

# **Effect of Decision Aid based counseling on the women's breast cancer screening related behaviours: an experimental study**

## **Abstract**

**Introduction:** Breast cancer is the most common cancer of women worldwide and is the third most common cause of early death or disability among Iranian women. Despite the availability of screening methods for breast cancer, women are less likely to welcome these opportunities. Since, the factors such as the level of awareness and the beliefs and attitudes of individuals about the risk of disease, and in particular the perceived barriers to breast cancer screening, are effective in the adoption of screening behaviors, so we decided to perform the study with the purpose of the assessment of effect of Decision Aid based counseling on the women's breast cancer screening behaviors.

**Methods:** The experimental study was performed on the 202 women aged 40 to 69 without history of mammography along two years ago through simple randomized sampling and were allocated randomly into two groups of intervention and control. Data were collected using a demographic and obstetric questionnaire, a checklist for behavioral change, a breast cancer awareness tool, and breast cancer screening tools before and 8 weeks after the intervention by interviews and analyzed by SPSS24 software. Chi-square, ANCOVA and sequential logistic regression were used.

**Results:** In this study, the two groups did not have a significant difference in terms of demographic and obstetric characteristics ( $p > 0.05$ ). During the 8 weeks after the intervention, there was a significant difference between the two groups in terms of changing the stages of behavior, so that after the intervention, the frequency of those who entered the stage of practice or intended to perform a clinical exam, breast control and mammography was more than the control group ( $p < 0.001$ ). The mean score of awareness after intervention was 66.92(0.67) significantly more than control group 50.60 (0.60), ( $p < 0.001$ ). The after intervention mean score of belief about breast cancer screening 32.33(0/35) was significantly higher in the decision-making counseling group than the control group 28/32 (0/35) ( $p < 0.001$ ).

**Conclusion:** Decision-based counseling led to improvement of awareness and women's belief about breast cancer screening, and informed decision making to doing cancer screening. Therefore, it is suggested that counseling based on decision support should be used in health care centers along with educational programs to raise awareness among women in various dimensions related to breast cancer.

**Keywords:** counseling, decision aid, breast cancer screening, breast control, mammography