

## RESEARCH COMMUNICATION

# Effects of Peer Education, Social Support and Self Esteem on Breast Self Examination Performance and Knowledge Level

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### Abstract

**Objective:** To estimate associations among peer education, social support and self esteem and their influences on performance of breast self-examination (BSE). **Method:** Seven volunteer peer educators were given the BSE training programme and in turn educated 65 women students in the university. BSE knowledge evaluation forms developed by Maurer were applied for evaluation. Other data were collected with questionnaires for the Coopersmith Self-Esteem Inventory and Scale of Perceived Social Support over three months. **Results:** Knowledge level points of students and the BSE practice ratio were increased by peer support. There was a positive relationship between average BSE knowledge points and social support and self-esteem. **Conclusion:** The results showed positive relationships among BSE knowledge, social support and self esteem, these affecting the BSE performance level.

**Key Words:** Breast self examination - awareness - peer education - social support - self esteem - Turkish students

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### Introduction

The incidence of breast cancer is increasing worldwide (American Cancer Society, 2008). There are three methods of screening for breast cancer: mammography, clinical breast examination and breast self-examination (BSE). BSE is a simple, low-cost, noninvasive and it has the advantage of being performed by the woman herself (Platin, 1998).

BSE is not generally considered a detection method for reducing breast cancer mortality (Hackshaw and Paul, 2003). However, breast awareness may lead to an earlier diagnosis of breast cancer and young women are therefore encouraged to do BSE every month. Helping detection of any abnormal signs can possibly save lives as well as help their learn and understand their body more. BSE is an option for women starting from the early 20 (Dündar et al., 2006; American Cancer Society, 2008; 2009; Mayo Foundation for Medical Education and Research, 2008). If young women perform BSE, they fulfill CBE and mammography and American Cancer Society recommends as an option breast awareness and BSE for early detection of breast cancer (American Cancer Society, 2005; Dündar et al., 2006; Mayo Foundation for Medical Education and Research, 2008). Currently, peer educators lead to effort on breast cancer awareness and encourage screenings (Maurer, 1996; Karayurt et al., 2008). Peer educators have positive social support the other

adolancent. Social support has been shown to have a positive association for improved breast health. As role models, Peers must have accurate information and positive attitudes about BSE and should perform it regularly. Therefore, peers who have knowledge about BSE must be informed about BSE in detail and shown how to perform it correctly while in appropriate environment so they are able to educate their peers after take BSE train education. So positive social support have increased positive health behaviour among the adoleancent (Schuster et al., 1990; Rook, 1992).

According to Bandura (1977), basic concepts of social learning are observation, imitation and taking someone as a model. Social learning among late adolescents is the act of forming identity to peers, of taking behavior approved by peers as models, adoption and imitation of them and consequently reflection of all these concepts in his/her own behavior. Identity and social interaction increase the level of social learning. In developing positive health behaviors for young women; being aware of the effect of peer group interaction and identity (Bandura, 1977).

Various studies have explored the usefulness of approaches such as peer support (Lierman et al., 1994; Sevil et al., 2005; Tuna Malak and Dicle, 2007; Karayurt et al., 2008). The other important concept that affect the BSE is self esteem. The peer positive feedback increase self esteem. The high self esteem increase the positive

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health behaviour among the adolescent (Bandura, 1989; Chait et al., 2009). The peer positive feedback about BSE increase the adolescent knowledge and the frequency BSE (Richmond and Ross, 2008).

BSE is important to determine who is likely to perform behavior regularly and why. If points of social support and body esteem are much, BSE is performed by young women. The aim of this study was determined affect of peer social support and self esteem was performing breast self examination and relationship among the self-esteem, social support and BSE in young women.

## Materials and Methods

This research was planned as an experimental study for the purpose of examining the effect of peer social support and self esteem was performing breast self examination and relationship among the self-esteem, social support and BSE in young women. A pretest-posttest group model was used in this study. Permission to conduct this research was obtained from university students.

### Sample

72 of the university students who volunteered to participate in the study were included in the research. The research consist of two level. First, researcher were select the volunteer peer educators. Seven peer educator were educated by the researchers. After education, peer educator have successfull if they take 75 point in exam and 100 point in practice of BSE. Second, peer educators were educated 65 women students in the university. All groups were educated by slide presentation and face to face practice of BSE.

### Instruments

A socio-demographic characteristics data form, knowledge form about breast cancer and breast self examination and breast self examination practice form were used to collect data. The data was used evaluation forms developed by Maurer (1997).

The other data were collected with questionnaire\_ Coopersmith Self-Esteem Inventory and Scale of Perceived Social Support between January-April. The original Social Support Scale was developed in 1988 by Zimet, Dahlem, Farley as a scale for the purpose of evaluating adults' perceptions social support status (Zimet, Dahlem, Zimet, & Farley, 1988). It adapted for Turkish use by Çakır (1993) and tested for validity and reliability. Çakır (1993) determined that the scale had a cronbach alpha value of 0.89. The original Self-esteem Scale was developed in 1967 by Coopersmith (Coopersmith, 1981) and adapted for Turkish use by Tufan and Turan (1987) the scale had a cronbach alpha value of 0.76 (Tufan, & Turan, 1987).

### Data Analysis

Data were analyzed using percentage, paired sample t-test, Mc Nemar test and pearson correlation statistical methods.

## Results

The students mean age was 20.4 ( $\pm 1.26$ ) years and 92.3 % did not know how to perform breast self-examination before the intervention.

Average BSE knowledge points of students were 34.8 ( $\pm 12.8$ ) before and 79.1 ( $\pm 10.6$ ) 3 months after training, the difference being statistically significant ( $p < 0,001$ ). Students performed BSE one month after training. While the students' BSE practice ratio was only 7.7% before training, it increased to 92.4% after training. There was a significantly difference between the ratio of systematic practice of BSE before and after training ( $p < 0,05$ ). There was also a statistically significant relationship between average BSE knowledge points and social support of all students ( $r = 0,86$ ;  $p < 0,05$ ).

## Discussion

For young women to live healthy lives, it is essential for them to develop healthy behaviors. In this study, conducted for the purpose of developing healthy behaviors in young women, a significant difference was found between the young women's pretest and posttest BSE mean scores. Many other studies have also reported that health promotion education taught to young women increases their BSE knowledge level, and improves BSE performance levels (Maurer, 1996; Sevil et al., 2005; Tuna Malak and Dicle, 2007; Karayurt et al., 2008). In this study, it increased BSE knowledge points of young women by peer educators after three months.

In line with our findings, regular performance of BSE is reported to be increased by peer education (Maurer, 1996; Sevil et al., 2005; Tuna Malak and Dicle, 2007; Karayurt et al., 2008). Peer educator developed a positive social support and environment so that young womens self-esteem was increased.

In this study, there were significant positive relationship among BSE knowledge, social support and self-esteem point. Many other studies have also reported that people who have a high level of support has high level of self-esteem and relationship among them. The ohter hand, high social support and self esteem affect the level of self efficacy (Bandura, 1989). High level self effecacy has positive affect the perform of BSE. So our results shown that have a positive relationship among BSE knowledge, social support and self esteem, and they affect the BSE perform level.

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