Summary

Breast and cervical cancer are two cancers of great concern to many women. Both can be detected early with current screening methods. Finding abnormal cells before they become cancerous can actually prevent cervical cancer. One of the barriers to breast and cervical cancer screening is the attitude of some women. Generally, a low level of knowledge, acculturation and modesty are factors resulting in a low acceptability of screening. Hence, there is a need for a public education program to encourage and inform about breast and cervical cancer and the benefits of screening, as well as to dispel myths and misconceptions (Tan et al., 2007).

This work aimed to study the effect of educational program about breast and cervical cancer on knowledge, attitude and practices of working women in Benha University.

Research Hypotheses:

To fulfill this aim, the following research hypotheses were formulated:

- The majority of working women in Benha University have a lack of knowledge and poor attitude and practices about breast and cervical cancer, before application of program.

- After the application of program, working women in Benha University knowledge, attitude and practices about breast and cervical cancer will improve.

Research design:

Quasi experimental design

I. Technical Design:
Technical design included the settings, subjects as well as tools of data collection.

* Settings:

This study was conducted at Benha University faculties. Studied faculties were faculty of Science, Veterinary Medicine, Law, Nursing, Commerce, and Agriculture.

* Subjects:

260 working women at Benha University were randomly selected from the above mentioned setting under the following inclusion criteria: educated women, age from 20 to 59 years; do not have a history of breast or cervical cancer, and not under the treatment of chemotherapy or radiotherapy.

- Sample technique:
  - Fifty percent about (6 faculties) of the total 12 faculties of Benha University were randomly selected (simple random sample).
  - Fifty percent of the working women in the selected (6) faculties were selected randomly (systemic random sample) every single digit of the records of attendance and absence.

* Tools of data collection:

- Assessment Questionnaire (Appendix I):
  
  Self administrated questionnaire it included the following parts:

  Part (1):
  
  - Socio-demographic data such as age, religion, residence, marital status and level of education.
- Health history of the study subjects which include obstetric, menstrual, and family history
- Practices of study subjects for early detection measures of breast and cervical cancer such as breast self examination, clinical breast examination, mammogram and pap smear test (through asking questions)

**Part (2):**

Assessing the knowledge of working women in Benha University in regard to cervical and breast cancer as (definitions, abnormal signs and symptoms, risk factors, treatment and early detection methods.

- **Modified Likert Scale:** - (Appendix II)

  A modified likert scale to assess attitude of working women in Benha University to breast and cervical cancer. The scale was developed of 18 statements about several issues related to breast and cervical cancer and early detection measures.

- **An Observation Checklist:** - (Appendix III)

  An observation checklist to assess practice of the working women in Benha University in regard to breast self examination.

- **A guide booklet:** - (Appendix IV)

  It was prepared by the researcher with supervisors' guidance after reviewing the related literature.

**II. Operational Design:**

1) **Preparatory phase**

This phase involved reviewing current and past local and international related books, journals, and periodicals was made to get
acquainted with various aspects related to breast and cervical cancer and early detection measures and then to develop the study tools and the content of the program.

2) Pilot study;

A pilot study was carried out during December, 2009. It involved ten percent of the total sample (26) working women in Benha University.

3) Educational program

- **General objectives:**

  The aim of this program was to improve the women's knowledge, attitude and practices regarding breast and cervical cancer.

**Program implementation:**

Implementation of the program was carried out at the previously mentioned settings. The subject material used has been sequenced through the 6 sessions, 4 sessions for theory and 2 sessions for practice. Women were divided into small groups (total number of groups at all faculties were 17 groups), each group included about 15 women (depends on women's circumstances). The six sessions were implemented for each group separately for 2 weeks (3 days/week), in addition to one week for pre and post test.

**Program evaluation:**

After the implementation of the program, the post-test was done to the studied women to assess knowledge, attitude and practice by the same format of the pre-test. This was done immediately after the intervention and after three months of program implementation.

*The findings of this study can be summarized as follows:
Summary

- The mean age of the studied women, was 37.22 ± 11.00 years. (60.0%) of them were live in rural areas, (52.3%) of them had middle education and (82.7%) of them were married.

- The study reflected that, general improvement in all items of knowledge about breast and cervical cancer of the studied women during the different assessment periods as compared to before program with highly statistically significant difference observed between three times of assessments at p-values (< 0.001).

- The study illustrated that, highly statistically significant difference (< 0.001) at different times of assessment in relation to attitude of the studied women about cervical cancer and early detection measures.

- Findings of present study indicated that only 4.6% of the women had practices BSE in the past versus (95.4%) were not practice. However, after three months of program implementation findings showed that the practices of BSE relatively increased (57.3%) among the studied women.

- The finding of the current study indicated improvement in relation to women’s performance of breast self examination after training. As none of them had good level of practice before training to become (46.2%) had good level and (21.3%) had average level.

- Regarding to the source of information about breast and cervical cancer, about half of the women obtain their information from mass media before program.

- There was a positive highly statistical significant correlation between total knowledge scores and educational level as well as total practice scores and educational level immediately after implementation of program.

- There was a positive highly statistical significant correlation between total knowledge and attitude scores as well as total knowledge and
practice scores regarding breast and cervical cancer at different times of assessment.

*Conclusion:*

In the light of the study findings, it was concluded that women's knowledge, attitude and practice regarding breast and cervical cancer was deficient pre-program. Several socio-demographic factors had their reasonable impact on women's knowledge and attitude, such as age and level of education. There was significant improvements in women's knowledge attitude and breast self examination practice after implementation of the educational program. This supported the main hypothesis of the study which stated that, "women's knowledge, attitude and practice about breast and cervical cancer will be improved after implementation of the educational program".

*Recommendations:*

Based on the main study findings, the following recommendations are proposed.

- Provide women with simple information (through brochures and booklets) that can assist in decreasing barriers and clarifying any misconceptions about breast and cervical cancer screening.
- Involve women in the design of breast and cervical cancer programs to ensure it’s validity in satisfying their needs and to promote breast and cervical cancer screening.
- Provide women with health care services appropriate to them for improving their breast and cervical cancer screening practices.
- Development of a national breast and cervical cancer early detection program in Egypt