

The Investigate Cultural Factors on Screening of Breast Cancer Based on PEN_3 Model in Women with Breast Cancer

Abstract

Background: Breast cancer is the most common type of cancer in women and the most common cause of death from cancer in women aged 40 to 44 years. Early detection of breast cancer is done through mammography, clinical tests and breast self-examination, and they play a vital role in reducing cancer mortality. The PEN-3 model is one of the models for studying behavior in the field of education and health promotion, and the factors that affect a person's behavior are examined in this model. This model has different structures, including: perceptual factors, enabling factors and strengthening factors; which is associated with positive, negative and ineffective self-beliefs. Identifying these factors is very important in the use of interventions. In the implementation of educational programs, the evaluation of the relationship between education and the cultural power of society is of particular importance and requires a sociological perspective and attention to social processes affecting behavior.

Aim: in this study, we intend to use the PEN-3 model to determine the cultural factors involved in performing and not performing screening in women with breast cancer.

Method & Materials: In this study, patients with confirmed breast cancer referred to Imam Khomeini Educational-Therapeutic Hospital in Ardabil city and the Cancer Registry Center of Health Vice-Chancellor of Ardabil University of Medical Sciences were included in the study by easy sampling based on the inclusion and exclusion criteria. Next, using a self-made researcher questionnaire based on the PEN-3 model, the required data about demographic information (including history of breast disease except for malignancy and family history), screening behavior, perceptual factors, enabling factors and strengthening factors was extracted in this study. The reliability and validity of the questionnaire has been confirmed in the study of Naghibi and his colleagues in 2016. Statistical analysis was done using SPSS version 26 software. One-sample and two-sample t-tests, chi-square and descriptive tests were used to analyze the data. Mean and standard deviation were used to describe quantitative data with normal distribution, and median and interquartile range were used to describe quantitative data with non-normal distribution.

Results: Among the investigated women, 22% had a history of breast self-examination, 30% had a history of clinical breast examination, and 28% had a history of

mammography at least once. The most important factors affecting screening are having health insurance (95%), attention to women's health (84%), ability to pay for screening (83%), positive family history (82.4%), busyness and lack of time (77%) , the recommendation of health workers (71%) and the encouragement of the spouse (66%). There was no significant difference in the incidence of screening behaviors according to the average ($P=0.237$). However, there was a positive correlation between the score of enabling and enhancing factors with early screening behaviors ($B=326$ and $P=0.01$ respectively, $B= 0.168$ and $P=0.032$). Screening behaviors and reinforcing factors were also significantly higher in the group with a history of breast diseases ($P=0.007$ and $P=0.001$, respectively).

Conclusion: Since the factors affecting breast cancer screening behavior are formed in a cultural and social context, comprehensive planning in the majority of health education models can be useful in this regard. The results of the present study showed that enabling and reinforcing factors were the best predictors for screening behaviors. In the studied population, despite the appropriateness of strengthening factors such as family support, the level of enabling factors such as urban facilities and financial concerns is alarmingly lower than the average, which requires an increase in social support.

Keywords: PEN-3- Breast cancer – screening