conscious mind while highlighting the significance of regular screening, treatability and the 4 stages of breast cancer.

The government through its Ministry of Health should offer more support in terms of developing policies that address funding and acquisition of; Specialized human resource and adequate breast cancer screening equipment acquisition for public health facilities to increase accessibility as the current 58 oncologists, 60 oncology nurses and 12 oncology pharmacists are not sufficient for an at risk population of 54 million individuals

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