

## Knowledge and Practice of Breast Self Examination among Female Adolescents in Osogbo, Nigeria.

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### Abstract

**Background:** Breast self examination (BSE) is a simple, inexpensive, non-invasive and non hazardous means of detecting breast cancer at early stage. BSE is also reported to be less effected than mammography or examination by a trained physician. However, it is a reliable approach particularly in developing countries that cannot afford sophisticated screening services for the entire population at risk. Breast cancer has become the most leading cause of cancer death among women. This can be prevented by early diagnosis of breast lump. Breast cancer is a cancer that is preventable and yet has a high morbidity and mortality rate but breast cancer can be prevented by the practice of BSE which is an easy preventive measure through early detection of precancerous lesions. This study therefore aimed to assess the knowledge and determine the level of practice of BSE toward prevention of breast cancer among female adolescence of two selected secondary school Osogbo.

**Materials and methods:** This descriptive study was conducted among one hundred and sixty female adolescents recruited from Ata Oja Government High School and Baptist High School Osogbo Local Government Osogbo, Osun State using stratified random sampling technique. A self-structure questionnaire was used to collect data from respondents which was analyzed with SPSS version 22 and was summarized using tables and bar charts.

**Results:** 69.8% of the respondents demonstrated knowledge of BSE with health workers (52.1%) being the major source of information, other sources were mass media (31.7%), friends (9.2%) and sources undisclosed (7%). Practice of BSE among respondents revealed that 56.3% agreed that they found it difficult to examine their breast, 61% agreed that the hospital is the only place for breast examination while 46.3% felt BSE was not necessary. However, 40.6% of the respondents consented that they were uncomfortable touching their breast, 44.4% indicated that going to school affected the practice of BSE while 41.9% of the respondents agreed that BSE should be done when they feel abnormal around their breast. The study also revealed that there was significant relationship between knowledge of female adolescents and their practices of BSE while age of respondents was not significant to the practice of BSE.

**Conclusion:** Respondents demonstrated good knowledge about BSE which was not reflected in their practice. Based on the findings of the study, the following recommendations were made: Nurses should take outreach to schools periodically in order to teach the female students on how to perform the BSE and to be comfortable touching their bodies. Parents, teachers, community and the Government all have roles to play in encouraging the effective practice of BSE to reduce the rate of breast cancer in the world.

**Keywords:** Knowledge, Practice, Breast self-examination, Breast cancer, Prevention, Adolescents, Female

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### I. Introduction

Breast self examination is a screening method used in an attempt to detect breast cancer early. The method involves the herself looking at the mirror and feeling each breast for possible lumps distortion or swelling<sup>1</sup>. BSE is an important cheap and easy method for early diagnosis of breast cancer<sup>2</sup>. Cancer is a group of complex disease characteristics by uncontrolled growth of abnormal tumor cells. Carcinoma of the breast is an important public health problem with its associated high morbidity and mortality. The manifestation of cancer varies depending on which body system is affected and what type of tumor cells are involved. People of any age, gender, ethnicity or geographical regions can be affected by this disease<sup>3</sup>.

Breast cancer is one of the leading causes of morbidity and mortality worldwide, with nearly 1.7 million new cases and 521,900 deaths in 2012, which is expected to rise by about 70% over the next two decades<sup>4</sup>. With 8.8 million deaths recorded in 2015 as a result of cancer globally. Breast cancer is a global disease of significant burden and its incidence continues to rise especially in sub-Saharan African<sup>5,10</sup>. The American Cancer Society<sup>6</sup> recommends that women, starting from the age of 15 years should be educated on the pros and cons of performing a monthly BSE. For women to present early to hospital they need to be "breast aware", they must be able to recognize systems of breast cancer.

Despite the advent of modern screening methods, more than 90% of cases of cancers of the breast are detected by women themselves, stressing the importance of BSE<sup>7</sup>. There is evidence that most of the early breast tumors are self discovered and that majority of early self discoveries are by BSE performers<sup>8</sup>. The low survival rates in less developed countries may be explained mainly lack of early detection programmes, lack of adequate diagnosis and treatment facilities which results in a high proportion of women presenting with late stage disease at which time little or no benefit can be derived in form of therapy. Reports shows that majority of cases occurred in premenopausal women and the mean age of occurrence ranged between 43-50years across regions in Nigeria and the youngest age recorded was 16years<sup>9</sup>. This study therefore aimed to assess the knowledge, determine the level of practice of BSE toward prevention of breast cancer among female adolescents of two selected secondary schools in Osogbo.

## II. Materials and Methods

**Research Design:** The non-experimental design was used for the study.

**Study setting:** This research study was carried out in Ata Oja Government High School and Baptist High School Osogbo, Osun State. Ataoja Government High School is situated in between Abere and Ogo- Oluwa while Baptist High School is located at Gbodofon area in Osogbo Local Government, Osun State.

The **target population** for this study were female adolescents attending Ata-Oja Government High School and Baptist High School Osogbo Osun state. All the students aged 12-18 years in the selected schools were targeted. The study area had an estimated secondary school students population of 7000. The estimated number of female adolescents of the study area, Ata Oja Government school is 2,500 and Baptist High School 1,500 making a total of 4000.

**Sample Size:** This was determined by using Fisher's formula  $n = \frac{z^2 pq^D}{d^2}$ .

The sample size 160 students was determined and picked randomly and proportionately from each of the schools. In Ata-oja Government High School and Baptist High School, 100 questionnaires and 60 questionnaires were distributed respectively.

**Instrument for Data Collection :** The instrument that was used for data collection in this study was a questionnaire which was designed by the researcher and consist of closed ended questions, the items was categorized into three sections to address respondent's demographic data, knowledge of BSE and the practice of BSE.

**Validity and Reliability of Instrument:** The contents of the questionnaire were obtained from recent literature reviewed in the study covering all aspects of BSE. The questionnaire was scrutinized by the research experts for clarification, modification of items and assessment of content validity ensuring that every item is in relation with the objectives therefore ensuring accuracy. A pilot study was conducted on 16 female adolescents of Osogbo Grammar School using the designed questionnaire. This tested the reliability of the instruments.

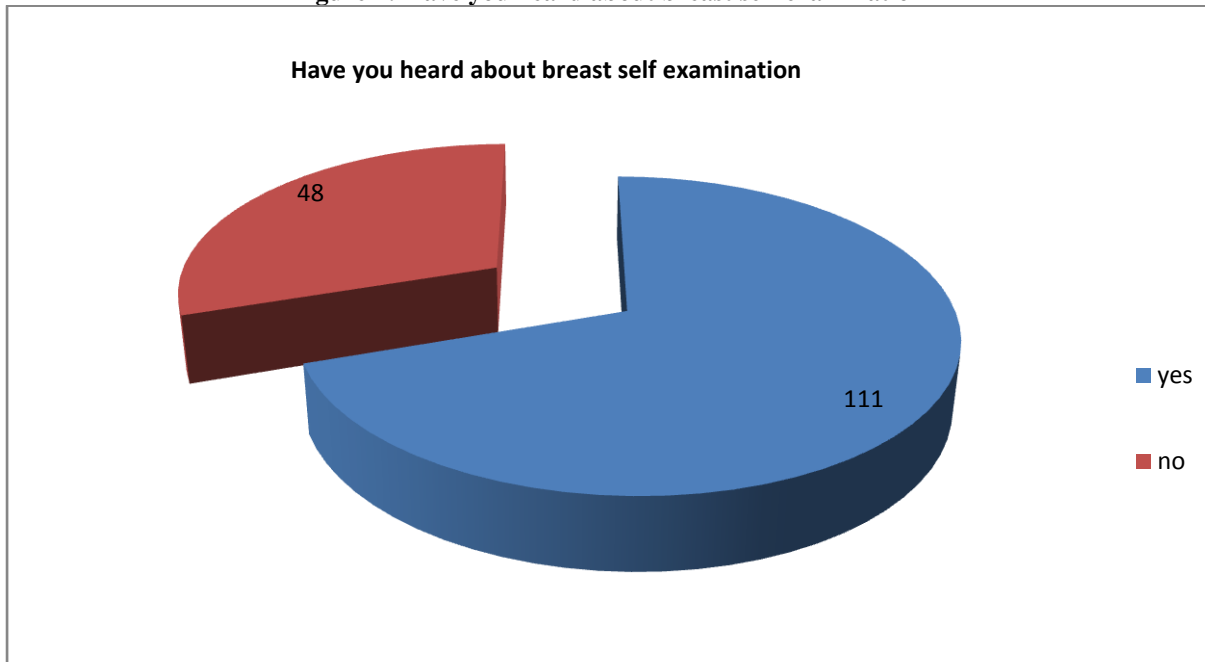
**Study duration** was September to November, 2018

**Method of data analysis:** The data was analyzed using statistical package for social sciences (SPSS) 22 version, results derived were interpreted using tables, figures, and percentages, chi-square was used to analyze the hypotheses at 0.05 significant level.

**Ethical Consideration:** A written permission was presented to the Principals of the secondary schools before administering the questionnaires. This was utilized along with the consent of the respondents. Respondents were assured of privacy and confidentiality of information provided. The purpose of study was also made known to the respondents from whom the data was collected

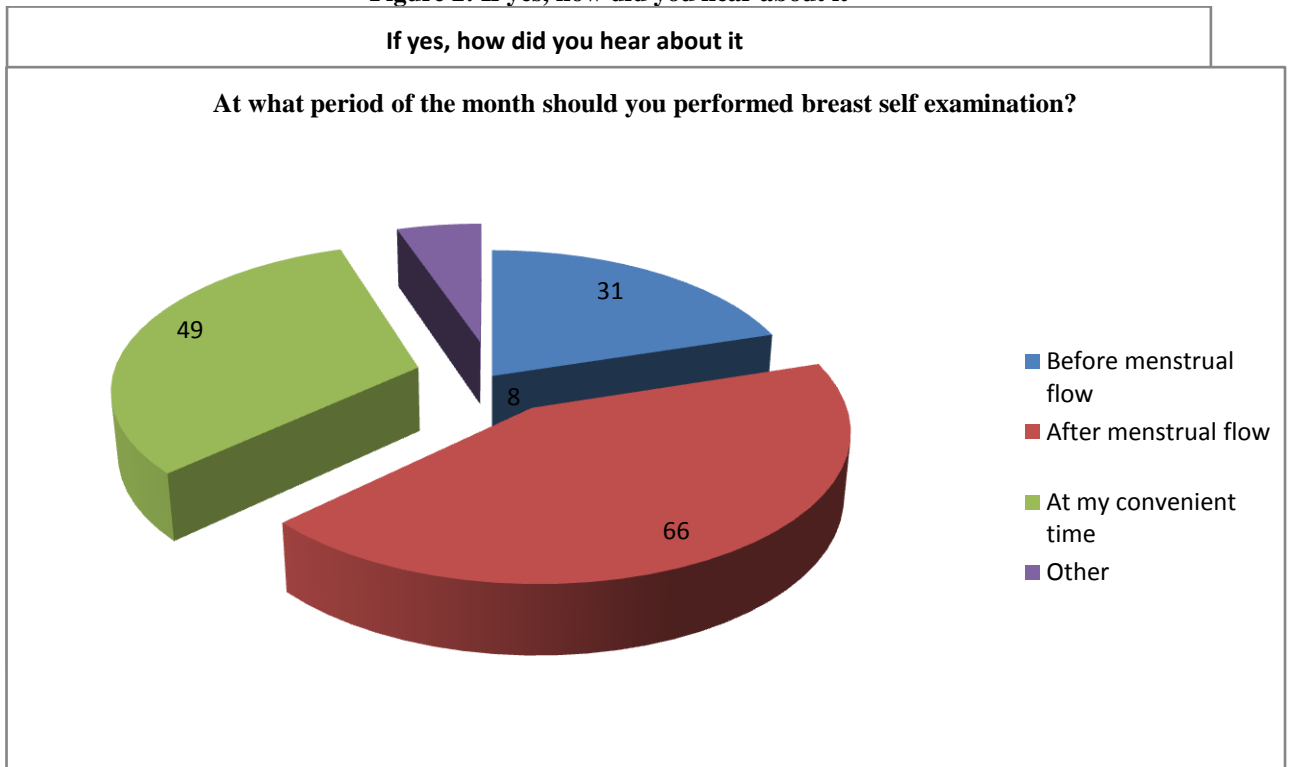
**III. Results**

**Figure 1: Have you heard about breast self examination**



The figure 1 above shows knowledge of the respondents on breast self examination, yes, 111 (69.8%) and no, 48 (30.2%)

**Figure 2: If yes, how did you hear about it**



**Figure 3: At what period of the month should you performed breast self examination?**

Figure 3 above describes period of breast self examination by the respondents, before menstrual flow, 31 (20.1%), after menstrual flow, 66 (42.9%), at my convenient time, 49 (31.8%), other, 8 (5.2%)

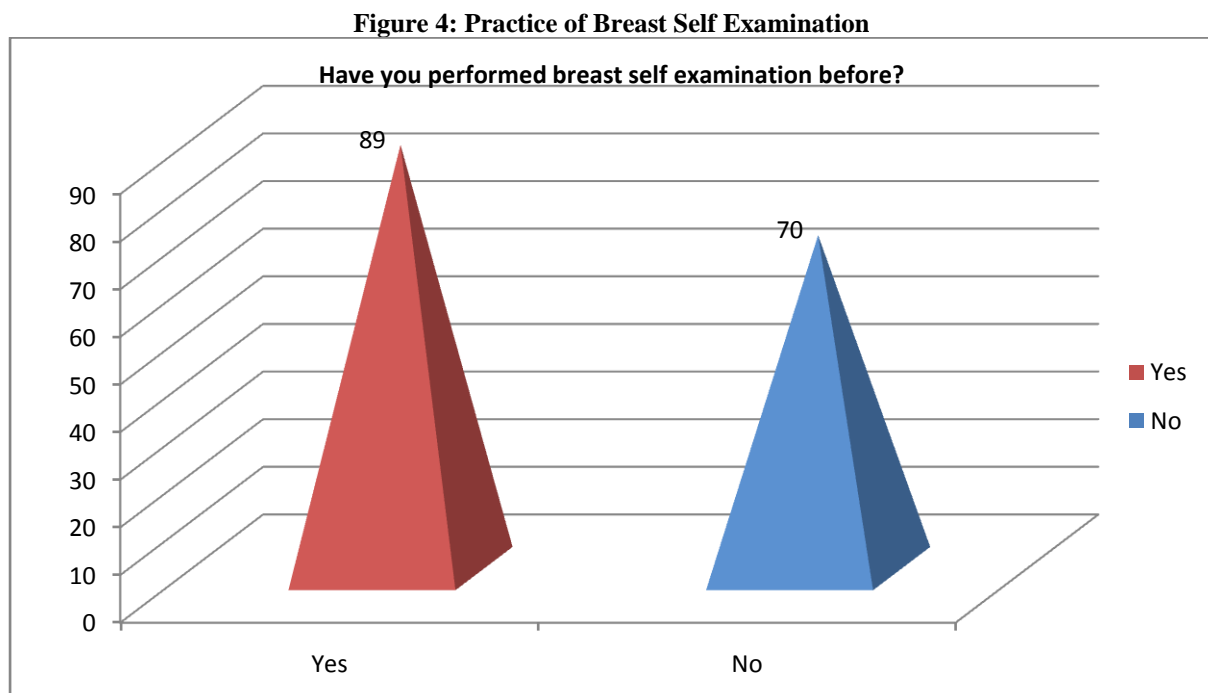


Figure 4 above indicates that 89 (56.0%) of the respondents had performed breast self examination while 70 (44.0%) had not.

**Figure 5: If yes what are you looking for?**

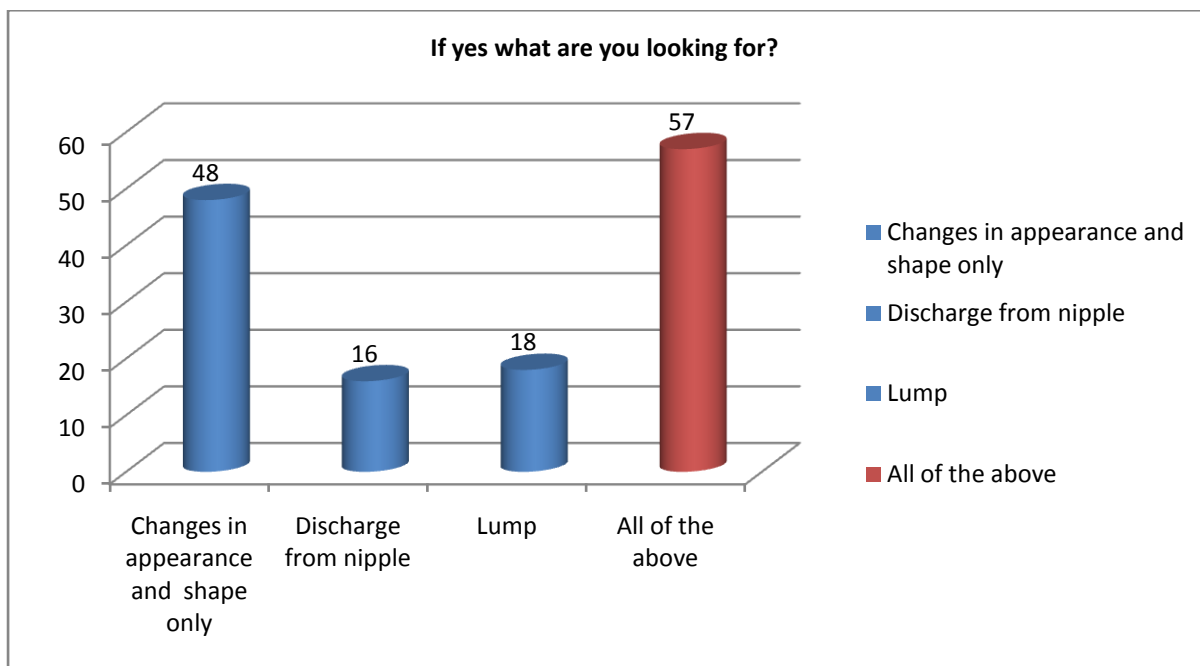


Figure 5 above indicates breast self examination by the respondents, changes in appearance and shape only, 48 (34.5%), discharge from nipple, 16 (11.5%), lump, 18 (12.9%), all of the above, 57 (41.0%)

**Table 1: If no, why have you not?**

Variable	Frequency	Percent
(yes response)	129	80.6
It is difficult to perform	5	3.0
I don't know how to perform it	8	4.9
it is painful	1	.6
no time	7	4.3
not easy	1	.6
not necessary	2	1.2
Painful	3	1.9
scared of having lump	1	.6
Unaware	1	.6
We don't performed it in our family	2	1.2
Total	160	100.0

The table 1 above describes reason for not performing breast self examination by the respondents.

**Table 2: Practice of breast self examination**

Variable	Frequency	Percent
<b>Regular practice of BSE can help in early detection of breast cancer</b>	strongly agree	35.6
	Agree	41.9
	Disagree	10.0
	strongly disagree	11.9
<b>I should practice BSE every month</b>	strongly agree	25.0
	Agree	49.4
	Disagree	15.6
	strongly disagree	9.4
<b>I found it difficult pressing (examine) any breast</b>	strongly agree	22.5
	Agree	33.8
	Disagree	28.8
	strongly disagree	14.4

<b>Breast self examination is not necessary</b>	strongly agree	19	11.9
	Agree	55	34.4
	Disagree	53	33.1
	strongly disagree	32	20.0
<b>One should only go to the hospital for breast examination</b>	strongly agree	40	25.0
	Agree	59	36.9
	Disagree	49	30.6
	strongly disagree	11	6.9
<b>I feel uncomfortable touching my breast which has affected my practice of BSE</b>	strongly agree	16	10.0
	Agree	49	30.6
	Disagree	61	38.1
	strongly disagree	32	20.0
<b>Irregularities of menstruation also affect the practice of BSE</b>	strongly agree	49	30.6
	Agree	43	26.9
	Disagree	43	26.9
	strongly disagree	23	14.4
<b>Going to school can affect the practice of BSE</b>	strongly agree	27	16.9
	Agree	44	27.5
	Disagree	65	40.6
	strongly disagree	23	14.4
<b>BSE is a method of screening for breast cancer</b>	strongly agree	44	27.5
	Agree	65	40.6
	Disagree	39	24.4
	strongly disagree	9	5.6
<b>BSE should be done only if you feel abnormal around your breast</b>	strongly agree	28	17.5
	Agree	39	24.4
	Disagree	47	29.4
	strongly disagree	45	28.1

Table 2 above provides details on practice of breast self examination by the respondents, the significant numerals of the respondents, 124 (77.5%) agreed that the regular practice of BSE can help in early detection of breast cancer, 35 (21.9%) did not agree that BSE should be practice regularly, 119 (74.4%) agreed to practice BSE every month where 40 (25.0%) disagreed to every month practice. Though 90 (56.3%) agreed that they found it difficult to examine breast, 69 (43.2%) disagreed, so 74 (46.3%) agreed that breast self examination is not necessary, 85 (53.1%) did not agree that breast self examination is not necessary while 99 (61.9%) agreed that hospital is the only place for breast examination but 60 (37.5%) did not assent to it.

However, 65 (40.6%) of the respondents consent that they uncomfortable touching their breast, 93 (58.1%) did not agree with it, so 92 (65.7%) of the respondents agreed that the irregularities of menstruation affect the practice of BSE where 66 (41.3%) did not consent, while 71 (44.4%) indicated that going to school affects the practice of BSE, 88 (55.0%) did not agree that school attendance affect practice of BSE, so 109 (68.1%) agreed that BSE is a method of screening for breast cancer where 48 (30.0%) did not agree and 67 (41.9%) of the respondents agreed that BSE should be done when you feel abnormal around your breast and 92 (57.5%) did not consent.

Hypotheses tested using Chi- square @ 0.05 significant level revealed that there was significant relationship between knowledge of female adolescents and their practices of BSE and that there was no significant relationship between age of female adolescents and their practices of BSE.

#### IV. Discussion

69.8% of the respondents demonstrated knowledge of BSE and source of information revealed from health workers (52.1%), mass media (31.7%), friends (9.2%) and other sources undisclosed (7%). This was supported in previous studies which revealed that a high percent of their respondents had previously heard about BSE though higher than that of this study<sup>12, 13</sup>.

Practice of BSE among respondents revealed that 77.5% agreed that the regular practice of BSE can help in the early detection of breast cancer, 75% of the respondents agreed to monthly practice which might be due to their significant awareness though 56.3% agreed that they found it difficult to examine their breast and 61% agreed that the hospital is the only place for breast examination while 46.3% felt BSE was not necessary. However, 40.6% of the respondents consent that they are uncomfortable touching their breast, 44.4% indicated that going to school affect the practice of BSE while 41.9% of the respondents agreed that BSE should be done when they feel abnormal around their breast. These findings are in accordance with that of previous studies which showed a high level of knowledge of BSE (87.7%) and a low level of practice (19%) of BSE monthly<sup>14</sup> and other previous studies were also in support<sup>15, 17</sup>.

The study also revealed that there was significant relationship between knowledge of female adolescents and their practices of BSE while age of respondents was not significant to the practice of BSE. This

might be due to the fact that in-depth knowledge enhances practice. Having to hear about BSE is not enough for adequate practice of the procedure<sup>10, 16</sup>.

## V. Conclusion

Respondents demonstrated good knowledge about BSE which was not reflected in their practice. Based on the findings of the study, the following recommendations were made:

- Health workers especially nurses and midwives should health educate female adolescents on the importance of BSE whenever they come in contact with them as they still remain the major source of informants as revealed in this study.
- Nurses should take outreach to schools periodically in order to teach the female students on how to perform the BSE and to be comfortable touching their bodies.
- Parents should be aware and have adequate knowledge on BSE in order to teach and encourage their wards on how to perform BSE regularly.
- A school health service with reproductive health services is a must in all our schools.
- The hospital management should provide free routine examination that ensures knowledge and practice of BSE.
- The community and Government have roles to support the practice of BSE by providing the required logistics to create a breast cancer-free society.

## References

- [1]. Koster, J.P & Gostszsche, P.C, (2011): Regularself examination for early detection of breast cancer. USA: Longman Publisher.
- [2]. Shrivastava S.R.(2013): Breast examination: a tool for early diagnosis of breast cancer. *American Journal of Public health research*;1(6):135-139.
- [3]. Burke K.M, Mohn-Brown E, and Eby L,(2011): Medical surgical Nursing ,3<sup>rd</sup> ed., Pearson education Inc.New Jersey.
- [4]. International Agency for Research on Cancer. Globacon 2012: estimated incidence, mortality and prevalence worldwide in 2012. Available from: <http://globocan.iarc.fr/Pages/factsheetscancer.aspx>.
- [5]. Balogun M,(2016): Breast cancer awareness and preventive practice: a challenge for female urban slum dwellers in Lagos, Nigeria. *African Journal of Reproductive Health*; 16:75-82.
- [6]. American Cancer Society (2014):Can cancer be found early? Retrieved from <http://www.cancer.org> on 16/8/18
- [7]. Kayode, F.O., Akande, T.M and Osagbemi, G.K. (2005). Knowledge, attitude and practice of breast self examinationamong female secondary school teacher in Iloin, Nigeria. *Eur Journal Sci Res*: 10: 42-7
- [8]. Okobia M.N, Bunker C.C, Okonofia F.E. and Osime, U.(2006): Knowledge and practice of Nigeria women towards prevention of breast cancer: a cross-sectional study. *World J Surg Oncol*; 4:11
- [9]. Banjo A.(2014):Perception of breast self examination among female of reproductive age among under graduates European . *Journal of scientific research* 10(1).
- [10]. Salaudeen, Akande and Musa (2009). Knowledge and attitude to breast cancer and breast self examination among female undergraduates in a state in Nigeria. *European Journal of Social Sciences*: 7 Suppl 3: 157- 64 retrieved from <http://www.symposia.unimas.com> on 26/9/18
- [11]. Doshi R., Reddy, B.S., Kulkarni K. & Karunakar, P.(2012):Breast self examination:knowledge and practice among female dental students in India. *India J Palliat care*; 18: 68-73
- [12]. Fon P,Jules C., and Tebit K.(2015):Textbook of preventive and social medicine.17<sup>th</sup> edition, Barasiders blanot publishers Jabulpher,India.
- [13]. Gwarzo, U.M.D.,Sabitu, K and Idris, S.H. (2009): Knowledge and practice of breast self examination (BSE) among female undergraduate students of Ahmadu Bello University Zaria, Nouthwestern, Nigeria. *Ann Afr Med*; 8: 55-8
- [14]. Fondjo, L. A., Afriyie, O. O., Sakyi, S.A., Acheampong, E., Ephraim ,R.K.D., & Owiredu, W. K. B. A. (2018). Comparative assessment of knowledge, attitudes and practice of breast self examination among female secondary and tertiary school students in Ghana. <https://doi.org/10.1155/2018/7502047>
- [15]. Abdul-Rahman A, and Aziato B.(2017): Knowledge and practice of Nigeria women towards breast cancer. Retrieved from <http://www.worldsurg.com> on 14-9-2018
- [16]. Akpanekpo, E. I. (2017). Knowledge, attitude and practice of breast self examination (BSE) among female undergraduates in the University of Uyo, Southern, Nigeria. *Evo Journal of Public Health* 2:6: 6-11. DOI:10.21276/ejph1.3.2

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