

## PAPER DETAILS

TITLE: Effects of Hospital Ethical Climate on Voice Behavior among Oncology Nurses': Mediating Role of Courage

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## Araştırma makalesi

## Research article

Effects of Hospital Ethical Climate on Voice Behavior  
among Oncology Nurses: Mediating Role of CourageŞenay SARMASOĞLU KILIKÇIER<sup>1</sup>, Gül Hatice TARAKÇIOĞLU ÇELİK<sup>2</sup>, Şenay GÜL<sup>3</sup>, Eda KARAIŞMAİLOĞLU<sup>4</sup>

## ABSTRACT

**Aim:** Ethical climate is an important organizational characteristic that affects employees' thoughts, attitudes, and behaviors. The voice of the nurses, one of the fundamental employees of the hospitals, is very valuable both in terms of the organizations they work in and the safety of their patients. However, the relationship between hospital ethical climate and voice behavior remains unclear. The aim of this study was to investigate the effects of the ethical climate on oncology nurses' voice behaviors, considering courage as a mediator.

**Material and Methods:** This study was designed as a predictive cross-sectional study. The sample of this study consisted of 71 registered nurses who were employed as staff nurses in inpatient care services in Hacettepe University Oncology Hospital between October and December 2018.

**Results:** There is a positive and significant relation between the hospital's ethical climate and oncology nurses' voice behaviors, and that courage has a positive partial mediating effect.

**Conclusion:** Since the relationship between a hospital's ethical climate and nurses' voice behavior contains many different variables, courage can be deemed a mediator in this relationship, but courage is not may directly be effective on its own.

**Keywords:** Courage, ethical climate, mediating, oncology nurse, voice behavior

## ÖZ

**Hastane Etik İkliminin Onkoloji Hemşirelerinin Seslilik Davranışlarına Etkisi: Cesaretin Aracılık Rolü**

**Amaç:** Etik iklim, çalışanların düşünce, tutum ve davranışlarını etkileyen önemli bir örgütsel özelliktir. Hastanelerin asli çalışanlarından biri olan hemşirelerin sesi hem çalıştıkları kurumlar hem de hastalarının güvenliği açısından çok değerlidir. Ancak, hastane etik iklimi ile seslilik davranışı arasındaki ilişki belirsizliğini korumaktadır. Bu çalışmanın amacı cesareti bir aracı olarak ele alarak etik iklimin onkoloji hemşirelerinin seslilik davranışları üzerindeki etkilerini araştırmaktır.

**Gereç ve Yöntem:** Bu araştırma, kestirimsel kesitsel bir çalışma olarak tasarlanmıştır. Bu çalışmanın örneklemini Ekim-Aralık 2018 tarihleri arasında Hacettepe Üniversitesi Onkoloji Hastanesi'nin yatan hasta kliniklerinde hemşire olarak istihdam edilen 71 hemşire oluşturmuştur.

**Bulgular:** Hastanenin etik iklimi ile onkoloji hemşirelerinin seslilik davranışları arasında pozitif ve anlamlı bir ilişki vardır ve bu ilişkide cesaretin pozitif kısmi aracılık etkisi vardır.

**Sonuç:** Bir hastanenin etik iklimi ile hemşirelerin seslilik davranışları arasındaki ilişki birçok farklı değişkeni içerdiğinden, cesaret bu ilişkide aracı olarak kabul edilebilir ancak tek başına doğrudan etkili olmayabilir.

**Anahtar kelimeler:** Aracı rol, cesaret, etik iklim, onkoloji hemşiresi, seslilik davranışı

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## INTRODUCTION

The employee voice is one of the indicators of organizational quality that can provide institutions with an advantage by allowing them to support development, innovation, and progress<sup>1</sup>. Dyne et al. (1998) stated that the concept of employee voice promotes behaviors such as giving feedback and making suggestions rather than focusing on criticism<sup>2</sup>. This increases productivity and efficiency by reducing the number of problems caused by employees in an institution. It has been reported that voice behavior (VB) benefits organizations such as increased performance<sup>3</sup>, motivation, commitment to the organization, teamwork<sup>4</sup>, job satisfaction, and decreased intention to leave the organization<sup>5,6</sup>. In addition, employee voice can lead to beneficial results such as positive evaluation and promotion opportunities for employees. On the other hand, sharing ideas and concerns may lead to misunderstanding and other unwanted administrative results<sup>1</sup>.

An approach that emphasizes employees' thoughts and suggestions encourages them to express their concerns and makes them believe that they will be effective in change, positively affecting the voice by providing a comfortable and safe environment<sup>7</sup>. In this context, the prevailing climate in an institution plays a vital role in whether employees prefer to use their voices or remain silent<sup>8</sup>. Thus, a positive ethical climate (EC) created in organizations positively affects the actions and thoughts of employees<sup>9</sup>. Although EC may affect decisions regarding employee voice, it is reported that some individuals and psychological mechanisms may also mediate the decision-making process<sup>10</sup>. Study results show that employees' voices are affected by individual characteristics, such as the internal control focus level<sup>11</sup>, critical thinking<sup>12</sup>, and a proactive personality<sup>13</sup>.

VB is defined as a double-edged sword, and it is emphasized that the employee should thoroughly analyze the possible consequences of their behavior before expressing themselves<sup>14</sup>. Therefore, VB can be considered risky behavior, which requires courage<sup>15</sup>. Courage has been seen as one of the four basic virtues (the others are wisdom, proportionality, and justice), which have been widely accepted from antiquity to the present day<sup>16</sup>. Courage is a concept that has different dimensions within itself. Studies by Numminen et al. (2017) examined courage conceptually while noting its physical, psychological, and moral dimensions<sup>17</sup>. Sadooghi et al. (2018) included the social dimension of courage<sup>18</sup>. Courage means volunteering to act in response to a moral outcome or threat to achieve a goal; it intertwines with fear of varying levels<sup>19</sup>.

Oncology nurses play a critical role in providing healthcare to cancer patients and are the fundamental human resources of hospitals. It is important for nurses to be courageous to provide quality patient care and maintain safe working conditions<sup>20</sup>. In a study conducted into nurses' perceptions of courage, it was concluded that they perceived courage as a situation they would not like to be involved in, in the context of VB and risk-taking<sup>21</sup>. Whether or not nurses express their views is one of the critical

performance indicators of hospitals<sup>22</sup>. In cancer care, various situations could warrant speaking up, but the literature knowledge about oncology nurses' behavior is not enough<sup>23</sup>. Nurses sharing their ideas for improving the hospitals they work in and expressing their concerns or problems they encounter can often trigger changes that can directly affect patients and their relatives. EC is an essential component of organizational climate, and a positive EC is needed to support professional nursing practices<sup>24</sup>. In addition, it is the duty and responsibility of the managers to create an EC environment, encourage the nurses, and improve the VB<sup>25</sup>.

Voice is one of the essential behaviors for improving nursing care and patient safety. Establishing EC environments is so crucial to support nurses' VB as well courage. There are limited studies examining the VB of nurses<sup>26,27</sup>, EC, and courage concerning different concepts (morale, distress, job satisfaction, etc.)<sup>17</sup>; however, studies examining the relationship between these three concepts have not been found.

## Aim

The aim of this study is to determine the relationship between a hospital's ethical climate (HEC), as perceived by oncology nurses and shown by their VBs, and demonstrate the mediating effect of courage in the relationship between an HEC and oncology nurses' VB. Our study results will particularly help administrators, decision-makers, and leaders responsible for creating the atmosphere of the working environment to understand the impact of EC on organization improvement and patient care. Thus, it will contribute to taking the necessary initiatives to create a more positive ethical atmosphere. Another contribution of the article is that it enables nurse administrators to understand the relationship between their VB and the EC in the work environment and to empower the nurse's courage. The hypothetical model of the research is shown in Figure 1.

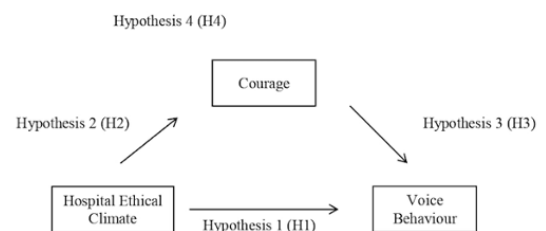


Figure 1. Hypothetical Model of the Research

## Theoretical Background and Hypotheses Development

### Ethical Climate and Voice Behavior

The concept of an EC, which Kohlberg calls "moral environment", is also referred to as "moral climate", "ethical business climate", "ethical atmosphere"<sup>28</sup>. The "EC" theory developed by Victor and Cullen (1988) includes the development of a common institutional understanding in explaining what is right and wrong in terms of ethics or which behaviors are acceptable or unacceptable<sup>28</sup>. When faced with a decision that affects other people, making the

right decisions is related to the organization's working environment. This working environment determines what constitutes ethical behavior in organizations and affects the attitudes and actions of the employees<sup>9</sup>.

Hospitals are one of the types of organizations where EC is important; they are complex structures where health professionals encounter a wide range of ethical problems and make ethical decisions. Oncology nurses, who form the backbone of hospitals, play a critical role in providing healthcare to cancer patients and regularly face ethical problems. Negative perceptions of nurses<sup>29</sup>, especially oncology nurses<sup>30</sup> in terms of the EC in their hospital can lead to failure to provide care at the desired level. The study conducted by Gok et al. (2017) found that an EC positively affects employees' voices<sup>31</sup>. In another study, it was determined that the voice of the employees would be affected by EC<sup>32</sup>. On the other hand, the EC also encourages people to make decisions<sup>10</sup>. The EC of hospitals is an essential factor influencing nurses' involvement in decisions that affect their patients and organizations and their willingness to share their opinions. We believe that an HEC will affect the VB of nurses. For this reason, we propose the hypothesis below:

**H1:** An HEC is positively related to its nurses' VB. Ethical Climate and Courage

Courage is a virtue that has an important place in the nursing profession. This virtue manifests in relation to environmental factors. Moral courage, as defined for nurses, is expressed as adhering to moral principles in defending and protecting patient rights, even if there is a potential risk to the nurse's situation as an employee<sup>33</sup>. An HEC is known to be an essential factor in the demonstration of courage in nurses<sup>34</sup>. Based on this point, we believe that the EC of a hospital has an impact on the courage of its nurses, and we suggest the hypothesis given below:

**H2:** An HEC is positively related to courage. Courage and Voice Behavior

The purpose of improving the organization and sharing employees' opinions, suggestions, or concerns with the administration are common factors in definitions of the employee voice<sup>2</sup>. It has been reported in previous studies that employee voice is affected by individual characteristics, the EC of the organization, and managerial behavior<sup>35</sup>. Courage can be considered an individual characteristic that is defined as "trust in a person when he is engaged in a difficult or dangerous job," "bravery," "daring," and "assertiveness"<sup>36</sup>. According to Derin (2017), "VB" was defined by Hirschman for the first time as "*making any attempt to change rather than escape from an objectionable situation*."<sup>37</sup>. We believe that courage influences the emergence of the VB of nurses and suggest the hypothesis below:

**H3:** Courage is positively related to the nurses' VB. Mediating Role of Courage

It is expected that nurses with negative perceptions about the EC in an organization may prefer to remain silent. We believe that courage may play a mediating role between an HEC and the VB of its nurses. Determining the relationship

between these concepts is important as it will enable us to understand the behaviors and attitudes of nurses more deeply. Therefore, we present the hypothesis below:

**H4:** Courage positively mediates the relationship between an HEC and its nurses' VB.

## MATERIAL and METHODS

### Study Design

A cross-sectional design study was conducted on a university oncology hospital located in the capital city of Turkey.

### Study Sample

The population of this study consisted of registered nurses in inpatient care services through Medical Oncology Departments, Radiation Oncology Department, Pediatric Oncology Department, Bone Marrow Transplantation Unit, and Intensive Care Unit. The inclusion criteria were as follows: (1) working on an inpatient health service, (2) having a bachelor's degree, (3) agreement to participate in the study. Nurses who were employed in outpatient health services were excluded from this study.

### Data Collection Tools

The data of the study were collected using the Descriptive Characteristics Questionnaire, developed by the researchers, the Courage Scale (CS), the Hospital Ethical Climate Survey (HECS), and the Employee Voice Scale (EVS). The descriptive characteristics form included demographic characteristics such as age, gender, education level, and working time as a nurse.

The CS was developed by Yalçındağ (2009) to measure courage (Cronbach's alpha=0.80). The CS is an 11-item and seven-point Likert scale (1=strongly disagree to 7=strongly agree). An example of an item is, "Even though it has risks like being alone, I advocate what I believe." The scale showed a relatively high-reliability value (Cronbach's alpha=0.807) in this study<sup>16</sup>.

The nurses' view of the EC of their working environment was measured (Cronbach's alpha=0.91) using the HECS developed by Olson (1998)<sup>24</sup>. The validity and reliability of the HECS in Turkey (Cronbach's alpha=0.89) was assessed by Bahcecik and Ozturk (2003)<sup>38</sup>. The HECS includes five sub-factors: an assessment of the relationships between colleagues (four items), the patients (four items), the manager (six items), the hospital (four items), and the doctors (six items), based on the EC; this makes 24 items. This survey is a five-point Likert scale (1=not true to 5=always true). Sample items include "my peers listen to my concerns about patient care" and "nurses and physicians trust one another." The scale showed high reliability value (Cronbach's alpha=0.944) in this study.

The nurses' VB was measured using the EVS, developed by Dyne and LePine (1998)<sup>2</sup> to measure employee VB (Cronbach's alpha=0.87), and was adapted to the Turkish language (Cronbach's alpha=0.76) by Arslan et al.<sup>39</sup>. The EVS is a six-item five-point Likert scale (1=strongly disagree to 5=strongly agree). The scale covers items such as "I develop and make recommendations to my supervisor concerning issues that affect my work." The scale showed a high-reliability value (Cronbach's alpha=0.922) in this study.

## Data Collection

Between October-December 2018, the second author informed and invited each nurse to participate in the study. All staff nurses working on inpatient care services were informed and asked to take part in the study. In total, 84 nurses employed as staff registered nurses in inpatient care service were included in the study. Of these nurses, 13 refused to participate in the study and did not sign the informed consent form. Thus, 71 nurses who met the inclusion criteria were included in the study (participation rate: 84.52%). The data was obtained by the filling out of the printed forms by nurses, which happened during a time slot of 10-15 minutes under the second author observance.

## Data Analysis

Confirmatory factor analysis (CFA) was used to test how well the data fit the factor structures of the CS, HECS, and EVS scales. Descriptive statistics and reliability analysis were performed using Statistical Package for the Social Sciences (SPSS) version 21 (SPSS/IBM, Inc., Chicago, IL, USA). The relationship between the scales was analyzed using Pearson correlation analysis. Mediation analysis investigated whether courage was a mediator between EC and VB. This process was conducted using IBM SPSS AMOS version 26. The Sobel test was implemented to test the mediating role of courage in the relationship between EC and VB. Several indexes were used to evaluate model fit. The Root Mean Square Error of Approximation (RMSEA) is an absolute fit index that assesses how well a hypothesized model fits a perfect model.  $RMSEA < 0.08$  means a good model-data fit<sup>40</sup>. A goodness-of-fit statistic (GFI) and a comparative fit index (CFI) were employed to measure the incremental fit. For both the GFI and CFI values,  $> .90$  constitutes an "acceptable fit"<sup>41</sup>,  $\chi^2/df$  is a badness-of-fit index, and smaller values of five indicate a "better fit"<sup>42</sup>.

## Ethical Considerations

Ethical approval of this study was obtained from the Ethics Commission of Hacettepe University. Written permission for using the scales was obtained from the developers. Written permission was obtained from the medical and nursing service directors of the hospital. Written consent was obtained from the nurses.

## Limitations

This research includes some limitations that should be considered alongside its contributions to the literature. First, it should be noted that the research was conducted within a certain timeframe while establishing a causality relationship related to the study results. This limitation could be eliminated by conducting longitudinal studies. Second, considering the applicability of the research, oncology nurses who work at a university hospital in Turkey were included in the sample, and the participants were volunteers recruited through convenience sampling. The areas questioned in the study it was not possible to choose different hospitals because of the reason that the EC of the institutions may vary, and this may have an impact on the ability of employees' VB. These situations limit the generalization of the study results to other nurses and other organizations. For this reason, we recommend conducting

research with larger samples in different hospitals for future studies, particularly to understand the impact of the EC more comprehensively.

Due to the nature of the courage measurement tool, our study has handled the courage concept in a broad context. More detailed insights into the components of courage could be obtained by dealing with the courage sub-dimensions in detail. Finally, it should be considered that the study data were obtained from single-source questionnaires based on self-assessment. It is recommended to apply multi-source measurements for future studies.

## RESULTS

The sample consisted of 71 (84.52%) registered nurses. The mean age of the nurses was  $29.11 \pm 4.08$ , and 61 (86%) of them were female. They have been working as a registered nurse for  $5.88 \pm 3.94$  years. Reliability analysis of the scales was conducted using Cronbach's alpha. An acceptable range of Cronbach's alpha is  $> 0.70$ . In this study, the values were between 0.751 and 0.958. The correlations between the HECS-CS ( $r=0.381$ ,  $p=0.001$ ), the HECS-EVS ( $r=0.719$ ,  $p<0.001$ ), and the EVS-CS ( $r=0.451$ ,  $p<0.001$ ) were significant. Therefore, H1, H2, and H3 were supported. That means A HEC is positively related to nurses' VB and courage, and likewise courage is positively related to the nurses' VB. Confirmatory factor analysis was performed to verify the factor structure of the CS, HECS, and EVS scales. Several common model-fit measures were used to assess the model's overall goodness of fit: chi-square/degree of freedom, comparative fit index, goodness-of-fit statistic, and root mean square error of approximation. In this study, the ratios of  $\chi^2$  to degrees-of-freedom ( $\chi^2/df$ ) for the model were 1.56, 1.65, 1.60 for CS, EVS, and HECS, respectively. A ratio of  $< 5$  indicates a close fit between the hypothesized model and the sample data. Comparative fit indexes (CFI) were 0.95, 0.94, 0.94 for CS, EVS, and HECS, respectively, which are greater than the 0.90 benchmarks suggested by Hair et al.<sup>41</sup>. Goodness-of-fit indexes (GFI) were 0.90, 0.90, 0.80 for CS, EVS, and HECS which were greater than or equaled the recommended cut-off<sup>41</sup>. Lastly, the root means square error of the approximation value closer to 0 represents a good fit and should be  $< 0.08$ <sup>40</sup>. This value was 0.09 for all CS, EVS and HECS. (Table 1). According to the model-fit measures, all of the scales showed an acceptable fit, and all of the standardized factor loadings were statistically significant ( $p<0.05$ ) (Table 1).

**Table 1. Goodness-Of-Fit Statistics for the Confirmatory Factor Analyses**

Fit Indices	Acceptable Value	CS	EVS	HECS
$\chi^2/df$	$< 5$	1.56	1.65	1.60
CFI	$> 0.90$	0.95	0.94	0.94
GFI	$> 0.90$	0.90	0.90	0.80
RMSEA	$< 0.08$	0.09	0.09	0.09
Factor loadings		0.67-0.86	0.70-0.88	0.65-0.97

CFI: Comparative fit index; GFI: Goodness-of-fit statistic;

RMSEA: Root means square error of approximation; CS: Courage Scale;

EVS: Employee Voice Scale; HECS: Hospital Ethical Climate Survey

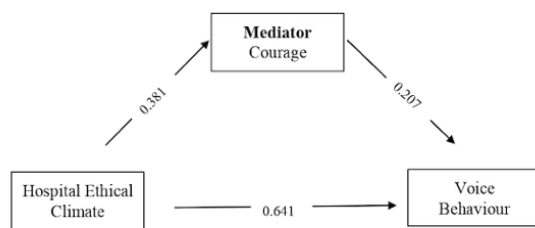
Before testing the mediation effect of courage, there should also be a significant relation between the HEC-VB, courage–

VB, and HEC–courage. In the first step, the relationship between the HEC and the VB was analyzed. In other words, the direct effect of the HEC over the VB was examined. There was a statistically significant effect of the HEC on the VB ( $b=0.392$ ,  $p<0.001$ ), and the relationship between the HEC and the VB was positive. In the second step, after adding courage as a mediator to the model, the HEC' effect on the VB was still significant, but the effect decreased ( $b=0.302$ ,  $p=0.017$ ). In this case, it can be said that the courage has a partially mediating affect over the VB (Table 2, Figure 2). Therefore, H4 was supported. The Sobel test confirmed that courage was a significant mediator between HECS and VB ( $z=2.51$ ,  $p=0.0012$ ).

**Table 2. Results of Direct and Indirect Mediation Analyses**

Type of Effect	Models		$\beta$	Standard Error	P value	Standardized Regression Weight
Direct Effect	Model 1	HECS→EVS	0.339	0.039	<0.001	0.719
	Model 2	HECS→EVS	0.367	0.106	<0.001	0.381
	Model 3	CS→EVS	0.221	0.052	<0.001	0.451
Indirect Effect	Model 4	HECS→EVS	0.302	0.041	<0.001	0.641
		CS→EVS	0.101	0.042	0.017	0.207

HECS: Hospital Ethical Climate Survey; EVS: Employee Voice Scale;  
CS: Courage Scale



**Figure 2. The Proposed Mediation Model**

## DISCUSSION

This study examined the effects of an HEC on VB among oncology nurses through the mediation of courage. The results showed that the HEC was positively related to courage, which was also positively related to oncology nurses' VB. Moreover, courage partly mediated the relationship between the HEC and the oncology nurses' VB. Courage is considered one of the basic virtues that form the core of the nursing profession. When the nursing literature was analyzed, it was seen that the studies relate mostly to the importance of moral courage, which is one of the dimensions of courage in the nursing profession<sup>17,18</sup>. This study results align with the findings of Taraz et al. (2019), who examined the relationship between an HEC and moral courage. That study was conducted with 126 nurses in Iran and determined that there was a significant positive correlation between an HEC and the moral courage of its nurses<sup>34</sup>. Considering this study results, the relationship between the HEC, one of the main determinants of hospital decisions, forms the boundaries that determine the attitudes and behaviors of nurses. Also, nurses can transfer their knowledge and skills to the next generation, which can

be one way to construct an intended HEC<sup>43</sup>. Nurses being called on to display the virtue of courage in difficult conditions or in situations of conflict is inevitable. While performing their profession, nurses often need to take the initiative when dealing with physical, social, ethical, and psychological hazards that threaten the individual/patient, family, or community<sup>17</sup>. Therefore, our research results are valuable in revealing that creating an ethical atmosphere in the work environment can encourage nurses to think, feel, and act courageously for the benefit of the hospital and the patients' safety.

Numminen et al. (2017) examined the concept of moral courage in nursing and found that "personal risk" was one of the attributes of a courageous nurse<sup>17</sup>. In the study, while expressing courage in the context of a "personal risk" attribute, expressions such as "being ready to endanger one's own reputation" and "being ready to stand alone" were used. The concept of courage includes the willingness to take risks and fight alone. Risky behaviors, such as "challenging", are also among the core components of VB<sup>44</sup>. LePine and Van Dyne (2001) noted that raising one's voice to bring about change also poses a social risk in organizations. In this context, VB also requires the employee to take risks, in other words, to be brave to improve the organization and organizational processes<sup>26</sup>. Therefore, the significance of the relationship between courage and VB, which is one of the findings of our study, can be explained by the fact that the two concepts are similar in nature.

## CONCLUSION

In this study, a positive and meaningful relationship has been found between HEC and nurses' VB. This study results show that courage plays a partly mediating role in the relationship between an HEC and its nurses' VB. An EC has an impact on VB, but this impact is mediated by courage. Courage is not the only mediator affecting VB; other variables may exist.

This study results will particularly help managers, decision-makers, and leaders responsible for creating the atmosphere of the working environment to understand the impact of EC on organizational improvement and patient care. Thus, it will contribute to taking the necessary initiatives to create a more positive ethical atmosphere. Another contribution of the article is that it enables nurse managers to understand the relationship between their VB and the EC in the work environment and to empower the nurses' courage.

**Ethics Committee Approval:** Ethical approval was obtained from the Ethics Commission of Hacettepe University (June 5, 2018, number: 35853172-000).

**Conflict of Interest:** None

**Funding:** None

**Exhibitor Consent:** Informed consent was obtained from nurses.

**Author contributions**

**Study design:** SSK, GHTC, SG

**Data collection:** GHTC

**Literature search:** SSK, GHTC, SG

**Drafting manuscript:** SSK, GHTC, SG, EK

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**Yazar katkıları**

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**Veri toplama:** GHTÇ

**Literatür araştırması:** ŞSK, GHTÇ, ŞG

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