

## The effects of Nurses' Empathy Skills on Attitudes towards Patients with Cancer

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### ABSTRACT

**Objective:** The purpose of this study is to evaluate the predictors of empathy skills and attitude towards cancer patients and association between nurses' empathy skills on attitudes towards patients with cancer

**Patients and Methods:** A structured questionnaire was used to evaluate the nurses' empathy skills and their attitudes towards to patients with cancer. Jefferson Scale of Empathy (JSE) and Attitudes towards Cancer Scale (ATCS) were used. The predictors of JSE/ATCS scores and correlation between JSE and ATCS were analyzed.

**Results:** 305 nurses participated in the study (84.2% of all nurses). The median age was 33 (20-52) and most of the nurses were female (82.6%). Most of the participants were married (188, 61.6%) and 40.3% of nurses had a job experience more than 10 years. Female sex, being married, having job experience more than 10 years or caring more cancer patients were associated with higher JSE scores. Nurses caring more cancer patients weekly, experience with cancer patients, participation in educational activities about cancer care or presence of relative with a diagnosis of cancer were found to have more positive attitudes towards cancer patients. Spearman correlation analysis showed a positive, weak correlation between JSE and ATCS ( $r=0.017$ ,  $P=0.38$ )

**Conclusion:** Empathy skills are important while caring patients, especially in oncology practice. Although a direct correlation between empathy skills and attitudes towards cancer patients couldn't be demonstrated, health care workers caring cancer patients should be both evaluated for empathy skills and educated.

**Key words:** Empathy skill, attitudes towards patients with cancer, nurse, oncology

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### INTRODUCTION

Empathy is sine qua non in nursing practice and the positive effects of empathy on clinical management have been documented. Nurses' use of empathy has been associated with relief from pain, improved pulse and respiratory rates, and patients' reports of reduced worry and anxiety [1, 2]. With the increased level of empathy, a significant increase in the self-concept of patients experiencing high empathy was demonstrated and this was associated with less anxiety and results in more satisfactory relationships between nurses and patients [3]. In addition, these positive effects of empathy

have also been verified in oncology practice. La Monica et al. explored the effect of nurses' empathy on the anxiety, depression, hostility and satisfaction with care of patients with cancer. They found less anxiety, depression and hostility in patients being cared by nurses exhibiting high empathy [4, 5]. Although empathy is an essential tool to communicate with patients and handle tough situations, in most of the studies nurses have shown a low level of empathy [6-8]. Fortunately, empathic skills are teachable and can be improved [9-11].

Nurses are important part of oncology practice and their attitudes towards cancer patients are important. Nurses' attitudes may

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be influenced by demographic factors of nurses (age, experience in oncology, education status about caring cancer patients...), work satisfaction and the degree of support in the working environment [12, 13]. In literature, data showed that nurses generally have positive attitudes towards cancer patients. It was found that nurses' positive attitudes towards cancer and patients with cancer are affected by older age, more years of nursing practice and giving care for patients with cancer. In addition, understanding of the patient's situation, derived from enhanced awareness and increased reflection, precedes changes in attitudes towards cancer patients and positive attitudes can be obtained by educational intervention [14, 15]. The nurses are also aware of the importance of positive effects of positive attitudes towards patients and agree on the necessity of educational programs and supportive strategies to alleviate fears and promote a more positive image towards cancer [16, 17]. However, in some of the studies, regardless of gender, profession and clinical experience, a negative attitude was demonstrated [18].

The importance of empathy skills and positive attitudes towards cancer patients have been highlighted in the literature. However, there is no data about the relation between these two essential tools of nursing practice. The purpose of this study is to evaluate the predictors of empathy skills and attitude towards cancer patients and association between nurses' empathy skills on attitudes towards patients with cancer

### PATIENTS AND METHODS

The study was performed in Public hospital. The hospital is the biggest health facility in the city, with a number of 360 nurses. Nurses actively working in inpatient and outpatient clinics were included. Nurses working in phlebotomy unit, intensive care units, operating theatre and nurses with a diagnosis of cancer were excluded. The nurses were invited to participate in the study and participants were evaluated with structured questionnaires. Local ethics Committee approved the study protocol, and the study was in accordance with the ethical standards laid down in the 1964 Declaration of Helsinki.

A structured questionnaire was used to evaluate the nurses' empathy skills and their attitudes towards to patients with cancer. The questionnaire was formed with questions about demographic data, cancer screening history, data about job experience; number of cancer patients cared weekly, experience with cancer patients, education about cancer patient care, and presence of relative with a diagnosis of cancer. To evaluate the empathy skills, nurses were tested with Jefferson empathy scale. Turkish validation of Jefferson Scale of Empathy (JSE) for Nursing Students" was performed by Yanik et al. [19]. The scale contains 20 items. The answers were recorded by 7 level likert scale (1= strongly disagree, 7= strongly agree). Ten of the items are positively worded and directly scored according to their likert weights, and the other

10 items are negatively worded, thus reversely scored. Total scores range from 20 to 140. Increase in the score is interpreted as increased empathy skills. Nurses' attitudes towards cancer were tested with Attitudes towards Cancer Scale (ATCS). The scale was developed by Tichenor&Rundall (20) and Turkish version was validated by Daban et al. [12]. The scale contains 30 items which consist of positive and negative statements. The answers are recorded by 6 level likert scales ranging from "strongly disagree" to "strongly agree" and are scored as (+1, +2, +3, -1, -2, -3). There is no neutral or zero point provided on the scale, so the respondent has to indicate to some extent either agreement or disagreement with each item. The final score is calculated by adding 90 to the score of the participant. So, the scores range from 0 to 180. Increase in the score is interpreted as increased positive attitude towards cancer patients.

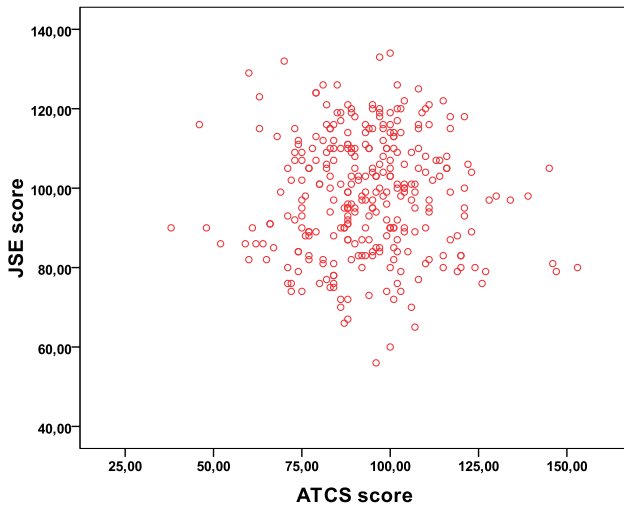
Baseline characteristics were analyzed by using frequencies and proportions for dichotomous and categorical variables. The chi-square or Fisher exact tests were used to compare categorical variables. Median scores of JSE and ATCS in different parameters were tested by using Mann Whitney U. The association between JSE and ATCS were analyzed by using Spearman test. All analyses were performed using SPSS 17.0 for Windows (IBM Corp., Armonk, NY). Values of p of less than 0.05 were considered to be statistically significant.

### RESULTS

Three hundred five nurses participated in the study (84.2% of all nurses). The median age was 33 (20-52) and most of the nurses were female (82.6%) (Table-1). Most of the participants were married (188, 61.6%) and had at least one child (186, 61.0%). 119 (40.3%) nurses had an job experience more than 10 years and 13.8% of them cared more than 10 cancer patients weekly. 19.1% of the participants had experience in department caring cancer patients and 106 (35.0%) of them had participated in a seminar/ congress or meeting about cancer care. None of the participants had attended to educational session about empathy or empathy skills.

Median JSE score of the study group was 99 (56-134). The analysis of factors related with empathy skills concluded that female sex, being married, having job experience more than 10 years or caring more cancer patients were associated with higher JSE scores (Table-2). Median ATCS score of the study group was 94 (38-153). The analysis of factors associated with attitudes towards cancer patients concluded that nurses caring more cancer patients weekly, experience with cancer patients, and participation in educational activities about cancer care or presence of relative with a diagnosis of cancer had more positive attitudes towards cancer patients. Spearman correlation analysis showed a positive, weak correlation between JSE and ATCS ( $r= 0.017$ ,  $P= 0.38$ ) (Figure-1)

## Empathy Skills of Nurses towards Cancer patients



**Figure 1.** Correlation between JSE and ATCS scores

**Table 1.** Characteristics of participants

Characteristics	n (%)
Age (median / range), years	33 / (20-52)
>40 years of age	61 (20)
Female	252 (82.6)
Marital Status	
Married	188 (61.6)
Single	105 (34.4)
Widow	12 (3.9)
Children present	186 (61.0)
Income	
1000-2000 TL	43 (14.1)
2000-4000 TL	126 (41.3)
More than 4000 TL	136 (44.6)
Comorbidity present	65 (21.3)
Cancer screening present	83 (27.2)
Relative with a diagnosis of cancer	52 (17.1)
Job experience	
Less than 1 year	29 (9.8)
1-5 years	69 (23.4)
5-10 years	78 (26.4)
More than 10 years	119 (40.3)
Work place	
Outpatient clinic	82 (27.6)
Inpatient clinic	215 (72.4)
Number of cancer patients cared (weekly)	211 (86.1)
Less than 10	34 (13.8)
More than 10	
Experience with cancer patients	58 (19.1)
Education about cancer patient care	106 (35.0)

**Table 2.** JSE and ATCS Score in different participant characteristics

Characteristics	JSE Score	P	ATCS Score	P
Age				
≥40 years	103 (70-134)		94 (67-122)	
<40 years	97 (56-133)	0.106	92 (38-153)	0.25
Sex				
Female	99 (56-134)		93 (46-153)	
Male	93 (66-126)	0.003	84 (38-119)	0.94
Marital status				
Married	101 (72-134)		93 (38-153)	
Single/widow	95 (60-132)	0.005	93 (46-146)	0.49
Children				
Present	100 (56-134)		91 (38-153)	
Absent	98 (60-132)	0.165	92 (46-134)	0.85
Comorbidity				
Present	101 (56-126)		95 (46-153)	
Absent	98 (60-134)	0.09	90 (38-146)	0.47
Job experience				
Less than 1 year	96 (65-132)		88 (48-146)	
1-5 years	99 (60-122)		92 (38-134)	
5-10 years	98 (72-125)		96 (60-153)	
More than 10 years	101 (56-134)	0.06	90 (59-127)	0.92
≥10 years	102 (56-134)		90 (59-127)	
<10 years	97 (60-132)	0.014	92 (38-153)	0.81
Work place				
Outpatient clinic	98 (56-134)		95 (38-146)	
Inpatient clinic	99 (60-132)	0.51	90 (46-153)	0.87
Number of cancer patients cared (weekly)				
Less than 10	86 (60-129)		90 (38-158)	
More than 10	99 (56-134)	0.003	100 (60-127)	0.007
Experience with cancer patients				
Present	100 (66-126)		99 (67-126)	
Absent	97 (56-134)	0.55	89 (38-153)	0.002
Education about cancer patient care				
Present	99 (65-134)		95 (61-145)	
Absent	97 (56-134)	0.12	90 (38-153)	0.026
Cancer screening history				
Present			92 (38-153)	
Absent			92 (46-146)	0.28
Relative with a diagnosis of cancer				
Present	100 (66-134)		98 (74-153)	
Absent	97 (56-133)	0.84	92 (38-134)	0.001

JSE: Jefferson scale of empathy, ATCS: Attitudes towards Cancer Scale

## DISCUSSION

In the present study, we evaluated the predictors of empathy skills and attitude towards cancer patients and association between nurses' empathic skills on attitudes towards patients with cancer. To the best of our knowledge, this is the first analysis that questioned the association between empathy and its effects on attitude towards cancer patients.

While caring patients, nurse-patient communication is important to understand the needs of them and provide necessary care. Empathy is an important tool for durable interaction between nurses and patients [16]. It's also the same for nurses caring cancer patients. In addition, patients with a diagnosis of cancer are more sensitive and they try to cope with reduced quality of life and deterioration in their overall health due to both the disease and the treatment modalities. So, working and communicating with cancer patients is a more challenging [17]. Improvement in empathic skills provides better communication skills of oncology nurses [18].

In our study, female sex, being married, having job experience more than 10 years or caring more cancer patients were associated higher level of empathy skills. JSE scores of the group were higher when compared with other studies conducted in nurses [13, 19]. When compared with male nurses, the empathic skills of female nurses and their empathic tendencies were reported to be higher in the literature [13, 19, and 20]. The results of our study were consistent with the data. In the literature, the empathic skills of nurses working in oncology wards were reported to be higher [17]. Although none of the participants had an education about empathy skills, ones caring cancer patients showed higher JSE scores in the analysis.

Nurses play an important role in caring patients and systematically helping patients and their family members to understand and deal with symptoms [21]. It's same for cancer patients. However, working with these patients and their families can be emotionally demanding and challenging. Nurses' attitudes towards cancer patients are important and can determine the level of care. But, the subject has not been extensively studied in the literature and also in Turkey. In our study, we concluded that nurses caring more cancer patients weekly, experience with cancer patients, and participation in educational activities about cancer care or presence of relative with a diagnosis of cancer had more positive attitudes towards cancer patients. The median score of ATCS was found to be similar with the validation study [12]. Factors associated with high ATCS scores were consistent with the data in the literature. In the data by Dedeli et al, working years and high number of cancer patients exposed were associated with high ATCS scores [14]. Similar with our results, Udo et al. showed the importance of educational sessions in improving nurses' attitudes while caring cancer patients [15]. Kav et al. conducted a study in a school of nursing [17]. Nurses under training thought that preceptors, nurses and peers were the most common sources of support during handling difficulties while caring cancer patients. In addition, they suggested the need for

orientation programs, introduction by the facilitator to the oncology team, organizing meetings to share experiences, extending the duration of practice placements and organizing motivating activities. Cancer patients, especially in metastatic stage, suffer from cancer related symptoms. Caregivers of cancer patients are prone to psychosocial trauma while caring them [27]. In our analysis, 17.1% of nurses had a relative with cancer. Although, the JSE scores of them were not different from others, ATCS scores were found to be higher. The association between ATCS and JSE has not been studied before and there is no data in the literature. In the analysis of correlation between JSE and ATCS, we found a positive correlation between them but it was a statistically insignificant.

The study was conducted to analyze the effects of empathy skills on attitudes towards cancer patients. However, there were some inevitable limitations. The study was performed in a public hospital in which oncology unit is new. Because the number of cancer patients in the unit was low, nurses' exposure to cancer patients was limited. The details of the educational sessions participated were not documented. The departments of nurses were not analyzed. Especially, education about communication skills and psychology could affect the JSE and ATCS scores. In addition, the limitations associated with a survey study were inevitable.

In conclusion, empathy skills are important while caring patients, especially in oncology practice. Although a direct correlation between empathy skills and attitudes towards cancer patients couldn't be demonstrated, health care workers caring cancer patients should be both evaluated for empathy skills and educated. Further studies should be conducted to evaluate the association between empathy skills and attitudes towards cancer patients.

**Declaration of Conflicting Interests:** The authors declare that they have no conflict of interest.

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