Awareness of Breast Cancer and Screening Programmes in Ilorin.kwara State, Nigeria.

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ABSTRACT
Breast cancers are malignant tumours of the breast that are exceedingly common all over the world. It has been estimated that 1 in 10 women develops the disease in her life-time[1]. In Nigeria, breast cancer is the commonest cancer among the females[2]. The importance of awareness of breast cancer, provision of its screening modalities and programmes cannot be over – emphasized. The present study was a questionnaire – based survey to investigate the incidence, awareness and screening programmes of breast cancer in Ilorin (and its environs) in Kwara state of Nigeria. The study also investigated the level of participation of women at risk in the available screening programmes. A prospective study of a population in Ilorin Emirate area, Kwara State of Nigeria, comprising of two hundred and fifty - five (255) adults with their age ranging between 15 and 70 years. They consisted of forty – nine (49) males and two hundred and six (206) female was conducted. Well – designed closed - structured questionnaires were administered to consented adults; case records of breast cancer patients were also collected from the Department of Pathology, University of Ilorin Teaching Hospital (U.I.T.H.), Ilorin, Nigeria. These were studied to determine the incidence. The results obtained were subjected to statistical analysis; it was discovered that 83.9% of the participants knew something about breast cancer; while only 73.3% thereof knew about its screening programmes. The prevalence of breast cancer was higher in patient aged between 55 and 64 years. It could therefore be concluded that the level of awareness of breast cancer and the available screening programmes was high among the study population, at risk, in Ilorin Emirate area of Kwara State, Nigeria.

Key words: Level of Awareness; Incidence of Breast cancer; Screening programmes; Ilorin and its environs.

INTRODUCTION
Breast cancer is an exceedingly common disease. Global number of cases were once estimated to be 1,050,346 and 372,969 deaths; with more than 183,768 deaths in year 2000[2]. It has now been estimated that 1 in 10 women would develop the disease in her life – time[1]. Males also account for 1% of breast cancer cases and deaths (www.cancer.gov, 2008). Breast cancers are malignant tumours of the breast. They are genetic disease of the somatic cell mutant gene category; wherein normal cells divide without control. Such cells can invade the breast tissue and beyond[2]. In Nigeria, it is the commonest cancer in females (incidence was 28.96 per 100,000 for year 2000); the number of new cases was 10,528 (31.8% of all cancer cases in females) while the number of death from breast cancer was 4,739 (23.3% of all cancer – related diseases[1].

The outcome of breast cancer and how long the survival of the afflicted is depend partly on how far the tumour has spread when it was first discovered. Death, in most cases, is due to metastatic spread which must have already occurred by the time of presentation[3].
Breast cancer screening programme is an important way to detect breast cancer early when it could be treated easily and cured. Currently available breast cancer screening modalities include: (i) Mammography[4,5]. (ii) Clinical Breast Examination (CBE); (iii) Ultrasonography (USS); (iv) Magnetic Resonance Imaging (MRI); (v) Scintimammography (SMM) and (vi) Tissue Sampling (TS).
The present study covers individuals such as students, professionals, non – professionals, *et cetera*.

AIM OF STUDY
The aim of the study is to investigate the incidence of breast cancer, its awareness, its screening programmes as well as to determine the level of participation of women in the screening programmes for prevention of breast cancer in Ilorin and its environs.

RATIONALE
The results obtained from this study would serve as the basis for increasing the awareness level of the general public and advising governments and non – governmental organizations (NGOs) on the provisions of requisite facilities / equipments in the existing screening centres and creation of new ones.

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METHODOLOGY

The study was a Knowledge – Attitude – Practices (KAP) type.

Sample Area: The selected areas for the study were chosen using stratified Random sampling method and these included ten localities in Ilorin town / environs .

Materials: Well – designed Composite questionnaires that were self – administered were used for this research. The questionnaires were the closed ended type to facilitate ease of administration and analysis. It consisted of two sections with section A on personal information and section B on the knowledge of breast cancer and its screening plus level of participation. The questionnaires were compiled and compared with the standard.

Data on the incidences of breast cancer in Ilorin and its environs were collected, with a written permission, from the records / collections of the Department of Pathology, University of Ilorin Teaching Hospital (UITH), Ilorin.

Sample Size: Two hundred and fifty - five respondents were involved in the study. Forty - nine (49) of which were Males and two hundred and six (206) Females.

Sampling Method: The Sampling method used to administer the questionnaires was the simple random method.

RESULTS:

The Data collected from the questionnaires were presented in Tables and analysed using frequency tables and graphs:

Table I: Showing the Breast Cancer incidence from the data collected from the Cancer Registry, University of Ilorin Teaching Hospital (UITH), Ilorin (2003 to 2007).

Age Group	Frequency	Percentage
15 – 24	3	0.8
25 – 34	42	11.6
35 – 44	93	25.6
45 – 54	96	26.5
55 – 64	82	22.6
65 – 74	37	10.2
Unknown	10	2.7
Total	363	100
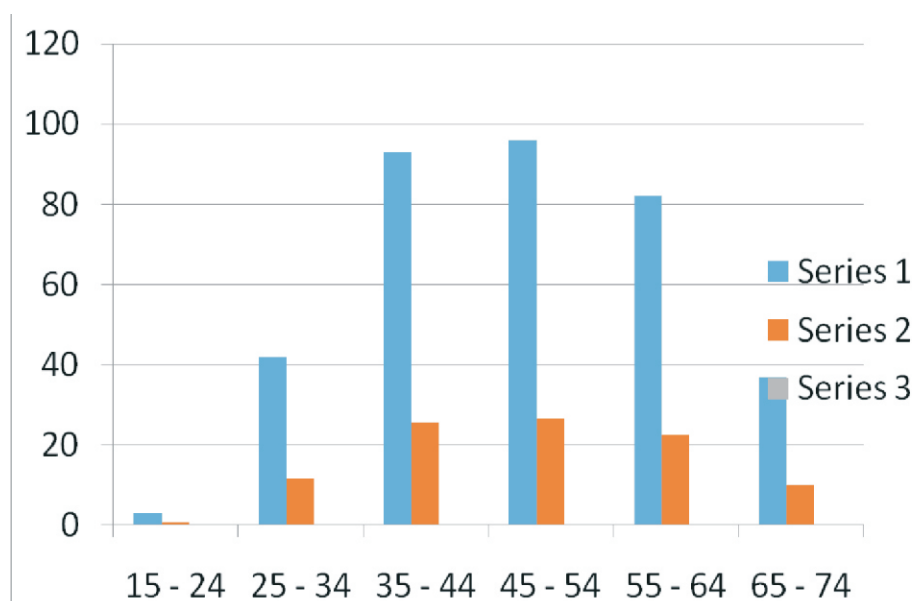
Figure 1: Showing the Breast Cancer incidence from the data collected from the Cancer Registry, University of Ilorin Teaching Hospital (UITH), Ilorin (2003 to 2007).
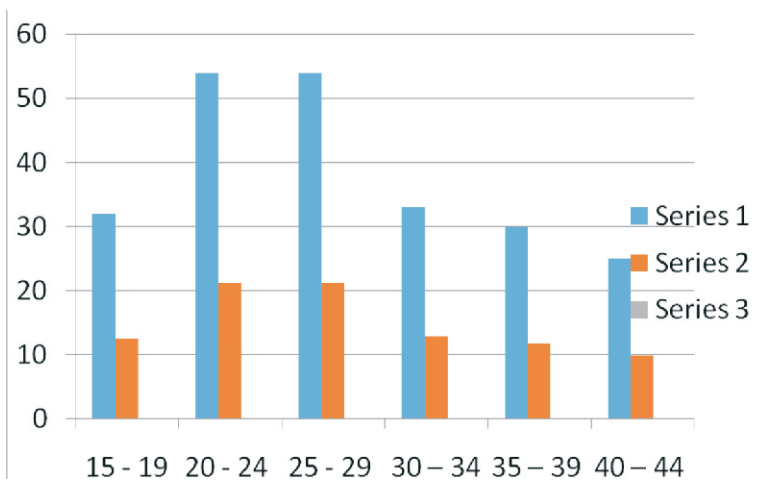
Table II: Showing Frequency Distribution of the ages of the respondents in Ilorin.

AGE GROUP (years)	FREQUENCY	PERCENTAGE (%)
15 – 19	32	12.5
20 – 24	54	21.2
25 – 29	54	21.2
30 – 34	33	12.9
35 – 39	30	11.8
40 – 44	25	9.8
45 – 49	13	5.1
50 – 54	9	3.5
55 – 59	1	0.4
60 – 64	4	1.6
65 – 69	0	0.0
TOTAL	255	100

Figure 2: Showing Frequency Distribution of the ages of the respondents in Ilorin.

Table III: Showing Frequency Distribution of the sexes of the respondents in Ilorin.

SEX	FREQUENCY	PERCENTAGE (%)
MALE	49	19.2
FEMALE	206	80.8
Total	255	100

Table IV: Showing Frequency Distribution of the levels of education of the respondents in Ilorin.

Level of Education	Frequency	Percentage (%)
None	31	12.2
Primary	15	5.9
Secondary	33	12.9
Tertiary	159	62.4
Others	17	6.7
Total	255	100

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Table V: Frequency Distribution Table showing degree of awareness of breast cancer and its screening programmes in Ilorin.

QUESTIONS	YES	Percentage (%)	NO	Percentage (%)
Have heard of Breast Cancer?	214	83.9	41	16.1
Knew someone who had Breast Cancer?	83	32.5	172	67.5
Had heard of Breast Cancer Screening Programmes?	187	73.3	68	26.7
Knew importance of screening?	194	76.1	61	23.9
Carried out BSE?	135	52.9	120	47.1
Carried out CBE?	24	9.4	231	90.6

Table VI: Frequency Distribution Table showing degree of awareness of breast cancer and its screening programmes, according to the level of education of respondents, in Ilorin.

Edu. Level	Heard of Breast Cancer				Heard of its Screening prog				Knew the importance of screening			
	YES	%	NO	%	YES	%	NO	%	YES	%	NO	%
None	20	7.8	11	4.3	16	6.3	15	5.9	19	7.5	12	4.7
Pry	5	2.0	10	4.0	6	2.4	9	3.5	6	2.4	9	3.5
Sec.	23	9.0	10	4.0	22	8.6	11	4.3	27	10.6	6	2.4
Tert.	149	58.4	10	4.0	133	52.2	26	10.2	132	51.8	27	10.6
Others	17	6.7	0	0.0	10	4.0	7	2.8	10	4.0	7	2.8
Total	214	83.9	41	16.1	187	73.3	68	26.7	194	76.1	61	23.9

Table VII: Showing the level of awareness of breast cancer and its screening programmes in Ilorin, according to the occupation of the respondents.

Occupatn	Heard of Breast Cancer				Heard of its Screening prog				Knew the importance of screening			
	YES	%	NO	%	YES	%	NO	%	YES	%	NO	%
Students	98	38.4	5	2.0	84	32.9	19	7.5	92	36.1	11	4.3
Profesnal	62	24.3	2	0.8	50	0.2	14	5.5	45	17.7	19	7.5
NonPrfesn	52	20.4	34	13.3	53	20.8	35	13.7	57	22.4	31	12.2
Total	214	83.9	41	16.1	187	73.3	68	26.7	194	76.1	61	23.9

Table VIII: Frequency Distribution Table showing degree of awareness of breast cancer and its screening programmes, according to the ages of respondents, in Ilorin.

	Heard of Breast Cancer?				Heard of its Screening programmes?				Knew the importance of screening?			
AGE GROUP (years)	YES	%	NO	%	YES	%	NO	%	YES	%	NO	%
15 - 19	29	11.37	3	1.18	25	9.80	7	2.75	27	10.59	5	1.96
20 - 24	48	18.82	6	2.35	44	17.25	10	3.92	43	16.86	11	4.31
25 - 29	44	17.25	10	3.92	38	14.90	16	6.27	50	19.61	4	1.57
30 – 34	27	10.59	6	2.35	26	10.20	7	2.75	26	10.20	7	2.75
35 – 39	27	10.59	3	1.18	21	8.24	9	3.53	19	7.45	11	4.31
40 – 44	22	8.63	3	1.18	16	6.27	9	3.53	16	6.27	9	3.53
45 – 49	9	3.53	4	1.57	9	3.53	4	1.57	7	2.75	6	2.35
50 – 54	8	3.14	1	0.39	5	1.96	4	1.57	5	1.96	4	1.57
55 – 59	0	0.0	1	0.39	0	0.0	1	0.39	0	0.0	1	0.39
60 – 64	0	0.0	4	1.57	3	1.18	1	0.39	1	0.39	0	0.0
65 – 69	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
TOTAL	214	83.92	44	17.25	187	73.33	68	26.67	194	76.08	61	23.92

Table IX: Frequency Distribution Table showing the participation of female respondents in BSE and CBE in Ilorin.

Responses	Breast Self – Exam (BSE)	Percentage	Clinical Breast Exam. (CBE)	Percentage
YES	126	61.2	24	11.7
NO	80	38.8	184	88.3
Total	206	100	206	100

Clinical exams. include clinical breast exam, mammography, tissue sampling etc.

DISCUSSION

From the results as shown in Tables I to IX, there was high degree of awareness of existence of breast cancer and availability of screening programmes especially among the students in the tertiary institutions in Ilorin. This is evident as 83.9% (214) of the 255 respondents had some knowledge of breast cancer; 73.3% (187) knew about the available breast cancer screening programmes while 76.1% knew the importance of these programmes. These are evidently due to the age, level of education and occupational status of the respondents. Even artisans (such as tailors and hair – dressers) and traders exhibited good knowledge of breast cancer and its screening programmes. The role of media in the provision of information and education on health matters is likely to be significant.

The fact that only 32.5% of the respondents knew someone who had breast cancer may be due to one or all of the following possibilities: low incidence of the disease in Ilorin as seen in the UITH's record from 2003 t0 2007 (Table I); and reluctance of patients to discuss their problems with people.

This high level of awareness could explain the reason for the observed high level of participation, 61.2%, in breast self- examination (126 respondents). Involvement of the respondents in clinical breast examination was, however, low as only 24 respondents

(11.7%) did so. This could be due to high cost of obtaining such services as mammography, ultrasonography, magnetic resonance imaging, scintimammography and tissue sampling.

CONCLUSION

From the foregoing, it can be concluded that in Ilorin and its environs, awareness of breast cancer and its screening programmes was high. Although breast self – examination was practised by about two thirds of the participants due to their high level of education, correspondingly few of them went for clinical assessment; probably discouraged by its high cost.

RECOMMENDATIONS

This study should be conducted to cover more areas of the Ilorin emirate; it should also be replicated in more local government areas of the State of Kwara and, of course, Nigeria.
The costs of screening programmes, and clinical assessment, should be greatly subsidized to enable many women at risk to benefit from. More efforts should be directed to further educate women at every forum and using all modes of communication. Finally, more centres should be empowered to provide services to persons at risk.

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