**RESEARCH ARTICLE**                                                                 **OPEN ACCESS**

# KNOWLEDGE ON RISK FACTORS TO BREAST CANCER AND SELF -EXAMINATION, AMONG WOMEN OF REPRODUCTIVE AGE (15-49 YEARS) AT LONGISA COUNTY REFERRAL HOSPITAL, BOMET COUNTY, KENYA

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| ARTICLE INFO | ABSTRACT |
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| | Globally, breast cancer incidence is on the rise, especially in developing countries and it is the most diagnosed cancer among women in Kenya. For the prevention and treatment, knowledge on early detection and risk factors is very important, however this has not been assessed among women of reproductive age attending Longisa County Referral Hospital Bomet County, Kenya. The study adopted a cross-sectional hospital based design to assess the knowledge on early detection and risk factors to breast cancer among 194 women of reproductive age (15-49 years). Purposive sampling was used to select respondents. Semi structured questionnaire was used to collect data from the study participants. Statistical package for social sciences (SPSS) version 21 was used for data entry, which allowed for analysis using descriptive and inferential statistics. The majority of the respondents have heard about breast cancer 182(93.8%). However, 56 (30.8%) knew about Breast self-examination (BSE) and among these only 44(79%) practiced Breast self-examination (BSE). Those respondents who practiced once a month as recommenced were 23(52.4%).High proportion pointed out that they didn't have any breast problem 17(37.84%).This study shows that there is poor knowledge on risk factors to breast cancer and poor practice of Breast self- examination (BSE). There is a need for those who provide direct health care to disseminate relevant informations to women on breast cancer risk factors and practices such as BSE for prevention and early detection. |

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## INTRODUCTION

Breast cancer is the most frequent form of cancer amongst women. However, its preventive measures are less than expected as many of these measures remain inaccessible to many women (Shulman, 2010). Breast cancer is a global health problem and a major health burden. It is the leading cause of cancer death among women in both developed and developing countries (WHO, 2013). Every year breast cancer kills approximately 40,000 women globally and is the leading cause of cancer death among women (Parkin & Fernandez, 2006). More than 1.2 million women are diagnosed with breast cancer annually worldwide (WHO, 2015).

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It is the most common cancer amongst women comprising 23% of female cancer (Gakwaya, 2008). According to Kenya Cancer statistics and National strategies Cancer statistics estimates, breast cancer is the leading cancer in women (Smith, 2006). Breast cancer is the most prevalent cancer among Kenyan women, and constitutes a major public Health problem (Mutuma and Korir 2008). The definite prevalence and incidence studies of breast cancer for Kenya are lacking some estimates indicate that breast cancer accounts for about 23% of all cancer (IARC, 2014). The breast cancer prevalence and incidence for Bomet County is not documented yet morbidities and mortalities attributable to it are reported. Unpublished report from one mission hospital in Bomet County reports of breast cancer as the second cancers among women, estimated as 60 cases per 1700 in 2015. Breast cancer screening methods include Breast Self-Examination, Clinical Breast-Examination and Mammography. Mammography is the

best choice for screening but Breast Self-Examination is the recommended method in developing countries because it is easy, convenient, private, and safe and requires no specific equipment also equally important and beneficial for mass awareness especially in countries with limited resources (Chioma and Asuzu, 2007). However, the practice breast self-examination has not been assesed in many rural settings.

## METHODS

**Study site**: The study was conducted at the Antenatal clinic of Longisa County Referral Hospital in Bomet East Sub-County, Bomet County. The hospital acts as a referral centre for five health centres and twenty four dispensaries. The community is majorly composed of the Kipsigis, a constituent of the larger Kalenjin ethnic tribe. Most of the inhabitants in this area are peasant farmers. The hospital has catchment population of 50,884 and women of reproductive age which is the population of interest to this study is 17,300; 34% of the total population (2009 Census).

**Study design**: This was a cross-sectional design that targeted a total of 194 women of reproductive age 15-49 years attending Antenatal clinic during the two months period of the study. Purposive sampling was used and women less than 15 years were excluded.

**Data collections:** Data was collected using semi-structured questionnaires and were administered to the study participants by trained research assistants in the languages best understood by the respondent that is Kipsigis (the local language), English and Kiswahili. The research instruments were pretested to increase the validity and reliability of the research instruments.

**Statistical Analysis:** Grouping and coding of data collected was done to ease sorting. Completeness and consistency of information obtained was checked at the end of the day. Descriptive statistics were used to interpret the data and analysed and computed using Statistical package for social sciences (SPSS) version 21. Frequency charts, tables, graphs and proportions were used in presentation of data.

## RESULTS

**Demographic characteristics:** All the target respondents 194(100%) were interviewed. A higher proportion of the respondents (60.1%; 117) were aged 20-29 years (Table1). Marital status is closely associated with stability, which is a core determinant of individual's health status. Most of the respondents; 84.97% (165) were married, 13.99% (27) were single, 0.52% (1) were widowed, and 0.52% (1) were divorced. The study revealed that majority of the respondents; 60.6% (118) were Protestants whilst 10.1% (20) were Catholics, and 29.3% (56) of the practiced other religions (Table 1).

**Table 1. Demographic characteristics**

| Age (Years) | No. of respondents (N) | Percentage (%) |
|---|---|---|
| 15-19 | 35 | 18 |
| 20-29 | 117 | 60.1 |
| 30-39 | 40 | 20.6 |
| 40-49 | 2 | 1.04 |
| Marital status | | |
| Married | 165 | 84.97 |
| Single | 27 | 13.99 |
| Divorced | 1 | 0.52 |
| Widowed | 1 | 0.52 |
| Religion | | |
| Christian | 193 | 99.48 |
| Muslim | 1 | 0.52 |

**Knowledge on breast examination:** Knowledge on the existence of breast cancer is important for its prevention. A large proportion 182(93.8%) reported to have heard about breast cancer. Of the study respondents, 126(69.2%) reported that they did not know breast self-examination. On breast self-examination, 44(79.0%) of the study respondents who know it indicated that they practice breast self- examination, whereas 12(21.0%) did not practice. Among the study respondents, 23(52.3%) reported to practice breast self-examination once a month (Table 2). Table 2 shows some of the factors that hinders breast self-examination amongst the study respondents with most of the indicating not performing because they didn't have breast problem 17 (37.84%).

**Table 2. Knowledge on Breast cancer and breast self-examination**

| Heard of Breast cancer | No. of respondents (N) | Percentage (%) |
|---|---|---|
| Yes | 182 | 93.8 |
| No | 12 | 6.2 |
| Knowledge on BSE practice | | |
| Yes | 56 | 30.8 |
| No | 126 | 69.2 |
| Practiced BSE | | |
| Yes | 44 | 79 |
| No | 12 | 21 |
| Frequency of BSE | | |
| Once a month | 23 | 52.3 |
| Once in 3 months | 13 | 29.4 |
| Once a year | 4 | 9.1 |
| Have never done | 4 | 9.1 |
| Factors the hinder BSE performance | | |
| Fear might get breast lump | 2 | 5.41 |
| Unsure of benefits | 10 | 21.62 |
| Don't feel comfortable doing it | 1 | 2.70 |
| Don't know how to do it | 14 | 32.43 |
| Don't have breast problem | 17 | 37.84 |
| Others | 0 | 0 |

**Potential risk factors of breast cancer:** On risk factors predisposing an individual to breast cancer, a high proportion 154 (79.38%) were not able to identify any potential risk factors for development of breast cancer. Only 40 (20.6%) were able to identify different potential risk factors with high fat diet 11 (5.67%) as the main predisposing factor (Figure 1).
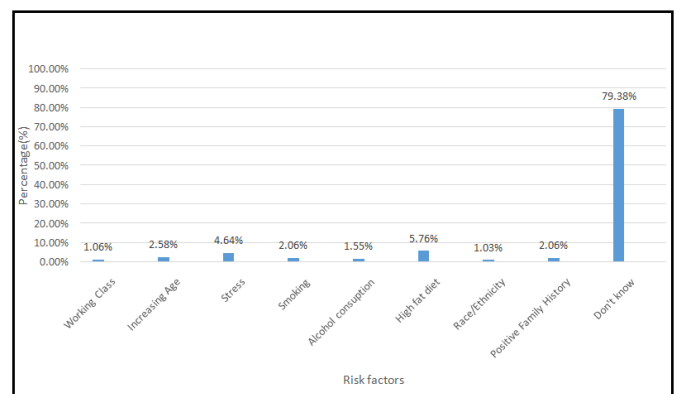


**Figure 1. Knowledge on risk factors**

## DISCUSSION

The current study assessed knowledge on breast cancer basing on respondents understanding of breast cancer screening with Breast self-examination method. Late detection of breast cancer amongst women arises from lack of awareness of simple life-saving diagnostic breast checks such as Breast Self-Examination (BSE). A high proportion of the study

respondents; 126 (69.20%) did not know procedures adhered to while performing BSE. According to Sherperd and Mclnerney (2006) women emanating from rural communities have limited knowledge on BSE; hence, the need to empower them on the same. The observations from the current study concur with Sherperd and Mclnerney (2006) because the fact that the study was done in a rural set-up increased the likelihood of the respondents lacking awareness on BSE. BSE for early detection of breast cancer is not often done by women as revealed in studies performed by Godazandeh *et al*. 2008 and Nafissi *et al*.2012 whereby only 17% and 12% of women were observed to perform BSE monthly. This does not differ from what transpire among women in Kenya not excluding women of Bomet East where the study was conducted. Despite its apparent benefits, women seldom perform BSE due to lack of knowledge on how to perform the procedure, which was evident in the current study where14 (32.43%) showed not performing BSE because they didn't know how to do it.

A study done in Nigeria by Okobia *et al*. 2006 observed that women with regular menstruation perform BSE regularly. Arguably, women in the current study experienced consistent menstruation because they were of reproductive age. However, observations in this research differ from Okobia *et al*.2006 observations because despite having regular menstruation, the respondents did not perform BSE on a consistent basis. Nonetheless, inconsistent performance of BSE amongst the respondents in this research was due to lack of knowledge on how to perform BSE. Studies have identified different factors that influence performance of BSE amongst women. Age and education level are some of these factors (Saeh and Tan, 2007). A high percentage of the respondents; 117(60.10%) were aged 20-29 years and most of them only had attained primary level education; 75(38.86%). Cancer awareness is often high among women aged 40 years and above (Kopan, 2014) as well as those with high education levels. Conclusively limited awareness about BSE amongst the respondents was due to their young ages and low education levels. Breast Self-Examination (BSE) entails the process by which women regularly examine their breasts with the sole intent of detecting lumps or abnormal swellings. Janni *et al*. (2014) noted that BSE is a recommended breast cancer screening method in developing countries due to its ease, convenience, and safety. A small proportion of respondent 56 (30.80%) showed to have knowledge on BSE therefore its practice is low. This shows that cost effectiveness, ease, and safety, practice of BSE amongst women prone to breast cancer is guaranteed.

Among the respondent 23(52.4%) reported to practice BSE monthly as recommended. It is recommended that BSE be done once in a month, that is between the 7th and 10th day of the menstrual circle (Mon and Than, 2009). IARC & WHO (2013) observes that women through BSE detect 90% of breast cancer cases. For this reason, limited knowledge and practice of BSE by the respondents in the current research hinders prompt detection by women themselves. From the study findings, it is apparent that a higher proportion, 126 (69.2%) did not report ever-practicing BSE as they reported not to have heard about breast cancer. This is of much concern as it shows limited awareness on essence of BSE as a key breast-cancer detection mechanism among the respondents. Upon further probing, most of the women in the current research; 17 (37.84%) noted not having breast problems as a core reason for not carrying out BSE. For this purpose, educating young

women on screening is essential as recommended by WHO, (2013). Shulman *et al*. 2010 observe that absence of routine screening and diagnostic procedures coupled with lack of awareness and poor access to primary health care increase mortality rates amongst women with breast cancer. Furthermore, the fact that most of the respondents in the current research had low level of education (primary education) calls for further education and counselling on factors that hinder women from accessing breast cancer screening, diagnostic, and treatment modalities. Overall, limited efforts have been put up to support and help women in resource-poor settings carry out breast cancer screening and tests. Shulman *et al*. 2010 noted also that in most instances, women underestimate or overestimate their vulnerability to breast cancer, which creates unnecessary and overwhelming anxiety. The study also assessed knowledge on risk factor of breast cancer of which the respondent either were able to identify any potential risk factor or not. There are different perceived risk factors to breast cancer harboured by the populations. Most of the respondents in the current research 54 (79.38%) were not able to identified potential risks factors to breast cancer; only 40(20.62%) who were able to identified attributed it to high fat diets 11 (5.67%). Most of the women lacked information that could enable them engage in recommended breast cancer prevention practices in particular most of the women who had knowledge on BSE were not able to practice a recommended. There is a need for those who provide direct health care to disseminate relevant informations to women on breast cancer aspects.

## Acknowledgement

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