Research Paper

Knowledge, Perception and Methods of Breast Cancer Prevention Among Womenin Agro-Chemical Companies In Lagos State, Nigeria

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ABSTRACT

Background: Breast cancer is the presence of a malignant tumour that has developed from the cells of the breast. Breast cancer mortality is typically associated with the general public's unawareness of the disease, insufficient screening services, and lack of access to care. Breast cancer incidence is increasing due to changes in reproductive and lifestyle patterns, as well as a rise in urbanization and population increase, in many developing countries. The study assessed the knowledge, determined the perception and identified methods of breast cancer prevention among women in Agrochemical Companies in Lagos State.

Method: *The study adopted a cross-sectional descriptive survey design. Participant for the study consisted of two hundred and twelve (212) women working in agrochemical companies in Lagos State using convenient sampling technique. A self-administered questionnaire was used for data collection.*
Results: *The results showed that the mean age of 43.60 ±7.74years.Larger percent of the respondents 124(58.5%) had moderate knowledge on breast cancer, with 46(21.7%) of the respondents having a low knowledge and 42(19.8%) of the respondents with high knowledge. More than half of the respondents had poor perception about breast cancer. Also, majority 115(54.2%), of the respondents had low preventive measure regarding breast cancer while 97(45.8%) of the respondents reported high preventive measure against breast cancer. There is significant relationship between respondents' knowledge of breast cancer and their perception of breast cancer (r=0.20; p=0.004). That there is significant relationship between respondents' knowledge and practice (r=0.28; p=0.000). Also, there is no significant relationship between respondents' perception and method of breast cancer prevention (r=0.02; p=0.743).*
Conclusion: Organizational-based programs should be provided consistently, such as implementation of affordable test for breast cancer, a mobile mammography unit, or development of culturally sensitive materials about breast cancer risk and mammography screening.
KEY WORDS:knowledge, perception, methods of breast cancer prevention, Agrochemical.

I. INTRODUCTION

Breast cancer refers to a situation when tumor is present in a woman breast. There are several different forms of breast cancer and this depends on the cells of the breast become malignant (CDC, 2017a). One of the most common types of breast cancer invasive ductal carcinoma is the production of cancer cells in breast tissues outside the duct (Centers for Disease Control and Prevention (CDC, 2017a). Invasive lobular carcinoma is the second most common type of breast cancer (CDC, 2017a). Cancer is the uncontrolled growth of cells that arise in epithelial tissue (American Cancer Society, 2017). Most cancers occur at random and due to somatic mutations (American Cancer Society, 2017). Cancers develop out of sight, making it clear that they may be benign or malignant (Centers for Disease Control and Prevention [CDC], 2017a). Breast cancer remains one of

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the top cancers in women both in the developed and in the developing country (World Health Organisation 2019). Breast cancer is the second cause of cancer worldwide and the fifth cause of cancer mortality (Centre for Disease Control Prevention, 2015).

Globally, cancer is among the deadliest illnesses which could endanger lives and causing general exhaustion (Jemal, Bray, Center, Ferlay, Ward, & Forman, 2011). Women in both industrialized and emerging nations are affected by breast cancer. The incidence of birth defects is growing in developing countries because of increased life expectancy, westernization, and urbanization. In 2011, over 500,000 women across the globe were killed from breast Cancer. Breast cancer has emerged to be a rising global public health concern. This issue affects women of all demographics in all developed and developing countries (Banegas et al., 2012). Approximately every eight women will become victims of breast cancer. Worldwide, more than one million people are diagnosed with breast cancer each year, and more than 410,000 of them will die of it (Curao, 2011). Indeed, breast cancer has become the most common type of cancer among women worldwide, in both developing and developed countries (Demchig, MelloThoms, & Brennan, 2017). In 2017, breast cancer was the fifth most prevalent disease, with over 410,000 deaths a year in women (Demchig et al., 2017).

Knowledge about breast cancer is a fundamental element necessary for the early detection, prevention and treatment of this condition (Outlook, 2002). Knowledge for this study was considered as the possession of accurate understanding of breast cancer, its symptoms, risk factors, prevention, treatment options and centers. Adequate knowledge of breast cancer will equip women with the ability to observe and identify symptoms before the disease starts to spread and seek medical assistance early; while knowledge of causes and risk factors of cancer will help in the prevention of this disease byequipping to adopt preventive measures and appropriate lifestyle modification. Breast cancer is essentially preventable. Early detection which remains the surest mean of breast cancer prevention can be achieved through Breast Self-Examination (BSE), Clinical Breast Examination (CBE) and Mammography. A comprehensive knowledge of all these components is important for women since it is the first step to preventing the disease and more so, since the disease is obviously of unknown cause, with non-specific treatment and poor prognosis (Stanford Comprehensive Cancer Center, 2006)

One useful testing tool for identifying breast cancer is breast cancer self-examination (BSE). Being able to spot breast cancer earlier is very significant. Screening measures such as self-exam and mammography may be useful for the early detection of breast cancer. It is recommended that the breasts should be routinely tested for early detection of BSE. Furthermore, Breast self-examination alone is not adequate in detecting of breast cancer; also, it does not give female health transparency, breast tissue sensitivity, and preventive health actions. There is no data about the effect of Breast self-examination screening in Nigeria especially among women working in agrochemical companies. Breast Self-Examination has a positive effect on people's breast examination attitude. Hence, the most accurate and established approach is mammography.

Young women have a much higher risk of dying of and being disabled from breast cancer in resource constrained countries. The incidence of breast cancer in low income country continues to be lower than in most high-income countries. However, the mortality rate from breast cancer is very high. Breast cancer mortality is typically associated with the general public's unawareness of the disease, insufficient screening services, and lack of access to care. Breast cancer is increasing due to changes in reproductive and lifestyle patterns, as well as a rise in urbanization and population, in many under developed countries. (Lawrence et al, 2010.) Residents in Nigeria are firmly conscious that most infectious diseases are caused by witches and evil spirits. Breast cancer is the world's most common cancer in women, with a population of approximately 187 million in Nigeria and constitutes about 12% of all new cancer cases and 25% of all cancers in women. (DeSantis, Ma, Bryan, &Jemal, 2014). Also, in Nigeria, about 100,000 new cases of breast cancer are diagnosed each year, while death from infectious diseases, poverty, physical inactivity, obesity, and poor eating habits contribute to the largest proportion of that figure (Adelekan, 2012).

There is indication that working conditions in agrochemical industries are unhealthy due to direct exposure to harmful and adverse chemical poisons (Gore et al., 2015). They can function and elicit consequences at very low doses, there are non-monotonic dose responses, and transgenerational effects (Anway et al., 2005; Nilsson et al., 2018). It was confirmed through studies that exposure to pesticides is extremely harmful and is related to several different types of diseases (Mostafalou&Abdollahi, 2013). The Mammary Gland may be adversely affected by endocrine disruption as revealed in scientific studies (Birnbaum & Fenton, 2003). Early exposure to some kind of agrochemical pesticides can have substantial potential to harm the developing breasts.

Women overtimes compound the risk of breast cancer by having poor perception toward the illness. This make them have low self-assessment or Wrong notions regarding which in turn lead to delay in treatment seeking or women engage in ineffective/harmful treatment methods According to Garg (2016), there is lack of awareness of breast cancer in low income countries. This is because the women are unaware of the risk factors and sign and symptoms of breast cancer. Majority of women in developing countries often look for pain as early

symptoms of breast cancer and almost all women were unaware that a painless mass could be the first sign and symptom of a breast cancer. The earlier studies in Iraq, by Hamad et al (2018), in Saudi Arab by Sindi et al (2019), Kotepui et al (2014) found good knowledge level of breast cancer. The overall mean knowledge was good level. Most participants responded family history of breast cancer as a risk factor of breast cancer which descended by age, oral contraceptives use and drinking alcohol. Previous studies (in Jordan by Suleiman (2014), in Angola by Sambanje and Mafuvadje (2012), by Siddeeq (2017) and in Libya by Elzahaf et al (2019) found poor level of knowledge of breast cancer among women. The majority of the participants were not aware of sign and symptoms and risk factors of breast cancer such as change in colour or shape of the nipple. 80% participants responded that cancerous lumps in breasts are painful. It was found that participants with better knowledge of breast cancer were associated to family members who had history of breast cancer. Only few participants were aware of breast cancer.

It is noted that the failure being experienced in breast Cancer prevention is not from inactivity in Nigeria. Awareness is predicted to change inversely with the late presentation and weak results, resulting in enormous funds being spent on awareness programs (Obin, Okeowo, 2014; Olajide, Habeebu, Lawal, Afolayan&Mofikoya, 2014) as the basis for the struggled against breast cancer. However, the high late presentation rate remains (Azubuike, &Okwuokei, 2013). Women in working in agrochemical companies are unaware of the risk factors of breast cancer this may due to the lack of awareness and proper orientation as regards the symptoms. This study aimed to examine the knowledge, perception and methods of breast cancer prevention among women working in agrochemical companies in Lagos State.

II.   LITERATURE/THEORETICAL UNDERPINNING
Research Objectives
The main objective of the study is to determine the knowledge, perception and methods of breast cancer prevention among women in Agrochemical Companies in Lagos State. The specific objectives of the study include the following:
1. To determine the level of knowledge of women in agrochemical companies in Lagos state on breast cancer;
2. To determine the perception of women n agrochemical companies in Lagos state on breast cancer
3. Assess the breast cancer prevention method used by women in agro-chemical companies in Lagos state

Research Hypotheses
H_1 – There is a relationship between knowledge of women in agro-chemical companies on breast cancer and their perception of breast cancer.
H_2 -- There is a relationship between knowledge and the method of breast cancer prevention.
H_3 – There is a relationship between perception and method of breast cancer prevention.

III.   METHODOLOGY
RESEARCH DESIGN
Materials and Methods
Research Design
The study employed a cross-sectional survey design that investigates knowledge, perception and methods of breast cancer prevention among women in agrochemical companies in Lagos state.
Study Population
The population for this study is women selected agrochemical companies in Lagos State. The agro-chemical company will be Swiss Biostadt, TheCandel Company Limited and Saro Agrochemicals.

For this study, seventy-nine (79) in Swiss Biostadt , seventy-one (71) women in SaroAgriscience and sixty-two women (62) in Candel company limited were sampled

The study adopted a two-stage sampling technique. First stage involved, a purposive sampling technique was used to select three (3) agrochemical companies out of ten (10) agrochemicals in Lagos state, while the second stage involved conveniently sampling technique used to select the respondents who are females from the selected agrochemical companies.

Instrument for data collection
The instrument for this study was structured survey questionnaire. The items in the research instrument will be developed by the researcher guided by the literature and researcher's supervisor. The questionnaire was divided into four sections. Section A looked at the socio-demographic factors of the respondents. Section B was measured using the 10 item knowledge of women on breast cancer. Section C was measured using the 23 item perception of women on breast cancer while section D was measured using 7 item method of breast cancer prevention. The instruments were constructed based on the research questions and objectives of the study.

DATA COLLECTION PROCEDURE
EMPTY

DATA ANALYSIS
Data entry, coding, and analysis was done using the Statistical Package for Social Sciences Version 26 (SPSS, 26). Descriptive statistics shall be summarized with simple frequency and percentage. However, inferential statistics shall be utilized by using correlational analysis to test the association between variables at a 95% level of significance ($p \leq 0.05$).

ETHICAL CONSIDERATIONS
Four hard copies and a soft copy of the research proposal and the questionnaire were submitted to Babcock University's Health Research Ethics Committee (BUHREC). An informed consent will be administered to every respondent filling the questionnaire.

IV.   RESULT/FINDINGS

RESULT
Table 1 shows that respondent's ages ranged from 18 to 59 years with a mean of 43.60 ±7.74years. the result shows that 10(4.7%) of the respondents fall between age range of 18-30 years, 62(29.2%) belong to age group of 31-40 years, 93(43.9%) were 41-50 years of age while 47(22.2%) were 51-60 years of age. As regards marital status, 61(28.8%) were single, 139(65.6%) were married, 8(3.8%) were divorce, 3(1.4%) were separated while 1(0.5%) were widow. Based on religious affiliation, 123(58.0%) were Christians, 85(40.1%) were Muslims while 4(1.9%) reported other religion. 28(13.2%) were Hausa/Fulani, 21(9.9%) were Igbo, 95(44.8%) were Yoruba, 21(9.9%) were Edo, 28(13.2%) were Warri while 19(9.0%) were Delta. Based on educational qualification, 49(23.1%) had no formal education, 29(13.7%) had primary school certificate education, 42(19.8%) acquired secondary school certificate education while 92(43.4%) possess a tertiary education. Based on years of experience, 69(32.5%) had 1-10 years of experience, 110(51.9%) had 11-20 years of experience while 33(15.6%) had 21-30 years of experience.

Table 1: Distribution of respondents based on demographic characteristics

Variables	Options	Frequency	Percentage (%)
		N=212	
Age ($\bar{x}$ 43.60±7.74)	18-30 years	10	4.7
	31-40 years	62	29.2
	41-50 years	93	43.9
	51-60 years	47	22.2
Marital status	Single	61	28.8
	Married	139	65.6
	Divorce	8	3.8
	Separated	3	1.4
	Widow	1	.5
Religion	Christianity	123	58.0
	Islamic	85	40.1
	Others	4	1.9
Ethnic group	Hausa/Fulani	28	13.2
	Igbo	21	9.9
	Yoruba	95	44.8
	Edo	21	9.9
	Warri	28	13.2
	Delta	19	9.0
Educational qualification	No formal education	49	23.1
	Primary School Certificate Education	29	13.7
	Secondary School Certificate Education	42	19.8
	Tertiary education	92	43.4
Years of experience	1-10 years	69	32.5
	11-20 years	110	51.9
	21-30 years	33	15.6

Level of knowledge of the respondents regarding breast cancer
Result in table 2 shows the **level of knowledge of the participants regarding breast cancer** it was revealed that largerpercent156(73.6%) of the respondents were aware breast cancer while 56(26.4%) were not aware. Also, 63(29.7%) of the respondents were aware that breast cancer is a communicable disease while 149(70.3%) reported that it is a communicable disease. In addition, 21(9.9%) of the respondents knew that age

is the cause of breast cancer, majority 38(17.9%) reported family history of breast cancer, 19(9.0%) agreed that exposure to oestrogen, 28(13.2%) reported dense breast tissue, 19(9.0%) reported hormone replacement therapy, 49(23.1%) reported exposure to radiation while 38(17.9%) reported exposure to some harmful chemical as the cause of breast cancer. More so, 9(4.2%) opined that age is the risk factor of breast cancer, while 25(11.8%) reported reproductive history: early menstrual before age of 12 and menopause after age of 55, meanwhile, 39(18.4%) reported family history of breast cancer, 62(29.2%) reported having the first pregnancy after age 30, 23(10.8%) reported drinking alcohol, 32(15.1%) reported being obsessed while 22(10.4%) reported previous history of breast cancer. Based on the sign and symptoms of breast cancer,10(4.7%) of the respondents reported that painless lump, 7(3.3%) reported change in breast shape, 49(23.1%) agreed on nipple discharge, 41(19.3%) reported lump under armpit, 58(27.4%) reported pulling in/inversion of the nipple, 28(13.2%) reported pain in breast region while 19(9.0%) reported discoloration of the skin as one of the signs and symptoms of breast cancer. Furthermore, as regards methods in reducing risk to breast cancer, 25(11.8%) of the respondents reported that physical activity can reduce breast cancer, 35(16.5%) reported breast feeding, 58(27.4%) reported limiting alcohol, 70(33.0%) reported avoiding hormone replacement therapy while 24(11.3%) reported all of the above as methods to be adopted in the reduction of breast cancer. Also, 16(7.5%) reported that knowing the sign and symptoms, 37(17.5%) knowing the risk factors groups and regular screening, 118(55.7%) reported performing BSE while 41(19.3%) reported regular mammogram after age 40. 182(85.8%) reported that breast cancer can be detected early while 30(14.2%) reported that it can be detected early can enhance early detection of breast cancer. More so, 195(92.0%) of the respondents were aware that early detection will improve chances of survival while 17(8.0%) were not aware. Finally, larger percent 152(71.7%) of the respondents agreed that breast cancer is curable while 60(28.3%) reported otherwise.

Table 2: Level of knowledge of breast cancer

	N=212	Frequency	Percentage (%)
Have you heard of breast cancer?	Yes	156	73.6
	No	56	26.4
Is breast cancer communicable disease?	Yes	63	29.7
	No	149	70.3
Which of the following you think are the causes of breast cancer?	Age	21	9.9
	Family history of breast cancer	38	17.9
	Exposure to oestrogen	19	9.0
	Dense breast tissue	28	13.2
	Hormone replacement therapy	19	9.0
	Exposure to radiation	49	23.1
	Exposure to some harmful chemical	38	17.9
Which of these do you think is the risk factors of breast cancer?	Age	9	4.2
	Reproductive history: early menstrual before age of 12 and menopause after age of 55	25	11.8
	Family history of breast cancer	39	18.4
	Having the first pregnancy after age 30	62	29.2
	Drinking alcohol	23	10.8
	Obesity	32	15.1
	Previous history of breast cancer	22	10.4
Do you know sign and symptoms of breast cancer?	Painless lump	10	4.7
	Change in breast shape	7	3.3
	Nipple discharge	49	23.1
	Lump under armpit	41	19.3
	Pulling in/ inversion of the nipple	58	27.4
	Pain in the breast region	28	13.2
	Discoloration of the skin	19	9.0
What methods do you think can help reduce the risk of breast cancer?	Physical activity	25	11.8
	Breast feeding	35	16.5
	Limit alcohol	58	27.4
	Avoid hormone replacement therapy	70	33.0
	All of the above	24	11.3
What do you think can detect breast cancer in early stage?	Knowing the sign and symptoms	16	7.5
	Knowing the risk factors groups and regular screening	37	17.5
	Performing BSE	118	55.7
	Regular mammogram after age of 40	41	19.3
Can breast cancer be detected early?	Yes	182	85.8
	No	30	14.2
Can early detection improve chances of survival?	Yes	195	92.0
	No	17	8.0
Is breast cancer curable?	Yes	152	71.7
	No	60	28.3

The result further revealed the level of knowledge of the respondents regarding breast cancer with a total mean score of 25.61± 3.58. Larger percent of the respondents 124(58.5%) had moderate knowledge on breast cancer, with 46(21.7%) of the respondents having a low knowledge and 42(19.8%) of the respondents with high knowledge.

Table 3: Level of knowledge of the respondents regarding breast cancer

	N=212 Frequency	Percentage (%)
Low	46	21.7
Moderate	124	58.5
High	42	19.8

Perception of women in agrochemical companies in Lagos state on breast cancer

Table 4.3 below shows perception of the respondents on breast cancer based on health belief model. The result showed that majority of the respondents perceived that there is a probability that they will suffer from breast cancer in the future, their physical health, being warriedworry a lot about getting breast cancer, the likelihood to develop breast cancer than other women and getting the feeling that within the next year they may susceptible to breast cancer.

More so, shows that respondents perceived level of seriousness of breast cancer, larger percent of the respondents reported that breast cancer to be a severe disease but only if one is diagnosed in an advanced stage when no treatment can be provided any more, more than half of them agreed that breast cancer is a threat to feminine beauty which is posed by the possibility of having to remove the breast, about half of the respondents associated breast cancer with breast removal, some opined that the thought that breast cancer scares them and majority perceived that they might survive from cancer but they have lost their breast and it is not replaceable.

It was further revealed the perception of the benefit of breast cancer prevention, the result shows that more than half of the respondents perceived that having breast exams performed by a physician prevents future problems for them, breast cancer self-examination/Mammography would enable the early detection of breast cancer, mammography would enable cancer that them to detect breast cancer that self-exam could not be detected, opined that mammography would decrease their chances of dying from breast cancer, agreed to gain alot to by having breast exams performed by a physician and reported that it would enable cancer to be detected quicklyand therefore the treatment would not be so bad.

Lastly, on the perceived barrier to breast cancer prevention, larger percent of the respondents agreed that it is embarrassing for them to do monthly breast exams, majority also agreed that breast cancer self-exams can be painful, doing breast cancer self-examination would require starting a new habit which is difficult, some of the respondents disagreed that they don't have time to receive a mammography because they are always busy, more than half of the respondents disagree that their family/ friends would make fun of them if they have a breast exam performed by a physician and disagree that nto getting screened for breast cancer is due to their social condition.

Table 4Perception of women in agrochemical companies in Lagos state on breast cancer

	N=212				
	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
Perceived Susceptibility to breast cancer					
It is very probable that I will suffer from breast cancer in the future	60(28.3%)	56(26.4%)	13(6.1%)	34(16.0%)	49(23.1%)
My physical health makes it more likely that I will get breast cancer	60(28.3%)	62(29.2%)	17(8.0%)	44(20.8%)	29(13.7%)
I worry a lot about getting breast cancer	72(34.0%)	67(31.6%)	33(15.6%)	10(4.7%)	30(14.2%)
I am more likely to develop breast cancer than other women	82(38.7%)	60(28.3%)	27(12.7%)	13(6.1%)	30(14.2%)
Within the next year I will get breast cancer	92(43.4%)	49(23.1%)	39(18.4%)	8(3.8%)	24(11.3%)
Perceived serious of breast cancer					
Breast cancer to be a severe disease, but only if one is diagnosed in an advanced stage when no treatment can be provided any more	1(0.5%)	24(11.3%)	55(25.9%)	86(40.6%)	46(21.7%)
Breast cancer is a threat to feminine beauty, which is posed by the possibility of having to remove the breast	17(8.0%)	15(7.1%)	25(11.8%)	17(8.0%)	138(65.1%)
I associate breast cancer with breast removal	20(9.4%)	26(12.3%)	26(12.3%)	19(9.0%)	121(57.1%)

The thought of breast cancer scares me	30(14.2%)	24(11.3%)	49(23.1%)	30(14.2%)	79(37.3%)
You might survive from cancer, but you have lost your breast and it is not replaceable	24(11.3%)	31(14.6%)	21(9.9%)	58(27.4%)	78(36.8%)
Perceived Benefit of breast cancer prevention					
Having breast exams performed by a physician prevents future problems for me	12(5.7%)	35(16.5%)	41(19.3%)	44(20.8%)	80(37.7%)
Breast cancer self-examination/Mammography would enable the early detection of breast cancer	25(11.8%)	27(12.7%)	30(14.2%)	62(29.2%)	68(32.1%)
Mammography would enable cancer that I could not find with a self-exam to be detected	13(6.1%)	36(17.0%)	36(17.0%)	51(24.1%)	76(35.8%)
Mammography would decrease my chances of dying from breast cancer	13(6.1%)	33(15.6%)	34(16.0%)	59(27.8%)	73(34.4%)
I have a lot to gain by having breast exams performed by a physician	18(8.5%)	37(17.5%)	22(10.4%)	50(23.6%)	85(40.1%)
It would enable cancer to be detected quickly, and therefore the treatment would not be so bad	23(10.8%)	44(20.8%)	41(19.3%)	42(19.8%)	62(29.2%)
Perceived Barrier to breast Cancer prevention					
It is embarrassing for me to do monthly breast exams	33(15.6%)	19(9.0%)	39(18.4%)	68(32.1%)	53(25.0%)
Breast cancer self-exams can be painful	39(18.4%)	25(11.8%)	19(9.0%)	66(31.1%)	63(29.7%)
Doing breast cancer self-examination would require starting a new habit, which is difficult	44(20.8%)	39(18.4%)	17(8.0%)	52(24.5%)	60(28.3%)
I don't have time to receive a mammography because I am always busy	53(25.0%)	50(23.6%)	12(5.7%)	56(26.4%)	41(19.3%)
My family/ friends would make fun of me if I have a breast exam performed by a physician	49(23.1%)	58(27.4%)	27(12.7%)	36(17.0%)	42(19.8%)
Not get screened for breast cancer is due to my social condition	174(82.1%)	16(7.5%)	13(6.1%)	5(2.4%)	4(1.9%)

Table 5 below revealed the result of the findings based on the respondents' responses on the method of breast cancer prevention, it was revealed that 115(54.2%) of the respondents agreed that they have practiced breast cancer before while 97(45.8%) have not practice. Also, 31(14.6%) of the respondents gave reason that it is not convenient/uncomfortable, 29(13.7%) reported that it is not necessary while 35(16.5%) reported that they do not know how to do it. Furthermore, on the type of breast cancer prevention used by the respondents, majority 120(56.6%) of the respondents reported that they used breast self-examination (BSE), 28(13.2%) used clinical breast examination (CBE) while 64(30.2%) used mammography. Also, on the when the breast cancer prevention practiced, 35(16.5%) of the respondents reported that they practiced it daily, 42(19.8%) practiced it weekly, 109(51.4%) practiced it monthly, 15(7.1%) practiced it yearly while 11(5.2%) do not know. In addition, 159(75.0%) of the respondents opined that breast cancer prevention that is stressful while 53(25.0%) reported otherwise. More so, 25(11.8%) of the respondents reported that they never use this preventive measure, 50(23.6%) rarely use this preventive measure, 48(22.6%) occasionally while 89(42.0%) always use the preventive measures. Larger percent 176(83.0%) of the respondents agreed that they will continue to engage in breast cancer prevention measure while 36(17.0%) disagreed.

Table 5: Method of breast cancer prevention

	N=212	Frequency	Percentage (%)
Have you practice breast cancer prevention before?	Yes	115	54.2
	No	97	45.8
If no why?	Not convenient/uncomfortable	31	14.6
	Not necessary	29	13.7
	Do not know how to do it	35	16.5
Which type of breast cancer prevention do you use?	Breast Self-Examination (BSE)	120	56.6
	Clinical Breast Examination (CBE)	28	13.2
	Mammography	64	30.2
How often do you practices breast cancer prevention?	Daily	35	16.5
	Weekly	42	19.8
	Monthly	109	51.4
	Yearly	15	7.1
	Do not know	11	5.2
Is any of the type of breast cancer prevention stressful?	Yes	159	75.0
	No	53	25.0
How often do you use this preventive measure?	Never	25	11.8

	Rarely	50	23.6
	Occasionally	48	22.6
	Always	89	42.0
Will you continue to engage in breast cancer prevention measure?	Yes	176	83.0
	No	36	17.0

The result of the findings in table 6 further revealed the respondents' preventive methods against breast cancer with a total mean score of 12.75± 2.46. It was revealed that majority 115(54.2%), of the respondents had low preventive measure regarding breast cancer while 97(45.8%) of the respondents reported high preventive measure against breast cancer.

Table 6: Respondents Level of Prevention regarding breast cancer

	N=212 Frequency	Percentage (%)
Low	115	54.2
High	97	45.8

Test of Hypotheses
There is significant relationship between respondents' knowledge of breast cancer and their perception of breast cancer (r=0.20; *p*=0.004)

Table 7: Relationship between Knowledge of breast cancer and Perception of breast cancer

Variables	r	p
Perception of breast cancer	.20**	.004
Knowledge of breast cancer		

**. Correlation is significant at the 0.01 level
The result revealed that there is significant relationship between respondents' knowledge and practice (r=0.28; *p*=0.000).

Table 8: Relationship between Knowledge of breast cancer and prevention of breast cancer

Variables	r	p
Prevention of breast cancer	.28**	.000
Knowledge of breast cancer		

**. Correlation is significant at the 0.01 level

The result revealed that there is no significant relationship between respondents' perception and method of breast cancer prevention (r=0.2; *p*=0.743).

Table 9: Relationship between Knowledge of breast cancer and prevention of breast cancer

Variables	r	p
Perception of breast cancer	.02	.743
Method of breast cancer prevention		

V. DISCUSSION

Discussion of Findings
The results of this study revealed that respondents do not have adequate knowledge about prevention of breast cancer. This demonstrates that, majority of the respondents had moderate knowledge about breast cancer among women in agrochemical companies. This contrasts the study by Mazinga et al (2016) performed a related research review and pointed out that less than one-fifth of the women participating had sufficient knowledge of the screening for breast cancer. The high practice of BSE among undergraduate students in the population surveyed should be regarded within the context of previous studies. All of these studies have reported low popularity of BSE amongst their respondents who live in college settings. This is why women do not adopt BSE either. This was also supported by Amoran& Toyobo (2015) among women in a rural

community in Nigeria in their research. Findings showed that while some 59.5% reported having learned about BSE, only 24.3% practiced BSE.

Based on the perception of women in agrochemical companies on breast cancer, it was revealed from the study that larger per cent of the respondents had poor perception about breast cancer as some of them reported high level of perceived susceptibility, perceived seriousness of breast cancer.

More than half per cent of the respondents agreed on the benefit of the breast can prevention by highlighting that breast cancer self-examination/Mammography would enable the early detection of breast cancer. The low practice of mammography screening in Hispanic/Latino women and negative attitudes and beliefs have caused physical and mental problems and decreased quality of life among them (Ell et al., 2005; Molina et al., 2013). This was a common theme among Latinas who survived breast cancer (Williams et al., 2011).

As regards the respondents method of breast cancer prevention, it was revealed that more than half of the respondents had low preventive measures and methods about breast cancer, as majority of them do practice breast cancer prevention monthly and also reported that they do not know how to the breast cancer prevention. breast cancer outcomes were likely to be more beneficial when the disease was diagnosed sooner (Hunt, 2016). However, such an outcome for Hispanic women is still uncommon (Hunt, 2016; Molina et al., 2013).

There is significant relationship between respondents' knowledge of breast cancer and their perception of breast cancer. Kapil et al. (2014) also explored reproductive risk factors for breast cancer in a cohort sample. The researchers found that the risk of breast cancer is elevated during early ages of first child birth, during late ages of menarche and during early ages of menopause. Reproductive factors are significant risk factors for breast cancer in women. They pointed toward endogenous estrogens as likely player in the initiation, development, and promotion of breast cancer. The research showed that having an earlier onset of menarche was linked to an increased risk of breast cancer only in post- menopausal women.

Romieu et al. (2018) investigated the association between reproductive factors and the three major forms of breast cancer. These results suggest that pregnancies in the older age groups could be associated with an increased risk of ER-positive cancers. Ever been pregnant, number of childbirths and history of breastfeeding decrease the risk of developing adenocarcinoma of the ovary. Older age at menarche and length of breastfeeding were associated with weaker estrogen negative (ER-) status.

More so, the result revealed that there is significant relationship between respondents' knowledge and practice of breast cancer among women in agrochemical companies in Lagos State. This was supported by Amoran& Toyobo (2015) among women in a rural community in Nigeria in their research. Findings showed that while some 59.5% reported having learned about BSE, only 24.3% practiced BSE. A cross-sectional study conducted by Bassey et al. (2011) assessed the level of awareness, attitude, and practice of breast self-examination among nursing students of the University of Lagos Teaching Hospital. The respondent's awareness of breast cancer and breast self-examination was above-average (97.3%; 85.6%). More than half of Singaporeans received their knowledge from television or radio. Most respondents, 98.5% thought self-examination of the breast was useful and 84.3% reported having done breast examination before.

The result revealed that there is no significant relationship between respondents' perception and method of breast cancer prevention. In line with the study by Aresvik, 2016 who fund that the goal of prevention is to reduce breast cancer incidence by reducing exposure to its risk factors. However, reproductive-related threats, including advanced maternal age of first birth, are presently untenable in developed societies. Tools for breast cancer prevention have primarily focused on proven modifiable risk factors such as physical activity, alcohol intake, and the use of exogenous hormones. Also, Kakarala et al. (2010) clarified that, breast cancer prevention starts with improvements that people can make in their daily lives, the most important of which are decreasing their exposure to and development of toxic estrogens, improving metabolism and removal of estrogens through detoxification, and reducing inflammation.

IMPLICATION TO RESEARCH AND PRACTICE
Based on the findings of this study the following are therefore recommended;

1.   Health professionals and the agrochemical companies should improve in the accessibility to health services and provide information regarding health and breast cancer prevention.

2.   Organizational-based programs should be provided consistently, such as implementation of affordable test for breast cancer, a mobile mammography unit, or development of culturally sensitive materials about breast cancer risk and mammography screening.

3.   There should be training and orientation by health professionals either private practitioners and or government health officials for women in agrochemical companies and women in general to heighten their 'suspicion' of breast cancer and ways to prevent it.

VI. CONCLUSION

In conclusion, this study showed that the level of knowledge of breast cancer as an entity and most of the other subthemes of level of the knowledge was not low among respondents in the studies reviewed. It also showed that the level of knowledge significant relate to the perception of breast cancer among respondents sampled. As there was increase in knowledge of clinical features and methods of breast cancer prevention were high, this suggests that increase in the level of knowledge boosted the awareness of the methods of breast cancer prevention.

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