Background
Breast cancer is the most frequent malignancy causing deaths and cancer related morbidity in women. This condition is a major global health problem of both developed and developing countries (American Cancer Society (ACS), 2013).

Global statistics indicate that the annual incidence of breast cancer is rising and it has been reported that each year 1.5 million women worldwide are diagnosed with breast cancer (WHO, 2012). A comparable epidemiological profile applies to Lebanon where breast cancer is the most widespread type of cancer among Lebanese women. It represents 42% of all cancer in women, with a median age of 52.5 years at diagnosis for breast cancer (Ministry of Public Health, WHO, & National Non-Communicable Diseases program [NCDP], 2008). Lebanese statistics report that one in five cancers is breast but most significantly, breast cancer below the age of 40 represents approximately 21% of the cases in Lebanon, while it is estimated to represent 6% of cases in western populations (El Saigh et al., 2002; Shamasdin & Musllim, 2010). Consequently, more research is needed in Lebanon to determine how to ensure early diagnosis and treatment, especially in young women.

Purpose of the study
Overall aim of this study is to assess the knowledge, attitudes and practices of Lebanese women towards breast cancer screening.

The following specific objectives were addressed:
1. To assess Lebanese women’s perception of breast cancer and its risk
2. To assess Lebanese women’s attitudes towards breast cancer screening: BSE, CBE and mammography
3. To examine Lebanese women’s practices of breast cancer screening techniques
4. To identify the barriers for breast cancer screening as perceived by Lebanese women

Study Design
This first Lebanese study followed the cross sectional descriptive survey design with Lebanese women as the target population. Data were collected at the national level in all mohafazat of Lebanon.

Sample and Sample size
The study targeted Lebanese women (Age 40-71 years) living in different region in Lebanon and coming from different religious, educational and social backgrounds. Women who have breast cancer and have a positive family history of breast cancer were excluded. The sample size was calculated based on the power analysis taking into consideration the confidence limits and degree of accuracy required at a 95% confidence level and a maximum 2.83% error ratio. The required national sample size was calculated to be 1200. It is estimated that the number of the Lebanese population of breast cancer is around 4 million and women constitute 52% of the total population.

Data Collection Procedures
After receiving institutional Review Board (IRB) from the Lebanese American University, data collection started. Data collection was completed by 24 female professional field surveyors and CITI certified from Statistics Lebanon Ltd (a data collection company).

Data collection were done through a door-to-door process using an interviewer administered questionnaire following the proportional sample technique in terms of age, religion, socioeconomic level, education background and area of living.

The surveyors used the Kish grid approach for determining the participant eligibility for interview in a house that has more than one female who meets the inclusion criteria. Data collection was done in Arabic using the translated instrument. The PI conducted training sessions for the surveyors in order to ensure inter rater reliability.

RESULTS

Knowledge, Attitude and Practice of Lebanese Women Towards Screening

Myrna A. Doumit, PhD, MPH, RN, Associate Professor/ Assistant Dean
Lebanese American University
Alice Ramez Chagoury School of Nursing
Email: myrna.doumit@lau.edu.lb

Souha A. Fares, PhD Assistant Professor American University of Beirut School of Nursing
Email: sf1@aub.edu.lb

Mary B. Areen, MPH, RN Clinical Associate Professor
American University of Beirut
School of Nursing, Email: mbf@aub.edu.lb

Statistical Analysis

Data were entered into and analysed by the Statistical Package for the Social Sciences, SPSS version 21.0 for Windows. Descriptive statistics (means, standard deviations, frequencies) were done to summarize the characteristics of the study sample. Bivariate associations between the independent variables and each of the three outcomes (BSE, CBE and mammography) were assessed by the Analysis of Variance (ANOVA – continuous variables) and Chi-square (categorical variables). A multivariate logistic regression model was conducted to evaluate the adjusted association between the predictors and each outcome variable while controlling for confounders. Adjusted odds ratios and their 95% confidence intervals were computed. All tests were two-tailed and a p-value < 0.05 was considered significant.

Knowledge of breast cancer

The questionnaire used consisted of two parts. Part 1 was composed of socio demographic variables and breast cancer screening items. Part 2 includes 53 items from the revised version of the CBEMS (Champion, 1999). This part is composed of eight categories: a) susceptibility (5 items); b) seriousness (7 items); c) benefits-BSE (6 items); d) barriers-BSE (6 items); e) confidence (11 items); f) health motivation (7 items); g) benefits mammography (6 items); and h) barriers-mammography (5 items).

Items are rated on a 5-point Likert scale ranging from strong disagreement (1 point) to strong agreement (5 points). The CBEMS was used after securing written approval from the author. The recommended procedures for translating research instruments which is known as back-translation was followed. Face validity was assessed by examining the face of the questionnaire. The questionnaire was pilot tested on 15 Lebanese women with a Cronbach’s Alpha of .857.

Purpose of the study

1. To assess Lebanese women’s perception of breast cancer and its risk
2. To examine Lebanese women’s attitudes towards breast cancer screening: BSE, CBE and mammography
3. To examine Lebanese women’s practices of breast cancer screening techniques
4. To identify the barriers for breast cancer screening as perceived by Lebanese women

The study targeted Lebanese women (Age 40-71 years) living in different region in Lebanon and coming from different religious, educational and social backgrounds. Women who have breast cancer and have a positive family history of breast cancer were excluded. The sample size was calculated based on the power analysis taking into consideration the confidence limits and degree of accuracy required at a 95% confidence level and a maximum 2.83% error ratio. The required national sample size was calculated to be 1200. It is estimated that the number of the Lebanese population of breast cancer is around 4 million and women constitute 52% of the total population.

Data were collected at the national level in all mohafazat of Lebanon.

The following specific objectives were addressed:
1. To assess Lebanese women’s perception of breast cancer and its risk
2. To assess Lebanese women’s attitudes towards breast cancer screening: BSE, CBE and mammography
3. To examine Lebanese women’s practices of breast cancer screening techniques
4. To identify the barriers for breast cancer screening as perceived by Lebanese women

Study Design

This first Lebanese study followed the cross sectional descriptive survey design with Lebanese women as the target population. Data were collected at the national level in all mohafazat of Lebanon.

Sample and Sample size

The study targeted Lebanese women (Age 40-71 years) living in different region in Lebanon and coming from different religious, educational and social backgrounds. Women who have breast cancer and have a positive family history of breast cancer were excluded. The sample size was calculated based on the power analysis taking into consideration the confidence limits and degree of accuracy required at a 95% confidence level and a maximum 2.83% error ratio. The required national sample size was calculated to be 1200. It is estimated that the number of the Lebanese population of breast cancer is around 4 million and women constitute 52% of the total population.

Data Collection Procedures

After receiving institutional Review Board (IRB) from the Lebanese American University, data collection started. Data collection was completed by 24 female professional field surveyors and CITI certified from Statistics Lebanon Ltd (a data collection company).

Data collection were done through a door-to-door process using an interviewer administered questionnaire following the proportional sample technique in terms of age, religion, socioeconomic level, education background and area of living.

The surveyors used the Kish grid approach for determining the participant eligibility for interview in a house that has more than one female who meets the inclusion criteria. Data collection was done in Arabic using the translated instrument. The PI conducted training sessions for the surveyors in order to ensure inter rater reliability.

Conclusion:

Lebanese women know about BSE and CBE but have the tendency not to perform the tests. In general Lebanese women do not feel themselves susceptible for getting breast cancer though they consider it as a serious condition and they tend to be highly motivated towards maintaining good health. They do not perceive barriers to BSE and Mammography as serious. On the contrary they highly value the benefits. While assessing the practice of BSE it was noted that a small percentage of women does it the proper way. The major barriers for doing BSE and mammography were the fear and worry about breast cancer followed by monetary concern for mammography.