Simulated Donor Family Encounters at Organ Transplantation Coordinators In-service Training Course: Process and Impact Evaluation

O.S. Karabilgin[a], N. Altug[b], S.A. Caliskan[a], C.A. Bozoklar[c], H.I. Durak[a], and N. Demiral-Yilmaz[a,*]

[a]Ege University Faculty of Medicine, Department of Medical Education, Izmir, Turkey; [b]Ege University Faculty of Medicine, Organ Transplantation Application and Research Center, Izmir, Turkey; and [c]Istanbul Bilim University Faculty of Medicine, General Surgery, Istanbul, Turkey

ABSTRACT

Objective. The study was aimed at introducing the modified version of the organ transplantation coordinator course including simulated donor family encounters (SDFEs), communication skills, and evaluating the participants' opinion, achievement levels, and how they implemented what they learned in the course in their work settings.

Methods. The course was modified using the ADDIE (analysis, design, development, implementation, and evaluation) model and was evaluated in three steps. The participants' views were obtained using the course overall evaluation form and communication skills evaluation form, their success was assessed with the post-test and SDFEs evaluation form, and the effects of what they learned during the course on their work settings were assessed through phone interviews. At this step, the participants were asked to write letters about the targets they intended to achieve in their work settings. The letters were analyzed with the content analysis method, and a questionnaire consisting of 10 targets was developed. A year later the participants were telephoned and asked to what extent they achieved their targets.

Results. The participants' satisfaction from the whole course was high (x: 8.65 ± 1.06). In the communication skills evaluation form, the participants stated that they would mainly use their communication and empathy skills during donor family encounters. The participants' mean post-test score was high (x: 96.[illegible]3.8). During the SDFEs, 70% of the respondents' performance was considered sufficient. Telephone interviews conducted with the questionnaire revealed that 77.6% of the targets were fulfilled.

Conclusion. It can be said that the course affected the participants in terms of implementing their knowledge and communication skills related to family encounters.

ACCORDING to European Consensus Document 2003 "Over [illegible] million people worldwide have received an organ transplant and some have already survived more than [illegible]" [1]. Nonetheless, the chronic shortage of donor organs is a worldwide continuing serious problem due to prolonged waiting times, deaths on the waiting list, acceptance of lower quality organs, increased living donors, and commercialization of organ transplantation in many countries [2]. In 2011, 114,690 solid organs were reported to be transplanted, constituting less than 10% of global needs [3].

In Turkey, the number of transplantations performed in 2012 for kidney, liver, heart, heart/lung, lung, pancreas, and small bowel was 3999 whereas the number of patients on the waiting list was 20,833. The rate of deceased organ donation is substantially lower than that in several countries. In 2012, actual deceased organ donation rates for per million

Part of this work was previously presented at AMEE 2012 and was published in abstract: Karabilgin ÖS, Altuğ N, Çalışkan SA, et al (2012). Simulated Donor Family Encounters at Organ Transplantation Coordinators in-Service Training Course: Process and Impact Evaluation, AMEE Lyon, France.

*Address correspondence to Nilufer Demiral-Yilmaz, PhD, Department of Medical Education, Ege University Faculty of Medicine, 35100 Bornova, Izmir, Turkey. E-mail: nilufer.demiral@gmail.com

0041-1345/15
http://dx.doi.org/10.1016/j.transproceed.2015.03.049

population (pmp) in Spain, the United States, and Turkey are 35.1 pmp, 25.8 pmp, and 4.6 pmp, respectively [4].

In Spain, which has the highest donor rate, there is a part-time working national network that motivates hospital physicians to the process of organ donation. The Spanish Model draws a special attention to a transplantation coordination network, continuous medical training, and education. There are some factors, such as the public national health system, economic resources, the number of doctors, the number of acute beds and intensive care unit (ICU) facilities, and age distribution of the population, that influence the use of this model in other countries [5].

In Turkey, after the law related to the transplantation procedures was enacted in 1979, the first cadaveric donor kidney and liver transplantations were performed in 1979 and 1988, respectively [6].

The Turkish system was improved similar to the Spanish Model in 2000. The Turkish National Coordination System (NCS) was constituted by the Ministry of Health (MoH). The NCS consists of the National Coordination Center (NCC), Regional Coordination Center (RCC), and Local Coordination Center (LCC) in hospitals that have ICUs.

A coordinator works at each level of the NCS. These staff members are known as organ transplantation coordinators (OTCs). The terminology for their positions differs by the level of work setting such as NCC coordinators (NCCs), regional coordinators (RCs), and hospital coordinators (HCs). Among the common tasks and responsibilities of all the coordinators are to organize organ donation campaigns, in-service training for health workers, public education, and to participate and support every campaign and education prepared by the MoH [7].

With the initiative of a group of volunteer training programs for coordinators were started in 2002 and repeated in 2003 and 2004. Following these courses the MoH conducted 2-day formal courses and gave certificates to 110 participants in 2004. In 2008 the MoH published a directive for OTCs in-service training programs and outlined the rules and regulations of teaching centers, course application procedures, content, methods, durations, and evaluation.

Theoretical training is given by recognized training centers or the trainers who are appointed by the MoH. It lasts 5 days or 40 hours at least. After the theoretical training, successful participants conduct at least three family interviews, organize meetings including reports of brain death, and submit the donor information from the receiver center to the RCs or NCCCs. Practical training is made at the hospital where participants work or at the organ transport centers favored by the MoH. These are approved by the MoH, organ transplantation center responsible, or the chief of staff.

The MoH formal training program consists of OTCs task definition, brain death diagnosis, donor care, marginal donors, tissue donors, criteria of donor selection, harvesting organ protection transport, patient selection (for heart-lung, liver, kidney, and cornea), religion, ethics, legal aspects of organ donor, NCS and the other country systems, donor selection and organ sharing, visiting ICU, infrastructure of the coordination office, life after the loss of a beloved one, advanced communication skills and presentation techniques, visiting transport service, and dialog with the patients, donor family encounter (role playing), and project study. Participants are divided into three working groups and at the end of training, they present their projects. At the theoretical examination performed after the training, examinees should get 70 of 100 points and fulfil the requirements of practical training. At the end of the training successful participants are entitled to receive a certificate [8].

The training conducted for this report was performed at the Ege University Faculty of Medicine (EUFM), Izmir, Turkey, in April 2012. The EUFM coordinator asked for assistance in conducting a formal OTC course within EUFM, so the Department of Medical Education (DME) staff offered to review the formal course and update several aspects including the training methods, reorganization of the content, and impact evaluation. After obtaining the permission of the MoH we developed the Simulated Donor Family Encounters (SDFEs) Enhanced Training Course for Organ Transplantation Coordinators.

Focusing on the OTCs' task, required competences, and a national syllabus the course was modified by the representative from the Turkish Transplant Coordinators Society, and the EUFM-DME.

This article aimed to introduce the modified version of the SDFEs Enhanced Training Course for Organ Transplantation Coordinators and to evaluate participants' opinions and achievement levels, and how they implemented what they learned during the course in their work places.

METHODS

In this descriptive study, to modify the national OTCs course curriculum, one of the most used prescriptive instructional design models known as ADDIE (analysis, design, development, implementation, evaluation) was adopted. A mixed evaluation approach which includes quantitative and qualitative evaluation methods was applied.

Development of the "Enhanced OTCs Course" Through the ADDIE Model

The ADDIE model describes a systematic process. This model requires determination of training needs and design, the development of the program and materials, and the evaluation of the effectiveness of the training [9].

The steps in developing the OTCs course according to the ADDIE model are as follows:

Step 1 – Analysis. In this step, needs analysis is conducted. Organ donation and transplantation process, the NCS, OTCs' jobs, and national syllabus were examined and previous trainings were reviewed. The OTCs' tasks were compared with the expected minimum knowledge and skills. Some skills that are not included in the national curriculum are encountered frequently in practice such