Communication Skills between the Relatives and the Doctors of Patients with Cancer Treated in Radiation Oncology: A Cross-sectional Questionnaire Study

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OBJECTIVE
To evaluate the communication between relatives and the doctors of patients with cancer treated in the radiation oncology department using a questionnaire composed of two sections.

METHODS
Relatives of 168 patients were selected through simple randomization after having obtained informed consent from the patients. A questionnaire form, which was developed based on the patient-physician communication scale, which had the sub-dimensions of information, empathy and confidence and included questions regarding socio-demographic data, and which used a Likert-type scale, was applied. Statistical analyses were performed using the Mann-Whitney U test and the Kruskal Wallis test.

RESULTS
A statistically significant difference was determined in the information and empathy sub-dimensions concerning the gender and the education level of the relatives (p=0.03, p=0.01, p=0.001) and the frequency of seeing the doctor and the doctor’s tolerance (p=0.007, p=0.02); in the confidence possession sub-dimension, a difference was found between the age groups of the relatives and the tumor groups of the patients (p=0.039, p=0.002), duration of seeing the doctor and talking with the doctor (p=0.004, p=0.009), between the relatives’ praying and all sub-dimensions (p=0.009, p<0.0001); in the information sub-dimension, a difference was found with regard to the duration of therapy (p=0.03). It was also determined that all relatives wished to obtain correct information and have confidence in the doctor.

CONCLUSION
The results show the expectations and the content of information, empathy and confidence sub-dimensions of the communication process between relatives and the doctors of the patients.

Keywords: Communication skills; relatives of patients with cancer.

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Introduction
Radiation oncology has an effective role in the treatment of patients with cancer. Radiotherapy (RT) may be applied with curative, adjuvant, neo-adjuvant, palliative and prophylactic purposes depending on the disease stage in approximately half of the patients cancer.[1,2] The duration of RT varies between 1 and 39 working days. Communication with the patients and their relatives is of importance as treatment and follow-
up of cancer patients take a long time. Communication between the patients and their relatives gains importance in radiation oncology in this context. There are studies in the literature investigating the importance of communication between patients with cancer and their doctors.[3-5] The communication between the doctors and the patients and their relatives is of importance during radiotherapy.[6,7] Despite the presence of the studies investigating the communication between the doctor and the patients,[8-10] studies investigating communication with patient relatives are restricted to the pediatric group of patients.[7-10] Positive communication between the doctor and the patient is known to reduce the emotional stress of the patient, improve the quality of life, and thereby increase the treatment compliance and satisfaction from the treatment.[11-15] The communication between the patient’s relatives and the doctor is of great importance during cancer treatment. In our country, the vast majority of the relatives ask the doctors not to tell the patient about the disease;[16] the communication between the relatives and the doctors gains more importance in such a case. Communication with the patients and relatives has become important in medical education in recent years. In the present study, we aimed to analyze the communication between the patient’s relatives and doctors through a questionnaire form composed of two sections and to improve the communication skills of medical students.

**Materials and Methods**

Ethics committee approval was received to conduct this study. The necessary approval and informed consent forms were obtained from the relatives of the 168 patients. In the study, two different questionnaires were used. “Communication-Attitude Questionnaire” was applied to 168 patient relatives and “Communication Skills Questions with the Physician” were applied to 122 patient relatives. A questionnaire that was used by Cicekci et al. was applied to a relative of each patient. This questionnaire is based on the patient-physician communication questionnaire developed by Curtis et al.[17] for patients with the severe chronic obstructive pulmonary disease. Cicekci et al.[18] conducted a pilot study to secure the validity and reliability of the surveys. In this study, we applied the questionnaire about the relative of the patient to the radiation oncology department. The relatives of the patients who were under treatment at the Radiation Oncology Department and selected through simple randomization regardless of the tumor group or stage were given a questionnaire form, which was developed based on the relatives of patients communication scale, which had the sub-dimensions of information, empathy, confidence and included questions regarding the socio-demographic data and used a structured Likert type scale (1: always, 5: never) after having obtained written informed consents from the patients. Each questionnaire was filled out by a 15-20 min interview between the student and the relative in a proper room at the clinic. In this study, five Marmara University Medical Faculty students applied the questionnaires. Data regarding the disease of the patient were noted. A maximum of two relatives was selected for each patient. For the statistical analysis, the SPSS 23 program and the non-parametric Mann-Whitney U test and the Kruskal Wallis test were used. A p-level of <0.05 was accepted as statistically significant.

**Results**

The answers to the questions are presented in Table 1. When the socio-demographic characteristics of the relatives and the treatment characteristics of the patients were compared with the information, empathy, confidence sub-dimensions, no significant difference was determined with the degree of kinship, marital status of the relative, age and treatment of the patient, disease stage and the data of the doctor. In the information and empathy sub-dimension, a statistically significant difference was found with regard to the male gender of the relative (p=0.03, p=0.01) and high education level (p=0.001); in the confidence sub-dimension, no difference was determined between the age groups of the relatives and tumor groups of the patients (p=0.03, p=0.002)(Table 2a). In the information and empathy subgroup, a significant difference was found between the duration of the conversation and talking with the doctor - one of the factors that relieves the relative (p=0.09, p=0.007). Having confidence in the doctor was determined to increase as the duration of conversation increased. In the empathy group, a significant difference was determined with regard to frequency of seeing the doctor, duration of the conversation and the patience of the doctor (p=0.007, p=0.09, p=0.02). In the confidence sub-dimension, the duration of conversation with the doctor and talking with the doctor were found to be significant (p=0.004, p=0.009). Comparison of the duration and frequency of talking with the doctor, important characteristics of the doctor from the view of the relative and the conditions that relieve the relative in the information, empathy and confi-
dence sub-dimensions are presented in Table 2b. All relatives stated that they wished to receive good news and correct information, and confidence was important. Besides, a significant difference was determined between praying- one of the conditions that relieve the relative- and all sub-dimensions (p=0.009; p<0.001).

Discussion

In the present study, the sub-dimensions of the communication (information, empathy, confidence) between the relatives of the patients who received radiotherapy and the doctors were analyzed and the
influential factors were determined. The male gender and the education level of the relatives were determined to be better with regard to empathy and information. In the information sub-dimension, a longer duration of conversation with the doctor was found to be significant. While the increase in the duration and frequency of the conversation with the doctor and the doctor’s tolerance were significant in the empathy sub-dimension; the age groups of the relatives, the tumor groups of the patients and the frequency of seeing the doctor and talking with the doctor were significant in the confidence sub-dimension. Praying and getting good news were determined to relieve all relatives, and correct information and confidence were important for all patients’ relatives.

Cicekci et al.[18] evaluated the quality of communication in the three sub-dimensions in their study, evaluating the communication between the patient’s relatives and the doctors and determined that the male gender caused a significant difference in the confidence sub-dimension and that the educational level of the relative caused a difference in all three sub-dimensions. The higher score of the male gender in the confidence sub-dimension was associated with female relatives’ being more sentimental. In our study, the scores of empathy and information were higher in the male gender. In the study of Cicekci et al., a significant decrease was determined in all three subgroups as the educational level of the relatives increased, and a higher educational level was reported to cause the subjects’ being more demanding toward the treatment team and showed a more critical approach to the treatment process. An opposite result was obtained in our study; we determined that an increased educational level was better in the information and empathy sub-dimensions. This may have resulted from our study having included the relatives of cancer patients. Data regarding the doctor’s tolerance, praying and receiving correct and good news were similar in both studies. The similarity of the results of the two studies indicates that the expectations of the patients’ relatives are similar, although our study was conducted with the relatives of cancer patients.

Table 2a Comparison of the socio-demographic data of the patient relatives and treatment characteristics with the information, empathy, confidence sub-dimensions

|                  | n (168) | Information | p | Empathy | p | Confidence | p |
|------------------|---------|-------------|---|---------|---|------------|---|
| **Gender**       |         |             |   |         |   |            |   |
| Female           | 86      | 0.03        |   | 0.01    |   | 0.7        |   |
| Male             | 82      |             |   |         |   |            |   |
| **Age (median: 43)** |       |             |   |         |   |            |   |
| 20-34            | 31      | 0.2         |   | 0.3     |   | 0.03       |   |
| 35-50            | 88      |             |   |         |   |            |   |
| 50-75            | 49      |             |   |         |   |            |   |
| **Education status** |       |             |   |         |   |            |   |
| Illiterate       | 7       | 0.001       |   | 0.01    |   | 0.14       |   |
| Elementary school| 56      |             |   |         |   |            |   |
| Intermediate school | 22   |             |   |         |   |            |   |
| High school      | 52      |             |   |         |   |            |   |
| University       | 24      |             |   |         |   |            |   |
| Postgraduate     | 7       |             |   |         |   |            |   |
| **Diagnosis**    |         |             |   |         |   |            |   |
| Head and neck-brain | 46   | 0.47        |   | 0.04    |   | 0.002      |   |
| Gynecology-breast  | 49    |             |   |         |   |            |   |
| Gastrointestinal system | 14 |             |   |         |   |            |   |
| Genitourinary system | 22 |             |   |         |   |            |   |
| Skin-Hematology-bone | 15 |             |   |         |   |            |   |
| Thorax           | 19      |             |   |         |   |            |   |
| **Duration of treatment(day)** |       |             |   |         |   |            |   |
| 1-13             | 26      | 0.03        |   | 0.21    |   | 0.32       |   |
| 14-30            | 107     |             |   |         |   |            |   |
| 30 +             | 27      |             |   |         |   |            |   |
It has been determined that nowadays the vast majority of the patients and relatives receive information about the disease through the internet.[19,20] The reporting of this information to the doctor may sometimes harm the communication between the patient and the doctor.[20] Many doctors find the discussion with the patients and relatives about the data obtained from the internet useless.[21] Wrong information obtained in this way may lead to an increased stress level of the patient, improper use of medical facilities and unnecessary expenditures in the health system.[22] The doctors’ spending time with the patient relatives and providing information may prevent this misinformation.

Öksüzoglu and Yalçın et al.[16,23] determined that most of the relatives of patients with cancer preferred not to tell the patient about her/his disease. This may have resulted from their considering psychological destruction when the patient would hear about the diagnosis of cancer, it is obvious that the oncologist would have challenges when informing the patient about the disease and the treatment process.[24] Besides, understanding of medicine has been evolved to a communication-based approach in which the patient and the doctor discuss the treatment process through a paternalistic approach.[25] This evolution is associated with the educational level of the patients’ relatives, as found in our study. The socio-cultural level of the patients and particularly that of the relatives is seen to be important for communication with the relatives. The quality of the communication between the doctors and the relatives is determined by many factors, including socio-
economic conditions, educational level of the patient’s relative, religion, ethics, ethnic and cultural history, previous experiences, doctor’s perception and expectations from the doctor.[26] Hunsucker et al.[27] found that confidence and providing good information were the most important requirement for the families. In the present study, relatives who found relief after talking with the doctor could establish a better empathy with the doctor and were better informed by the doctor. Besides, patients’ relatives who wished to receive good news from the doctor considered that they were informed in a better way by the doctor and established a stronger empathy with the doctor. Fassier et al.[28] determined that conversation that took a minimum of 10 minutes caused a better empathy with the patients’ relatives. Studies conducted with families from different cultures showed that the primary need of patients’ relatives was confidence and information.[28,29] Given all these data, good communication with the patients and their relatives has a critical role in providing correct and reliable information about the disease and for a satisfactory treatment process. Communication with the patients and their relatives have been included in the curriculum of medical schools, and patient participation programs have been introduced in many faculties for developing the communication skills of the medical students.[30,31] We hope that the present study would increase the sensitivity of the communication between the doctor and the patients’ relatives and contribute to improving the awareness of physician candidates about this issue. The students participating in this study reported that they gained experience in communicating with the patients’ relatives and that every relative should be approached individually.

**Conclusion**

The present study is investigating the quality of communication between the relatives and the doctors of cancer patients undergoing radiotherapy. This study revealed that communication with patients’ relatives is as important as the communication with the patients. The quality of the communication is correlated with the educational level of the relatives revealing the importance of education. From the perspective of the doctors, it may be stated that allowing sufficient time for the patients, particularly for the relatives, increases the confidence in the doctor. Given that positive communication with the relatives of cancer patients would positively influence the patient, doctors should care for the communication with patients’ relatives.

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