Journal Homepage: - www.journalijar.com

INTERNATIONAL JOURNAL OF ADVANCED RESEARCH (IJAR)

Article DOI: 10.21474/IJAR01/18036
DOI URL: http://dx.doi.org/10.21474/IJAR01/18036

RESEARCH ARTICLE

BREAST SELF-EXAMINATION KNOWLEDGE AND PRACTICE AMONG WOMEN OF REPRODUCTIVE AGE IN KARA, NORTHEN TOGO

Logbo-Akey Kossi Edem[1], Ketevi Tina[2], Bassowa Akila[3], M'bortche Kignomon Bingo[4], Kambote Yendoubé Pierre[1], Amewouho Kofi[1], Patchidi Noè[2], Ajavon Dédé Régina[5], Aboubakari Abdoul-Samadou[1] and Akpadza Koffi[2]

1. Gynecology-Obstetrics Departments, Kara University Hospitals, Kara University, Togo.
2. Gynecology-Obstetrics Departments, Sylvanus Olympio University Hospitals, Togo.
3. Gynecology-Obstetrics Departments, Campus University Hospitals, Lomé, Togo.
4. Togolese Association for Family Welfare (ATBEF) Clinic, University of Lomé, Togo.
5. Gynecology-Obstetrics Departments, Tomdé Regional Hospitals, Kara University, Togo.

Manuscript Info

Manuscript History
Received: 25 October 2023
Final Accepted: 28 November 2023
Published: December 2023

Key words:
Breast Self Examination, Knowledge, Practice, Togo

Abstract

The aim of this study was assessed the knowledge and practices of breast self-examination among women in Kara town, north Togo

Materials and Methods: A cross-sectional, multicentre study was conducted at the gynaecology-obstetrics departments of the three major hospitals of Kara town from January 2020 to May 2020. The study involved women of child bearing age (15-49 years) attending family planning or antenatal care who agreed to participate the survey.

Results: The mean age was 25,52 years. Women under 35 years accounted for 70.83%. Primary level education and no formal education were majority and both accounted for more than half (55.96%). Out of the 336 respondents, 82,78% had heard of breast cancer. But 52.68% were unaware of the possibility of self-examination. Regarding to practice, 29,47% of them reported practiced or ever practiced breast self-examination. The barriers of this low practice were lack of knowledge (58,73%), carelessness (28,57%), no breast sign (12,69%). Women under 35years old, and who have tertiary educational level were more likely to practice breast self-examination ($p < 0.05$)

Conclusion: The study had showed low knwoledge and practice of breast self-examination among women in Kara town, north Togo.

Introduction:

Breast cancer is the most common gynecological cancer among women world wide and the most common health issues **[1]**. Its impact is steadily increasing and according to the International Agency for Research on Cancer (IARC), in 2018, 2,088,849 new cases of breast cancer were diagnosed worldwide representing 11.6% of all cancers**[2]**. Despite therapeutic progress, its remains a serious desease with high mortality and morbidity. In 2010, its estimated approximately 425.000 deaths among women due to breast cancer **[3,4]**. This mainly in low and income countries, which alone account for 69% of these deaths **[5].**

Corresponding Author: Logbo-Akey Kossi Edem
Address**:** Gynecology-Obstetrics Departments, Kara University Hospitals, Kara University, Togo.

In Africa, the incidence of breast cancer is increasing and currently the leading cancer among women **[1]**. Its prognosis in some regions is generally poor. In sub-Saharan Africa only 32% of women are still alive five years after a breast cancer diagnosis, compared to 81% in USA **[6]**. Indeed, the low survival rates in developing countries is mainly due to late diagnosis of the disease by the lack of early screening programs, and the lack of appropriate care facilities **[5]**. Early detection of the disease by mammography or magnetic resonance imaging is necessary to improve the quality of care. However, these screening methods are expensive and not accessible to all social strata of the population. To this end, in the lack of these modern methods, it is obvious that a well-practised self-examination of the breast helps to detect breast abnormalities at early stage **[6,7]**. Thus, breast self-examinationis a healthy, simple and inexpensive approach wich not require special equipment, especially in low income countries where access to diagnostic and curative facilities are difficult **[8].**

Despite the controversies about its effectiveness in reducing mortality and morbidity **[9,10]**, the perception of a breast abnormality by the patient herself makes the diagnosis of breast cancer in more than half cases **[11]**. Its therefore logical to assume that patients who perform breast self-examination well will detect any breast abnormality earlier. However, several studies had reported a low rate of practice of breast self-examination by women due to lack of awareness and knowledge of the procedure **[12,13]**. Following the example of sub-SaharanAfrican countries where the disease is diagnosed in late stages due to delayed consultation **[14]**, in Togo, breast cancer is a major public health concern and accounts for 49.88% of female cancers **[15]**. It is discovered at late stage and is life-threatening. Faced with this desperate situation, we under took this study witch the aim was to determine the knowledge and practice of breast self examination and identify associated factors among women of Kara town

Materials and Methods:

A cross-sectional, multicentre study was conducted at gynecology-obstetrics departments of three major hospitals of Kara, from January 2020 to May 2020. Kara is the second largest city in Togo, located in the north of the country, at 400 kilometers away from Lomé. It is a cosmopolitan city where several ethnic groups and different social classes of Togo live. In 2021, the population was 301490 people, of whom 25% were in childbearing age. All women of childbearing age (15-49 years) randomly selected and seen in gynecology-obstetrics departments of the three hospitals constituted the study population. The study involved women attending family planning service or antenatal care in the three hospitals who agreed to participate the survey. Excluded were parturients and women who did not agree to participate in the study. The sample size wa sdetermined using single population proportion formula with the assumption of marginal error of 5% and expected non-response rate of 5%, with 95% confidence level. It was made with 27,5% practice of breast self-examination among reproductive age women in Akatsi South district of Volta region of Ghana **[16]**, whose population characteristics are similar to ours. So the sample was calculated by: n=1,962x(P)(1-P)/d2, n=1,962 x (0,275) (1-0,275)/0,052 n=306 and by adding 10% (30 participants) for non-responserate, the final sample size was 336.

The sample size for each hospital was proportionally defined according to hospital attendance For a better understanding of the questionnaire, a pre-test was carried out with 10 women who are not recruited in the survey. Data were collected using a questionnaire administered by an interviewer.

Study variables are: Socio-demographic data (age, marital status, educational level, employment, religion), Knowledge about breast cancer (information sources, riskfactors, breast self examination, anomalies researched, correlation with sociodemographic variable), Practice of breast self examination, motivation and barriers, practice predictor factors.

The collected data were processed and analysed using Epi-Info version 7 software. The results were considered at a significantp < 0.05 level with a 95% confidence interval

Ethicalconsideration

The study was carried out in strict and scrupulous compliance with the conditions laid down by medical ethics and deontology. The objective of the study was clearly explained for the study respondents. The consent of the respondents was observed and the collection and processing of the data were carried out with respect for confidentiality and anonymity.

Resultats:

Sociodemographic data

The mean age was 25,52 years. Women under 35 years accounted for 70.83% and women over 35 for 29.17%. Seventy-nine percent (79 %) were housewives and 18 % were single. They had a variety of occupations, of which 43% were self-employed, 28% were unemployed, 20% were students and 9% were government employees. With regard to educational level, primary education was in the majority and represented 39.40% of cases, 25.50% attained tertiary education, 18,54% attained high schoole ducation. Sixteen point fifty-six percent (16.56%) had no formale ducation. Majority of respondents were Christians (70,20%), following by Muslim (23,51%), traditionalist (5,63%)

Knowledge of breast cancer

Out of the 336 respondents, majority (82,78%) had heard of breast cancer. However, 52.68% were unaware the possibility of self-examination. Health centres (65%) and television/radio (23.10%) were the main sources of informations. Informations came much more from midwives (24.42%) and doctors (11.55%). Regarding risk factors, more thanhalf of the respondents either 196(58,33%) did not know any risk factors for breast cancer. The other 140 respondents mentioned various risk factors for breast cancer. So, family history (19,01%), contraceptive use (9,10%), older age (7,52%) and not breast feeding (5,23%) were the most well-known. Respondents were also asked about their knowledge of breast self examination performed (Table I)

Table I:- Knowledge about breast self-examination.

knowledge about breast self-examination	Number n(%)
Frequency of breast self examination	
Monthly	67 (37,85)
Weekly	20 (11,30)
Daily	16 (9,04)
Annually	0 (0,00)
No answer	74 (41,81)
Appropriate time	
Few daysbefore menstruation starts	4 (2,25)
During menstruation	2 (1,12)
2–3 daysafter cessation of menstruation	53 (29,94)
Any time within the month	28 (15,81)
Don't know	90 (50,84)
Anomaly researched	
Breast deformation	(43,51)
Breast mass	(77,62)
Sudden swollen	(33,18)
redness of nipple, and	(23,52)
Nipple discharge other than breast milk	(41,75)

There is a correlation between occupation and knowledge about breast cancer, as illustrated in Table II above

Table II: Demographic variables and their correlation to knowledge of breast cancer.

Variable	Good knowledge n=159(47,32%)	Poor knowledge n=177(52,68%)	Chi-square (χ2)	P-value
Educational level				
No formal education	10 (6,29)	46 (25,99)	2.29	0.129
Primary	45 (28,30)	88 (49,71)		
High school	33 (20,75)	28 (15,82)		
Tertiary	71 (44,65)	15 (8,47)		
Occupation				
Self-employed	58 (36,48)	87 (49,15)	21.54	0.000
Unemployed	30 (18,87)	64 (36,15)		
Government employees	26 (16,35)	4 (2,26)		
Student	45 (28,30)	22 (12,43)		

Age (years)				
< 35	115 (72,33)	123 (69,49)	0.20	0.652
> 35	44 (27,67)	54 (30,50)		
Marital status				
Single	31 (19,50)	29 (16,38)	0.143	0.704
Housewives	124 (77,98)	142 (80,23)		
Divorced	4 (2,52)	6 (3,39)		

Practice of breast self examination

Out of the 336 respondents who participated the study, 99 (29,47%) of them reported practicing or ever practiced breast self-examination. Among those who practiced it, 48,31% reported performing quarterly, 42,70% annualy and about 9% perform it every month. The motivations were fear of breast cancer (70,75%), curiosity (12,26%), friend's advice (9,42%) and feeling of anomaly (7,55%). Out of the 237 (70,53%) who do not perform breast self-examination, the barriers were lack of knowledge (58,73%), carelessness (28,57%), no breast sign (12,69%). The study shows some correlation predictor factors of breast self examination (Table III)

Table III: Predictor factors for practice of breast self examination.

Variable	**Practice**		**Chi-square (χ2)**	**P-value**
	Yes n=99(29,47%)	**No n=237(70,53%)**		
Knowledge of breast self examination				
Yes	90 (90,91)	69 (29,11)	104,50	0.000
No	9 (9,10)	168(70,89)		
Educational level				
No formal education	4 (4,04)	53 (22,36)	3,87	0,048
Primary	20 (20,20)	112 (47,26)		
High school	18 (18,18)	44 (18,56)		
Tertiary	57 (57,57)	28 (11,81)		
Occupation				
Self-employed	30 (30,30)	115 (48,52)	24.32	0.000
Unemployed	23 (23,23)	71 (29,96)		
Government employees	22 (22,22)	8 (3,37)		
Student	24 (24,24)	43 (18,14)		
Age group				
< 35	78 (78,78)	160 (67,51)	4.28	0.038
> 35	21 (21,21)	77 (32,49)		

Discussion:

Sociodemographic data

In our study, women under 35 years old were more represented and accounted for 70,83%. The preponderance of this age group could bee xplained by the fact that this study was conducted with women of childbearing age and therefore more concerned with family planning. Similarly, most of the women were housewives (79%). This result is similar to those studies in Nigéria and Ethiopia where 68.5% and 49.6% women were married **[17,18]**. Finally, women with a primary level education and no formal education were majority and both accounted for more than half (55.96%) of the respondents. However, in India, eighty percent were educated **[19]**. This finding reflects the profile of women in Togo, where most of them not have paid employment and not continue their studies **[20]**.

Knowledge about breast self examination

The study showed that 82.78% were aware of breast cancer. However, only 47.35% had ever heard of BSE. Of these, about a third had accurate information. This finding of awareness of breast cancer and low knowledge of BSE is similar to previous African studies which women have a good knowledge but are unaware of BSE possibility **[13,16,21,22]**. This low level of knowledge of BSE may be related to the level of education of the women in our study. Indeed, Women with high education level have a better knowledge of BSE than other women, similar to study carried in Ethiopia where this knowledge is correlated to the level of education **[23]**. Health centres (65%) and television/radio (23.10%) were the main sources of information. In Ghana, the media were the main sources of information about BSE **[16,24]**. The preponderance of health centres as source of information in ourstudy can be

explained by the fact that midwives teach pregnant women about BSE during antenal care in our hospitals. However, despite the sensibilisation by midwives and doctors in raising women's awareness of BSE, many women are still unaware of BSE possibility, although they have already received obstetric gynaecology care. An effort should be made to increase women's awareness of this simple means of early breast cancer detection. Awareness raising through the media must be strengthened to reach more women to increase the rate of knowledge and practice

Practice of breast self examination

Out of 336 respondents, 99 (29.47%) reported practicing or ever practiced BSE. Similar findings were observed in previous studies in Ghana (27.5%) **[16]** in Ethiopia (31%, 28.4%) **[23]**. But more than studies carried out in Turkey (8.5%) **[25]**, Libya (12.1%) **[26]** or Ethiopia 15% **[27]**. The commonest reasons for performing BSE were fear (70.75%) and curiosity (12.26%). Other reasons have been found in previous studies. So, early detection and seeking treatment, family pressure, and information provided by media were most reported in Ethiopia **[28,27]**. Apart from these reasons for performing breast self-examination, there are some interfering factors. Indeed, educational level impact BSE practice. In our study, women who have tertiary educational level reported more practice it. This finding is consistent with previous studies where educational level is correlated with the practice of BSE **[23,28]**. Another predictor factor is the knowledege and awareness about BSE as carried out our study where having more knowledge is positive for its practice. Several studies in African and Asia had also reported the same findings where knowledge of breast cancer and BSE being considered an important precursor to women's adherence to practicing BSE. However, these findings are not unanimous in other studies where women had sufficient knowledge but didn't practice it [**13,27-29**]. Negligence, absence of breast problem, supporting this finding as our finding **[16,27,28]**. Therefore, health personnel should encourage women to perform it regularly in order to detect early any breast abnormalities. Although some women practiced BSE, the majority did not know when to performit. It would be advisable for health staff to make an effort to give the full information on BSE. Young age would be correlated with an increase in practice as reported in our study where respondents aged under 35 years old were more likely to practice BSE. Same findings from previous studies in Ghana and Ethiopia **[16,27]**. The association between age and BSE may be due to younger women being more involved in social events and media including watching television, Facebook, Whatsapp, and YouTube. In addition, younger women are in formal education today than older women. Younger women are therefore, more exposed to information about health issues than older women **[16]**. Another factor finding rapported is family breast cancer whitch is 4 to 6 times more likely for performing BSE **[23]**.

Conclusion:-

The study showed that women were aware of breast cancer. But they did not know about the possibility of screening for an abnormality by breast self-examination. Those who have heard about it lack accurate information and then had low perfomed it. Negligence and lack of breast abnormality were the obstacles mentioned by the women

Authors declared they have no interest conflicts

References:

1. Globocan, Ferlay J, Soerjomataram I. In: GLOBOCAN 2012 v1.0, Cancer incidence and mortality worldwide: IARC Cancer Base No. 11 Lyon, France, 2013; 2012. [en ligne] consulté le 16/07/2018 Disponible sur: http://globocan.iarc.fr. Available from

2. Bray F, Ferlay J, Soerjomataram I, Siegel RL, Torre LA, Jemal A. Global cancer statistics 2018: GLOBOCAN estimates of incidence and mortality worldwide for 36 cancers in 185 countries. CA: a cancer journal for clinicians. 2018 Nov; 68(6):394–424.

3. Ferlay J, Soerjomataram I, Dikshit R, Eser S, Mathers C, Rebelo M, et al. Cancer incidence and mortality worldwide: sources, methods and major patterns in GLOBOCAN 2012. International journal of cancer. 2015 Mar 1; 136(5): E359–86. https://doi.org/10.1002/ijc.29210 PMID: 25220842

4. Naku Ghartey Jnr F, Anyanful A, Eliason S, Mohammed Adamu S, Debrah S. Pattern of breast cancer distribution in ghana: a survey to enhance early detection, diagnosis, and treatment. International journal of breast cancer. 2016; 2016

5. OMS. Cancer du sein: prévention et lutte contre la maladie. [en ligne] consulté le 16/07/2018 Disponible sur : http://www.who.int

6. Montazeri A, Vahdaninia M, Harirchi I, Harirchi AM, Sajadian A, Khaleghi F, et al. Breast cancer in Iran: need for greater women awareness of warning signs and effective screening methods. Asia Pac Fam Med 2008 ;7(1) :6.

7. Babu GR, Samari G, Cohen SP, Mahapatra T, Wahbe RM, Mermash S, Galal OM. Breast cancer screening among females in Iran and recommendations for improved practice: areview. Asian Pac J Cancer Prev 2011 ;12(7) :1647-55
8. Capri S, Russo A. Cost of breast cancer based on real-world data: a cancer registrystudy in Italy. BMC HealthServRes 2017 ;17(1) :84.
9. Abdurrahman Muhammad S, Yau Samira Labaran. Relationship between knowledge and practice of breast self-examination among female workers in Sokoto, Nigeria. Obstetric and gynecology international journal. 2018; 9(3):157–62
10. Bray F, Ferlay J, Soerjomataram I, Siegel RL, Torre LA, Jemal A. Global Cancer Statistics 2018: GLOBOCAN Estimates of Incidence and Mortality Worldwide for 36 Cancers in 185 Countries. A cancer Journal for clinicians. 2018; 68(6):394–424
11. Amant F, Loibl S, Neven P, Van Calsteren K. Breast cancer in pregnancy. Lancet 2012; 379:570-9.
12. Ferlay J, Soerjomataram I, Dikshit R, Eser S, Mathers C, Rebelo M, Parkin DM, Forman D, Bray F. Cancer Incidence and Mortality Worldwide: IARC Cancer Base No. 11. Lyon: International Agency for Research on Cancer ;. 2014; 136(5): E359–86.
13. Adetule YC. 81P Breast Self-Examination (BSE): A strategy for early detection of breast cancer in Nigeria. Annals of Oncology. 2016 Dec 1; 27(suppl_9).
14. Toure M., Nguessan E., Bambara T., Kouassi Y., Dia J., Adoubi I. Facteurs liés au diagnostic tardif des cancers du sein en Afrique-sub-saharienne: cas de la Côte d'Ivoire. Gynécologie Obstétrique & Fertilité 2013. Volume 41, Issue 12, 696-700
15. Amégbor K, Alfa AK, Darré T, Napo-Koura GA, Akpadza K. Aspects épidémiologiques et histopathologiques des cancers gynéco-mammaires au Togo. Med Tro 2011; 71: 451-453
16.Adzi R, Adam A (2019) Assessment of knowledge and practice of breast self-examination among reproductive agewomen in Akatsi South district of Volta region of Ghana. PLoS ONE 14(12): e0226925. https://doi.org/10.1371/journal. pone.0226925
17. Muluken A. et al, Assessment of Factors Associated withBreast Self-Examination among Health Extension Workers in West Gojjam Zone, Northwest Ethiopia, vol. 6, Department of Public Health, College of Medicine and Health Sciences, Bahir Dar University: Robert-Alain Toillon, 2013, p. 2.
18. Kelechi E. Knowledge and Beliefs of Breast Self Examination and Breast Cancer amongMarketWomen in Ibadan, South West, Nigeria, SeemaSingh, University of South Alabama Mitchell Cancer Institute, UNITED STATES éd., vol. 11, ,2015, p. 1.
19. Veerakumar A. et al, Déterminants de la connaissance et de la pratique de l'autoexamen des seins chez les femmes rurales de Trichy, Trichy, 2017, pp. 84-88.
20. STEPS, Rapport final de l'enquête Togo 2010. Agoudavi K. et all. Ministère de la Santé, Togo2012. En [ligne] 2012. Consulté le 16/07/2018 à 18h30. Disponible à l'URL: http//www.who.int/chp/steps/2010STEPS_Report_Togo_FR
21. Akpadza K, Baeta S, Amadou A et al: Connaissance et pratique des moyens de dépistage du cancer du sein par les patientes reçues en consultation à la Clinique de Gynécologie-Obstétrique du C.H.U. Tokoin Lomé - Togo. J de la SAGO 2004; 5: 42-6
22. Oladimeji KE, Tsoka-Gwegweni JM, Igbodekwe FC, Twomey M, Akolo C, Balarabe HS, et al. Knowledge and beliefs of breast self-examination and breast cancer among market women in Ibadan, South West, Nigeria. PloS one. 2015 Nov 25; 10(11): e0140904. https://doi.org/10.1371/journal.pone.0140904 PMID: 26606137
23. Kibret Asmare1, Yeneabat Birhanu1 and ZerkoWako. Knowledge, attitude, practice towards breast self-examination and associated factors among women in Gondar town, Northwest Ethiopia, 2021: a community-basedstudy. BMC Women'sHealth (2022) 22:174
24. Sarfo L. et al, «Knowledge, attitude, and practice of self-breast examination among female university students at Presbyterian University College, Ghana» vol. Vol 1(11), p. 395, 2013.
25. Karahan N. Prevalence and determinants of breast self-examination in Karabuk. Turkey Cukurova Med J. 2019;44(3):1046–54.
26. Ziuo FM, Twoier AA, Huria TR, El-Khewisky FS. Low awareness about breast self-examination and riskfactors of breast cancer in Benghazi, Libya. Ibnosina J Med Biomed Sci. 2018;10(2):54
27. Yonas Biratu Terfa, Ebissa Bayana Kebede, Adugna OlaniAkumaBreast Self-Examination Practice Among Women in Jimma, Southwest Ethiopia: A Community-Based Cross-Sectional Study. Breast Cancer: Targets and Therapy 2020:12 181–188

28. Breast self-examination practice and associated factors among female health care workers in West Shoa Zone, Western Ethiopia 2019: a cross-sectional study Seifadin Ahmed Shallo1* and Jibril Dori Boru. BMC Res Notes (2019) 12:637
29.Casmir EC, Anyalewechi NE, Onyeka IS, Agwu AC, Regina NC. Knowledge and practice of breast self examination among female undergraduates in south-eastern Nigeria. Health 2015;7: 1134.