

# Evaluation of the Breast Cancer Train the Trainer Program for Nurses in Turkey

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**Abstract** The Breast Cancer Train the Trainer (TTT) program was designed to increase breast cancer awareness, improve knowledge about breast cancer among nurses, and provide quality care for breast cancer patients by trained nurses. A total of three programs were held and 82 nurses from different regions of Turkey attended this training. The educational activities employed several teaching and learning strategies. After completion, we determined that the participating nurses' knowledge on breast cancer had increased significantly, and they were satisfied with the training received. The Breast Cancer TTT program is a unique educational endeavor for nurses in Turkey, and our results showed that the training achieved its goal. Trained nurses in Breast Cancer TTT programs can help educate women about the importance of breast health and the measures they need to take to protect themselves against breast cancer. At the same

time, nurses can also increase and enhance the quality of life in patients with breast cancer. This is an example of a program that can easily be spread throughout the world as it was done from England and Australia to Turkey.

**Keywords** Breast cancer · Breast care nurse · Breast cancer patient care · Turkey

Breast cancer is the most common cancer in women worldwide, and its incidence is increasing in most countries [1, 2]. Not surprisingly, it has become a critical health problem with increasing incidence in Turkey as in other parts of the world. According to the most recent reports of the Turkish Cancer Registry, breast cancer is the most common female cancer, accounting for 34.7 per 100 000 of all cancers in women with 5,634 new cases in 2004 [3].

Nurses are in an ideal position to play an important role in breast health education. Therefore, there is a particular need for specially trained nurses to increase awareness and to enable women to use early detection methods. In addition, nursing roles include the provision of psychosocial support and patient education as well as assistance in managing the side effects of treatment. Nurses can provide counseling and support from the moment of diagnosis throughout treatment and long-term follow up [4-6]. Nurses may also plan and conduct breast cancer research and develop guidelines for nursing care and practices for patients. However, the shortage of trained nurses available to care for and to teach women remains an issue, particularly in developing nations [7-9].

The World Health Organization has indicated that cancer education programs are most acutely needed in developing nations [10]. The Train the Trainer (TTT) programs have been used worldwide for many years to train healthcare providers, and they have been very effective in increasing the

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awareness and knowledge of specific health care conditions [7, 11, 12]. However, formalized TTT programs for nurses about breast health and breast cancer education in Turkey are nonexistent and this TTT National Breast Health program was developed to address the lack of trained health personnel and to provide a very important contribution to breast health and breast cancer patient care quality in Turkey.

The purpose of this breast cancer TTT programs is to increase awareness and knowledge about breast health and breast cancer among nurses in Turkey. The goals support the objectives of the TTT International Breast Health Programs projected by The International Society of Nurses in Cancer Care (ISNCC) [7, 10, 13].

The aims of this article are to describe the curriculum, the development of the breast cancer TTT program, and to share the TTT program evaluation.

## Materials and Methods

### Curriculum Focus, Content, and Development

The TTT breast cancer curriculum is focused on breast cancer prevention, treatment, symptom management, and

the problems of survivors. The programs were developed and delivered within the organizational structure of the Oncology Nursing Association (ONA). The aims of ONA are to provide nurses with education in oncology, to educate the public about cancer, to organize educational activities, such as conferences and courses, to share new developments with nurses, and to do research on oncology nursing. ONA has been a member of The European Oncology Nursing Society (EONS) and the International Society of Nurses in Cancer Care (ISNCC) since its foundation [14].

The president of ONA, six members from ONA committees responsible for nurses' training, and the first two authors of this article collaborated on the curriculum (Table 1). The first two authors joined the "Train the Trainer International Breast Health and Breast Cancer Education Program" organized by ISNCC in 2002 and 2004. The ISNCC, in collaboration with the Susan G. Komen Breast Cancer Foundation, arranged a breast cancer TTT program in London, England on August 27–28, 2002 which the first author attended. The second author attended the same program in Sydney, Australia on August 7–8, 2004.

The program was publicized at all hospitals and community health centers. Only nurses working with breast

**Table 1** Breast cancer TTT program curriculum

#### Day 1

- Breast cancer patient: case presentation
- Breast anatomy and physiology
- Breast cancer epidemiology
- Etiology of breast cancer and risk factors
- Prevention and early detection in breast cancer
- Breast cancer symptoms and findings.
- Types of breast cancer and staging
- Diagnostic procedures of breast cancer and nursing care during these procedures

#### Day 2

- Surgical therapy in breast cancer
- Nursing care of patients with breast cancer before and after surgery
- Chemotherapy and hormone therapy in breast cancer
- Symptom management in chemotherapy and hormone therapy in breast cancer
- Radiotherapy in breast cancer
- Symptom management in radiotherapy in breast cancer

#### Day 3

- Lymphedema: prevention, signs and symptoms, and care of patients with lymphedema related to breast cancer
- Psychosocial problems among breast cancer patients and nursing interventions
- Reconstructive surgery in breast cancer
- Complementary and alternative therapy in breast cancer
- Breast cancer support groups
- Experiences of a breast cancer patient (patient's presentation)
- Adult training methods

cancer patients and in early diagnostic cancer centers were accepted into the program.

### Implementation

In Turkey, three TTT Turkish Breast Cancer programs were implemented in the years 2003, 2005, and 2008 for nurses throughout the country. In cooperation with ONA, the first “Breast Cancer TTT Program” was in Ankara (December 2003); the second was held in Trabzon, a city in the north on the Black Sea (November 2005); and the third took place in Kayseri in central Anatolia (February 2008). All three TTT programs lasted 3 days. The first day focused on breast health and prevention of breast cancer, and the objectives and content of the program were introduced to the trainees, and participants became acquainted with each other using games. Participants were asked to form small groups, and these groups worked together during training. The second day covered breast cancer treatment and symptom management, and the last day focused on the care of survivors.

The program was mainly conducted by the first two authors, but some experts (breast surgeon, oncologist, physiotherapist, etc.) contributed with their own areas of expertise. Interactive learning methods, such as case discussions, group activities, presentation of group activities, role plays, demonstrations, brainstorming, lecturing, and skill teaching were used throughout the course. Video/video compact disk clips, flip-charts, slides, power point presentations, and skill practice on breast mannequins were also used to facilitate learning. Participants were encouraged to ask questions and group work was incorporated to allow participants to be actively involved in the learning experience. All nurses who attended the programs were given written materials including the program’s purpose, content, and all issues mentioned in the program.

Each trainee completed a pre-test and post-test to assess changes in knowledge of the content. There were 25 multiple-choice questions with one correct answer and scores ranged from 0 to 100. At the end of the training, all participants were evaluated again with the same questionnaire.

Trainees were asked to evaluate the training program, including the duration of the training, curriculum content, time for discussion, atmosphere for sharing opinions, and the trainer’s effectiveness with the educational topics, etc. Participants were asked to evaluate the program using a Likert scale with “1” being the strongest disagreement and “5” indicating the strongest agreement.

### Results

Eighty two nurses participated in the three breast cancer TTT programs. A *t* test compared differences between pre-

test and post-test mean knowledge scores about breast cancer. The mean knowledge scores on breast cancer increased significantly from pre-test ( $55.7 \pm 13.1$ ) to post-test ( $80.1 \pm 9.4$ ) ( $t = 11.24$ ,  $p < 0.001$ ).

Trainees were also given the opportunity to evaluate their training experience. All items were rated very favorably. The highest score given by the nurses went to the item of “enthusiasm of the trainer about the educational topics” whereas the lowest score went to the item of “the duration of the training”.

Participants were asked to express their ideas and emotions regarding their learning experiences. Some freely and openly expressed opinions by the nurses as to how the training had benefited them were as follows:

- “The program gave me motivation and self confidence for my work.”
- “I believe that my sense of responsibility increased after the training.”
- “The training showed me I need to take a more active role in my profession and its responsibilities. We nurses need to provide more education about breast cancer and prepare more educational materials for the public.”
- “I knew before the training that I was lacking in knowledge, but I really understood it more after the training. I know I need to continue to learn more about my profession and my role in it.”
- “The course helped motivate me to study more and upgrade my professional skills.”
- “Before the training I did not know how to use my knowledge but now I do.”
- “I now understand better that public health nurses must play a more effective role in prevention.”
- “I think I should help plan and organize a training program for the colleagues of my unit.”
- “I should help prepare patient booklets about preventive exercises against lymphedema.”
- “The training helped me see that we should use more of mass media (local TV and radio) to reach the public with information on breast cancer.”
- “The course showed me we need to be more aware of our roles and responsibilities as breast nurse professionals.”

### Discussion

The care of patients with cancer requires many skills found in professional nursing (patient care planning, critical thinking, holistic care, etc.). The field of oncology nursing has now more fully evolved in response to population growth, changing demographics, changing regulatory requirements, shorter inpatient hospital stays, and ongoing advances in cancer treatment and information technology

[15]. The unique characteristics of cancer patient care, the new developments in oncology nursing, and increases in breast cancer incidence have led to the need for trained “breast care nurses.”

TTT training for health workers has been used for years in many countries as an effective strategy in updating their skills and education. Examples of such training in other health areas include cardiopulmonary resuscitation [16], heart health programs [17], childbearing education courses [18], and dementia education for health care professionals [19]. Similar programs have also been carried out for breast and cervical cancer [20, 21]. The study by Meneses and Yarbo is a very good example of these international efforts for breast cancer [7, 10].

TTT programs are certainly not a new means of updating professional health training for health care workers. These programs have been widely used, for example, in the teaching of resuscitation and first aid skills in Turkey. However, the previous lack of trained nurses to care for and teach women about breast health and breast cancer is an important issue in Turkey. Therefore, this program is deemed very important in filling the void in breast cancer and breast health care in Turkey.

Results of this program indicate that exposure to the curriculum resulted in significant increases of knowledge for the participating nurses. Nurses were satisfied with the training received and felt empowered to assume a role as breast cancer nurse, which is a main goal of breast cancer TTT programs. After reviewing the evaluations by the trainees, the content of the program was felt to be sufficient. Nearly all of the nurses found the training atmosphere, the contents of the training program, the training materials, and the trainers’ performances to be sufficient. The length of the breast cancer TTT programs needs to be changed because most of the trainees evaluated that item as “not satisfactory”.

It was intended that participants should be able to use the knowledge received during this program in their work area when planning a TTT program. After completing this program, nurses were asked to explain their goals in their professional lives. Nurses expressed that this program created demand and energy to get new information about breast cancer. As individuals, nurses identified themselves as having increased confidence, improved knowledge, and increased awareness of professional issues about breast cancer. Furthermore, the nurses developed more global objectives related to the roles of nursing (to create educational materials for patients, to educate breast cancer patients and their colleagues, to use the media for community education, etc).

The efficacy of the programs is shown by the changes which the participants experienced about breast cancer awareness, knowledge levels, and professional opportunities. In the future, implementation of interventions with

patients and communities will provide a more effective evaluation of the program.

Breast cancer TTT programs in Turkey have enabled nurses to increase their awareness of breast cancer, to be more cognizant of their professional roles, to update and increase their knowledge, and to set new goals in their own practices. Eventually, ONA understands the need to increase the number and influence of the programs, and a more comprehensive TTT program with more ambitious aims is being planned to expand the original curriculum. Another future goal is to evaluate participants’ contributions to clinical, educational, and research activities after finishing the training. We feel that these programs described have been an important first step and demonstrate the power of TTT programs to spread knowledge, skills, and attitudes about breast cancer and are a beginning in the attack on the rising rates of breast cancer in the world.

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