

Nurses' Perceptions of Clinical Governance Climate

Abstract

Background: Clinical governance climate is a governance approach that aims at supporting communication and interaction, minimizing errors, and continually improving and developing service process in organizations.

Methods: The study population was composed of 1845 nurses working at public, university, and private hospitals in Trabzon Province. The sample was composed of 315 nurses recruited using a stratified sampling method. Data were collected using Information Request Form and Clinical Governance Climate Questionnaire.

Results: According to the nurses, the clinical governance climate score of hospitals was 182.62 ± 28.32 (min=60, max=300). In the study, it was found that the average total score and the sub-scale scores of the clinical governance climate of those nurses who were (1) aged ≤ 25 years and ≥ 36 years; (2) were female; (3) worked in managerial positions; (4) chose the clinical service where they were employed willingly; (5) were satisfied with the clinical service, nursing profession, and managers; (6) cared for 11-20 patients in a shift, knew what clinical governance was; and (7) joined trainings/meetings about clinical governance were significantly and statistically different as compared to other nurses ($P < .05$).

Conclusion: Nurses regarded and assessed the clinical governance climate of the hospitals where they worked as moderate. As a result of the study, it was recommended that educations and trainings about clinical governance climate be provided to nurses; interventions that will maximize their satisfaction be made; they be given the chance to choose the clinical servicers where they will work; and the number of patients be kept balanced.

Keywords: Hospitals, nursing, nurses, clinical governance, scales

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Introduction

The concept of governance is a contemporary management approach including elements such as participatory democracy, co-management, rule of law, openness and accountability in management, responsibility, a compromise approach, equality for all, efficiency and strategic vision.¹

The concept of clinical governance is an important issue related with coordinated delivery of quality care to the patient. Hence, in recent years, it has attracted the attention of policy makers, managers, and clinicians, and particulars needed for developing good clinical governance began to be determined. These applications are constituted of accountability, a focus on ethics, and regulating qualified privilege. Included besides these is taking steps for particulars such as continuous improvement, quality assurance, supervision, implementation and meeting of standards, using clinical indicators, promoting clinical effectiveness, supporting evidence-based practice, participating in accreditation processes, reporting and managing risk, focusing on patient safety, improving information sharing, supporting openness, managing information effectively, reaching patients, providing feedback on performance, encouraging continuing education, handling complaints effectively, and encouraging patients to participate in decisions that affect their care process.²

In order for clinical governance to be implemented, an organizational climate must be created, which can learn from mistakes, reward professional behavior, provide continuous training means, and support employees in the learning process.³ Organizational climate bears importance in the implementation of clinical governance, and it can assist in providing quality care in healthcare.⁴ Hence, a climate that is free of blame; that is supportive, participatory, innovative, inspiring, creative, enabling continuous learning,

This study was produced from the master's thesis titled "Determination of Governance Climate Levels of Hospitals by Evaluation of Nurses," which was prepared by the first author under the supervision of the second author.

Cite this article as: Koroğlu N, Öztürk H. Nurses' perceptions of clinical governance climate. *J Educ Res Nurs.* 2022;19(2):198-207.

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Received: February 15, 2020
Accepted: November 23, 2020



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optimistic, open to communication, and sharing problems, will provide opportunities for healthcare providers to change themselves and provide quality patient care.⁵

Along these lines, the concept of clinical governance climate is composed of the combination of the concepts of clinical governance and organizational climate. The clinical governance climate aims to improve and develop the service process in a continuous way to minimize the mistakes of the clinicians and to achieve the predetermined personal and corporate goals. Due to this reason, it is defined as the dominance of an environment where the employees participate in the management, the culture of blame, the procedures applied during accidents, reward systems, and communication and interaction of team members with one other, which covers the evaluations with regards to honesty among employees and their developments, and questions the training opportunities of employees.⁶

The most important resource in the implementation of the clinical governance climate in health services is healthcare professionals.⁷ If clinical governance climate is not perceived and implemented in a positive way by healthcare professionals, the institution will fail.⁸ Nurses also constitute an important member of health workers, who are the basic human resources in the execution of health services, and they are also affected by the climate of the organization they work within.⁷ Hence, a positive organizational climate perception of nurses will be realized by means of clinical governance, and a positive clinical governance climate perception will contribute to the development of new knowledge and skills by making emphasis to the necessity of teamwork, strengthen nurses, and improve their job satisfaction and motivation.⁹ It will also have a positive effect on the performance and efficiency of health institutions by increasing patient and employee satisfaction.¹⁰ But when research evaluating the clinical governance climate of hospitals from the perspective of nurses is examined, it is observed that there are limited number of studies in the national and international literature.⁴ In this context, there are 2 studies that evaluate the clinical governance climate level of nurses in our country. While one of these is composed of a scale adaptation study,⁴ the other evaluates the relationship between nurses' attitudes toward their working environment and clinical governance climate levels.⁹ In both of the studies conducted in Istanbul, nurses' perception of clinical governance climate was determined as being moderate. A study was realized abroad by Fardaza et al¹¹ with 400 participants, including doctors, nurses, laboratory staff, and support personnel. In this study, the governance climate levels of the hospitals were found to be "moderate" and "weak." Besides, it was concluded that fundamental changes are needed by focusing on shared vision, goals and values, inspiring leadership, autonomy, flexibility in structures, staff employment, infrastructure, reasonable wages, supportive working conditions, and practices. In the research conducted by Bahrami et al¹² in 3 training and research hospitals, it was specified that the climate of training hospitals should be more supportive for the successful implementation of clinical governance. Karassavidou et al¹³ had similar findings in a study conducted in hospitals in England. In this respect, conducting a research that will examine the communication and interaction of nurses, who play an important role in the functioning of health institutions and who are indispensable members of the health team in the effective and efficient maintenance of health services, with executive nurses, other health team members, and patients can have a positive impact on the performance and efficiency of health institutions.¹⁰ Contribution

can be made to the improvement of health and nursing management policies and approaches.

Purpose

The research was conducted with the aim to evaluate clinical governance climate perceptions of nurses.

Research Questions

What is the average of clinical governance climate perceptions of nurses?

Do nurses' socio-demographic features or their opinions about institutions and managers affect their clinical governance climate perceptions?

Method

Research Type

The research is a descriptive study.

The Universe and Sample of Research

The universe of the study consists of all nurses (N=1845) working in 4 public, 1 private, and 1 university hospitals in Trabzon provincial center. The number of nurses was calculated using the formula that was used to determine the number of individuals in the sample when the number of individuals in the population was known [$p=0.50$, $q=0.50$, $t=1.96$, $d=0.05$ (with 95% confidence)]. The distribution of these nurses as per hospitals was made by the stratified sampling method. A total of 177 nurses from public hospitals affiliated to the Ministry of Health, 122 nurses from a university hospital, and 16 nurses from a private hospital were included in the sample. Data were collected from nurses who worked as a nurse for minimum 1 year in the hospital where they worked and agreed to participate in the study.

Data Collection Tools

Information Form

The form developed by the researchers consists of 19 questions about subjects of age, gender, marital status, education level; institution and service experience; nursing experience; position; whether the nurses have chosen their profession and service voluntarily; whether they are satisfied with their profession, service and manager; working style; average number of patients they are responsible for in a shift; state of knowing clinical governance and attending any training, course or meeting on this subject.

Clinical Governance Climate Scale

It was developed by Freeman¹³ in year 2003 and adapted into Turkish by Gürdoğan⁴ in 2014. The scale has 60 items and 6 sub-dimensions such as planned and integrated quality improvement program, preventive risk management, crime and punishment environment, working with colleagues, training and development opportunities, and organizational learning. The score given for each question is based on the 5-point Likert type scale. But items 1, 3, 5, 7, 10, 17-21, 24-30, 33, 34, 36 38, 41, 42, 45, 46, 48, 50, 51, 53, 56, 58, 59 are scored in reversed order. The total score that can be obtained from the scale varies between 60 and 300. A low score indicates good clinical governance, while a high score indicates poor clinical governance. In Gürdoğan's study,⁴ the Cronbach Alpha value of the scale is 0.89. In the study, the Cronbach Alpha value is 0.92.

Ethical Aspect of Research

Written permission was obtained from the hospitals between May 11 and May 26, 2017, and from the Clinical Research Ethics Committee of Karadeniz Technical University Faculty of Medicine on the date of October 23, 2017, for the study to be implemented. Written consent was obtained from Gürdoğan for the use of the scale, stating that the nurses participating in the study have volunteered.

Collection of Data

In the research, the information form and the clinical governance climate scale were hand-delivered and collected between December 4, 2017, and January 5, 2018, after the nurses were informed about the purpose of the research and the duration of survey (10-15 minutes) and their written consent was obtained.

Assessment of Data

Data obtained from the study were analyzed by using the Statistical Package for Social Sciences (SPSS) for Windows 22.0 (IBM SPSS Corp.; Armonk, NY, USA) program (SPSS Inc.; Chicago, Ill, USA). While number, percentage, mean and standard deviation were used in descriptive statistics, the mean test was used to specify the clinical governance climate levels of hospitals. The Kolmogorov-Smirnov test was performed to make the data suitable for normal distribution and for the data to reveal a normal distribution. In addition, analysis of variance, Scheffe and *t*-test were used to compare nurses' socio-demographic characteristics and clinical governance climate scale scores. The significance level was accepted as $P < .05$.

Results

Of the nurses participating in the research, 39.4% were over 36 years old, 81% were women, 59.4% were married, 52.1% had undergraduate/postgraduate education, and 38.7% had 6-15 years of professional experience. Most of the participants (88.9%) were in the nurse position, 56.2% were working in public hospitals, 40% were working in specialized units (intensive care/emergency), 54.3% were working in hospitals for 5 years or less, and 67.9% were working in the service field for a period between 1 and 5 years. Of all the nurses, 62.5% chose nursing, 54.9% willingly chose the service they worked for, 81.6% were satisfied with the service they worked for, and 66.7% were satisfied with their manager. 49.8% of the nurses work during the day and sometimes keep watch; 47% care for an average of 11-20 patients per shift; 55.9% do not know what clinical governance is; and 79% have not attended a training or meeting on this subject.

The total mean score of the nurses' clinical governance climate scale was 182.62 ± 28.32 . The sub-dimension mean scores were 68.70 ± 12.02 for planned and integrated quality improvement program, 31.41 ± 6.22 for preventive risk management, 25.74 ± 5.59 for crime and punishment environment, 17.81 ± 4.09 for working with colleagues, 25.12 ± 4.52 for training and development opportunities, and 13.82 ± 3.25 for organizational learning.

A statistically significant difference was found between the age of the nurses and the clinical governance climate scale total score, the planned and integrated quality improvement program of the scale, preventive risk management, crime and punishment environment, working with colleagues, training and development opportunities, and organizational learning sub-dimension mean scores ($P < .05$). According to this difference, the clinical governance climate scale

total score (191.24 ± 25.96), the planned and integrated quality improvement program (71.91 ± 10.50), preventive risk management (32.78 ± 6.29), crime and punishment environment (27.04 ± 5.52), training and development opportunities (26.58 ± 4.29) sub-dimension mean score of nurses aged 26-35 is higher than the mean score of nurses under 25 and over 36 years old. On the other hand, the mean scores of working with colleagues and organizational learning sub-dimensions of nurses aged 26 and over are higher than mean scores of nurses aged 25 and under (Table 1).

The fact that the clinical governance climate scale total score (192.13 ± 24.74), planned and integrated quality improvement program (71.47 ± 10.53), preventive risk management (33.28 ± 4.60), crime and punishment environment (27.18 ± 6.26), training and development opportunities (27.18 ± 4.35) sub-dimension mean score of male nurses is higher than the score means of female nurses is statistically significant ($P < .05$). However, there is no statistically significant difference between the genders of nurses and the mean scores of working with colleagues and organizational learning sub-dimensions of the clinical governance climate scale ($P > .05$) (Table 1).

It is statistically significant that the mean score of working with colleagues (18.24 ± 3.91) for married nurses is higher than the mean score of single nurses ($P < .05$). There is no statistically significant difference between the marital status of the nurses and the clinical governance climate scale total score, planned and integrated quality improvement program, preventive risk management, crime and punishment environment, education and development opportunities, and organizational learning sub-dimension score averages ($P > .05$) (Table 1).

It is statistically significant that the mean score of working with colleagues (17.33 ± 4.08), education and development opportunities (24.58 ± 4.23) sub-dimensions of nurses with a vocational high school or associate degree education is lower than the mean score of nurses with undergraduate and graduate education ($P < .05$). There is no statistically significant difference between the education levels of the nurses and the clinical governance climate scale total score, planned and integrated quality improvement program, preventive risk management, crime and punishment environment, and organizational learning sub-dimension score averages ($P > .05$) (Table 1).

It is statistically significant that nurses working in public hospitals have higher mean scores of working with colleagues (18.33 ± 3.98), training and development opportunities (25.58 ± 4.68) sub-dimensions than those of nurses working in university or private hospitals ($P < .05$). There is no statistically significant difference between the institution where nurses work and the clinical governance climate scale total score, planned and integrated quality improvement program, preventive risk management, crime and punishment environment and organizational learning sub-dimension score averages ($P > .05$) (Table 2).

The particular that clinical governance climate scale total score (184.28 ± 27.58), planned and integrated quality improvement program (69.34 ± 11.66), preventive risk management (31.71 ± 6.17), crime and punishment environment (26.01 ± 5.59), training and development opportunities (25.33 ± 4.55) sub-dimension mean score of nurses employed at nurse positions is higher than that of nurses working as managers is statistically significant. There is no statistically significant difference between the positions of nurses and the

Table 1. Comparison of Nurses' Socio-Demographical Characteristics and Clinical Governance Climate Scale Score Averages

	n	Planned and Integrated Quality Improvement Program	Preventive Risk Management	Crime and Punishment Environment	Working with Colleagues	Training and Development Opportunities	Organizational Learning	Clinical Governance Climate Scale Total
		Ort ± SS	Ort ± SS	Ort ± SS	Ort ± SS	Ort ± SS	Ort ± SS	Ort ± SS
Age								
≤ 25 (1)	95	67.41 ± 11.90	30.95 ± 5.67	25.19 ± 5.94	16.60 ± 4.07	24.24 ± 4.47	13.08 ± 2.88	177.47 ± 27.13
26-35 (2)	96	71.91 ± 10.50	32.78 ± 6.29	27.04 ± 5.52	18.58 ± 4.05	26.58 ± 4.29	14.34 ± 3.33	191.24 ± 25.96
≥ 36 (3)	124	67.22 ± 12.81	30.70 ± 6.45	25.18 ± 5.24	18.16 ± 3.96	24.66 ± 4.51	13.99 ± 3.38	179.91 ± 29.65
F		5.030	3.451	3.751	6.554	7.755	3.925	6.824
P		.007	.033	.025	.002	.001	.021	.001
Scheffe testi		2>1,3 (P < .05)	2>1,3 (P < .05)	2>1,3 (P < .05)	2,3>1 (P < .05)	2>1,3 (P < .05)	2,3>1 (P < .05)	2>1,3 (P < .05)
Gender								
Male	60	71.47 ± 10.53	33.28 ± 4.60	27.18 ± 6.26	18.58 ± 4.09	27.18 ± 4.35	14.43 ± 2.90	192.13 ± 24.74
Female	255	68.05 ± 12.27	30.97 ± 6.47	25.41 ± 5.38	17.64 ± 4.08	24.64 ± 4.44	13.68 ± 3.32	180.39 ± 28.69
t**		1.987	2.617	2.221	1.613	4.015	1.614	2.923
P=		.048	.002	.027	.108	<.001	.107	.004
Marital status								
Married	187	69.27 ± 11.77	31.70 ± 6.27	25.80 ± 5.13	18.24 ± 3.91	25.46 ± 4.31	14.07 ± 3.27	184.55 ± 27.25
Single	128	67.88 ± 12.38	30.98 ± 6.15	25.67 ± 6.23	17.20 ± 4.27	24.63 ± 4.80	13.46 ± 3.21	179.82 ± 29.72
t**		1.014	1.003	0.203	2.225	1.611	1.651	1.458
P		.312	.316	.845	.027	.108	.100	.146
Educational status								
Senior high school/ associate degree	151	67.76 ± 12.11	30.89 ± 5.80	25.62 ± 5.69	17.33 ± 4.08	24.58 ± 4.23	13.63 ± 2.96	179.79 ± 27.33
Bachelor and graduate	164	69.58 ± 11.91	31.89 ± 6.56	25.87 ± 5.52	18.27 ± 4.06	25.62 ± 4.74	14.01 ± 3.49	185.24 ± 29.05
t**		-1.347	-1.431	-0.405	-2.042	-2.058	-1.028	-1.709
P		.179	.153	.685	.042	.040	.301	.088
Hospital								
Public	177	69.58 ± 12.83	31.54 ± 6.44	25.94 ± 5.55	18.33 ± 3.98	25.58 ± 4.68	13.76 ± 3.22	184.71 ± 29.97
University+Private	138	67.59 ± 10.83	31.25 ± 5.94	25.51 ± 5.66	17.17 ± 4.15	24.54 ± 4.27	13.91 ± 3.30	179.96 ± 25.92
t**		1.460	0.410	0.677	2.521	2.033	-0.422	1.481
P		.137	.682	.499	.012	.043	.673	.140

Professional										
Nurse	280	69.34 ± 11.66	31.71 ± 6.17	26.01 ± 5.59	17.94 ± 4.05	25.33 ± 4.55	13.95 ± 3.16	184.28 ± 27.58		
Nurse manager	35	63.66 ± 13.78	28.97 ± 6.21	23.63 ± 5.21	16.86 ± 4.31	23.46 ± 4.02	12.86 ± 3.81	169.43 ± 31.08		
<i>t</i> **		2.660	2.479	2.397	1.479	2.321	1.877	2.960		
<i>P</i>		.008	.014	.017	.140	.021	.061	.003		
Professional seniority (years)										
≤ 5 (4)	105	69.93 ± 11.61	32.15 ± 6.33	25.80 ± 5.73	17.41 ± 4.34	25.46 ± 4.49	13.67 ± 3.30	184.42 ± 27.50		
6-15 (5)	122	69.70 ± 11.08	31.63 ± 6.39	26.18 ± 5.58	18.23 ± 4.04	25.60 ± 4.58	14.17 ± 3.16	185.51 ± 27.77		
≥ 16 (6)	88	65.86 ± 13.36	30.22 ± 5.73	25.09 ± 5.44	17.74 ± 3.84	24.06 ± 4.37	13.53 ± 3.31	176.50 ± 29.42		
<i>F</i>		3.476	2.468	0.976	1.159	3.451	1.174	2.936		
<i>P</i>		.032	.086	.378	.315	.033	.310	.055		
Scheffe testi		4,5>6 (<i>P</i> < .05)								
Status of requesting the service										
Yes	173	66.73 ± 12.56	30.21 ± 6.24	24.69 ± 5.09	17.35 ± 4.26	24.31 ± 4.51	13.47 ± 3.34	176.77 ± 28.74		
No	142	71.11 ± 10.90	32.87 ± 5.90	27.04 ± 5.92	18.39 ± 3.81	26.11 ± 4.36	14.26 ± 3.10	189.77 ± 26.18		
<i>t</i> **		-3.260	-3.846	-3.774	-2.277	-3.563	-2.165	-4.156		
<i>P</i>		.001	<.001	<.001	.023	<.001	.031	<.001		
Service satisfaction										
Yes	257	68.09 ± 12.21	31.02 ± 6.20	25.28 ± 5.59	17.61 ± 4.12	24.73 ± 4.62	13.60 ± 3.22	180.33 ± 28.44		
No	58	71.43 ± 10.84	33.14 ± 6.06	27.83 ± 5.17	18.76 ± 3.85	26.84 ± 3.66	14.83 ± 3.22	192.83 ± 25.65		
<i>t</i> **		-1.920	-2.359	-3.178	-1.945	-3.260	-2.624	-3.077		
<i>P</i>		.056	.019	.002	.053	.001	.009	.002		
Status of willingly choosing nursing										
Yes	197	67.67 ± 12.41	30.91 ± 6.33	25.45 ± 5.63	17.56 ± 4.28	24.80 ± 4.76	13.64 ± 3.31	180.03 ± 29.37		
No	118	70.44 ± 11.18	32.25 ± 5.97	26.25 ± 5.51	18.25 ± 3.74	25.65 ± 4.08	14.14 ± 3.14	186.97 ± 26.02		
<i>t</i> **		-1.993	-1.853	-1.220	-1.464	-1.618	-1.312	-2.119		
<i>P</i>		.047	.065	.223	.144	.107	.190	.035		
One-way ANOVA**Independent sample t-test.										

Table 2. Comparison of Nurses' Views on Their Institutions, Professions and Managers, and Clinical Governance Climate Scale Scores

	n	Planned and Integrated Quality Improvement Program	Preventive Risk Management	Crime and Punishment Environment	Working with Colleagues	Training and Development Opportunities	Organizational Learning	Clinical Governance Climate Scale Total
		Ort ± SS	Ort ± SS	Ort ± SS	Ort ± SS	Ort ± SS	Ort ± SS	Ort ± SS
Satisfaction with nursing								
Yes	235	67.43 ± 12.04	30.76 ± 6.16	24.99 ± 5.28	17.43 ± 4.15	24.51 ± 4.65	13.52 ± 3.16	178.65 ± 28.22
No	80	72.44 ± 11.22	33.31 ± 6.03	27.99 ± 5.91	18.96 ± 3.72	26.90 ± 3.64	14.73 ± 3.36	194.33 ± 25.39
t**=		-3.265	-3.214	-4.255	-2.930	-4.175	-2.900	-4.399
P=		.001	.001	<.001	.004	<.001	.004	<.001
Satisfaction from the manager								
Yes	210	66.38 ± 12.06	30.58 ± 6.21	24.83 ± 5.46	17.06 ± 4.18	24.13 ± 4.48	13.36 ± 3.17	176.34 ± 27.84
No	105	73.36 ± 10.54	33.07 ± 5.95	27.58 ± 5.43	19.34 ± 3.45	27.10 ± 3.95	14.75 ± 3.22	195.20 ± 25.00
t**=		-5.048	-3.398	-4.219	-4.840	-5.745	-3.649	-5.858
P=		<.001	.001	<.001	<.001	<.001	<.001	<.001
Number of patients cared								
≤ 10 (7)	93	71.77 ± 10.05	32.99 ± 6.09	26.45 ± 4.68	18.74 ± 4.05	25.63 ± 4.15	14.89 ± 3.37	190.48 ± 24.41
11-20 (8)	148	66.43 ± 12.91	30.02 ± 6.34	25.24 ± 6.03	17.27 ± 3.94	24.63 ± 4.71	13.36 ± 3.32	176.95 ± 30.45
≥ 21 (9)	74	69.41 ± 11.64	32.20 ± 5.58	25.88 ± 5.71	17.76 ± 4.28	25.46 ± 4.56	13.42 ± 2.61	184.12 ± 26.21
F=		6.003	7.594	1.362	3.774	1.688	7.410	6.908
P=		.003	.001	.258	.024	.187	.001	.001
Scheffe testi=		7>8 (P < .05)	7,9>8 (P < .05)		7>8 (P < .05)		7>8,9 (P < .05)	7>8 (P < .05)
Knowledge of clinical management								
Yes	139	66.86 ± 12.94	30.90 ± 6.60	24.67 ± 5.60	17.55 ± 4.51	24.24 ± 4.63	13.45 ± 3.50	177.67 ± 30.42
No	176	70.16 ± 11.06	31.81 ± 5.89	26.60 ± 5.45	18.03 ± 3.72	25.81 ± 4.34	14.12 ± 3.01	186.55 ± 25.98
t**=		-2.445	-1.295	-3.087	-1.050	-3.093	-1.812	-2.791
P=		.015	.196	.002	.305	.002	.076	.006
Status of participation in training								
Yes	66	64.06 ± 13.39	29.42 ± 6.55	23.44 ± 4.53	16.62 ± 4.68	23.36 ± 4.68	13.24 ± 3.49	170.15 ± 30.18
No	249	69.94 ± 11.35	31.94 ± 6.04	26.36 ± 5.70	18.14 ± 3.87	25.59 ± 4.38	13.98 ± 3.17	185.94 ± 26.92
t**=		-3.597	-2.951	-3.856	-2.703	-3.613	-1.643	-4.127
P=		<.001	.003	<.001	.017	<.001	.101	<.001

* One-way ANOVA **independent sample t-test.

mean scores of working with colleagues and organizational learning sub-dimensions ($P > .05$) (Table 2).

A statistically significant difference was found between nurses' professional experience and planned and integrated quality improvement program, training and development opportunities sub-dimension score averages ($P < .05$). According to this difference, the planned and integrated quality improvement program, training and development opportunities sub-dimension score averages of nurses with 15 years or less professional experience are higher than the mean scores of nurses with 16 years or more professional experience. There is no statistically significant difference between nurses' professional experience and clinical governance climate scale total score, preventive risk management, crime and punishment environment, working with colleagues, and organizational learning sub-dimension score averages ($P > .05$) (Table 2).

The fact that clinical governance climate scale total score (176.77 ± 28.74), planned and integrated quality improvement program (66.73 ± 12.56), preventive risk management (30.21 ± 6.24), crime and punishment environment (24.69 ± 5.09), working with colleagues (17.35 ± 4.26), training and development opportunities (24.31 ± 4.51), and organizational learning (13.47 ± 3.34) sub-dimension score averages of nurses who willingly selected the service where they work is lower than that of nurses who did not chose the service where they work willingly is statistically significant ($P < .05$) (Table 2).

The clinical governance climate scale total score of the nurses who are satisfied with the service they work with (180.33 ± 28.44), preventive risk management (31.02 ± 6.20), crime and punishment environment (25.28 ± 5.59), training and development opportunities (24.73 ± 4.62), and organizational learning (13.60 ± 3.22) sub-dimension mean scores were lower than the mean scores of the nurses who were not satisfied with the service they worked for, and it was statistically significant ($P < .05$). There is no statistically significant difference between nurses' satisfaction with the service they work and the mean scores of the planned and integrated quality improvement program of the clinical governance climate scale and working with colleagues ($P > .05$) (Table 2).

It is statistically significant that the clinical governance climate scale total score (180.03 ± 29.37) and the planned and integrated quality improvement program (67.67 ± 12.41) sub-dimension score averages of the nurses who voluntarily chose nursing were lower than those who did not choose nursing voluntarily ($P < .05$). There was no statistically significant difference between the nurses' willingness to choose their profession and the mean scores of preventive risk management, crime and punishment environment, working with colleagues, training and development opportunities, and organizational learning sub-dimensions ($P > .05$) (Table 2).

The particular that the clinical governance climate scale total score (178.65 ± 28.22), planned and integrated quality improvement program (67.43 ± 12.04), preventive risk management (30.76 ± 6.16), crime and punishment environment (24.99 ± 5.28), working with colleagues (17.43 ± 4.15), training and development opportunities (24.51 ± 4.65), organizational learning (13.52 ± 3.16) sub-dimension score averages of nurses who are satisfied with their work is lower than mean scores of nurses who are not satisfied with their work is statistically significant ($P < .05$) (Table 2).

The particular that the clinical governance climate scale total score (176.34 ± 27.84), planned and integrated quality improvement program (66.38 ± 12.06), preventive risk management (30.58 ± 6.21), crime and punishment environment (24.83 ± 5.46), working with colleagues (17.06 ± 4.18), training and development opportunities (24.13 ± 4.48), organizational learning (13.36 ± 3.17) sub-dimension mean scores of nurses who are satisfied with their manager is lower than score averages of nurses who are not satisfied with their manager is statistically significant ($P < .05$) (Table 2).

A statistically significant difference was found between the number of patients that nurses are responsible for in a shift and the clinical governance climate scale total score, planned and integrated quality improvement program, preventive risk management, working with colleagues, and organizational learning sub-dimension score averages ($P < .05$). According to this difference, the clinical governance climate scale total score (190.48 ± 24.41), planned and integrated quality improvement program (71.77 ± 10.05), working with colleagues (18.74 ± 4.05) sub-dimensions of nurses who care for 10 or less patients in a shift is higher than the mean score of nurses who care for patients between 11 and 20 ($P < .05$). The preventive risk management sub-dimension score averages of nurses who care for 10 or less and 21 or more patients in a shift are higher than mean scores of nurses who take care of patients numbered 11 to 21. On the other hand, organizational learning sub-dimension mean scores of nurses who care for 10 or less patients in a shift are higher than the mean scores of nurses who take care of 11 or more patients. There is no statistically significant difference between the number of patients that nurses are responsible for in a shift and the mean scores of the crime and punishment environment, education and development opportunities sub-dimensions of the clinical governance climate scale ($P > .05$) (Table 2).

The particular that the clinical governance climate scale total score (177.67 ± 30.42), planned and integrated quality improvement program (66.86 ± 12.94), crime and punishment environment (24.67 ± 5.60), training and development opportunities (24.24 ± 4.63) sub-dimension score averages of nurses who know clinical governance is score averages of nurses who do not know about clinical governance is statistically significant ($P < .05$). There is no statistically significant difference between nurses' knowledge of clinical governance and the mean scores of the clinical governance climate scale's crime and punishment environment, working with colleagues, and organizational learning ($P > .05$) (Table 2).

It is statistically significant that the total score of the clinical governance climate scale (170.15 ± 30.18), planned and integrated quality improvement program (64.06 ± 13.39), preventive risk management (29.42 ± 6.55), crime and punishment environment (23.44 ± 4.53), working with colleagues (16.62 ± 4.68), training and development opportunities (23.36 ± 4.68) sub-dimension mean scores were lower than those of the nurses who did not attend any training or meeting on clinical governance ($P < .05$). There is no statistically significant difference between the nurses' participation in any training or meeting on clinical governance and the organizational learning sub-dimension score averages of the clinical governance climate scale ($P > .05$) (Table 2).

Discussion

The aim of clinical governance is to make quality improvement routine in medical practice and health care management by changing the

culture of health care delivery. Creating an appropriate clinical governance climate requires the internalization of all goals and values related to the clinical governance system by healthcare professionals.¹² In this direction, in this study, in which the clinical governance climate level of the hospitals was determined by the evaluation of the nurses who have an important position in the health team, the majority of them were 36 years old and over, more than half of them were married, had undergraduate or graduate education, were in public hospitals and 2/5th of them were in emergency, intensive care units. According to the nurses working in specialized units such as care, the clinical governance climate level of their hospitals is at a medium level. In a study conducted with nurses in a university hospital in Istanbul, the clinical governance climate level was found to be moderate.⁴ In the study of Gün and Söyük,¹⁴ it was determined that the organizational climate score of the employees was below the average. In the study carried out with 214 employees in 3 hospitals in Greece, it was concluded that the climate of the hospitals does not support clinical governance.⁵ In the study conducted by Bahrami et al¹² with the participation of 186 employees in 3 training hospitals in Iran, the clinical governance climate levels of the hospitals were found to be weak. All these studies show that hospital climates do not provide sufficient support in clinical governance practice and should be improved.

In the sub-dimensions of clinical governance, "planned and integrated quality improvement program" based on continuous improvement and development of the service process in order to reduce errors and achieve predetermined personal and corporate goals, "preventive risk management," which is concerned with the impact of any information on the decision-making process and the collection of information on risk management, "crime and punishment environment," which includes the culture of blame in the institution, the procedures applied during accidents, the reward systems and the interaction of team members with each other, "working with colleagues," which focuses on the way employees work with each other, the level of common understanding of their duties and responsibilities, and honesty among employees, and "training and development opportunities" questioning the evaluations made on the developments of the employees and the training opportunities, organizational limitations, "organizational learning," which explains the knowledge sharing inside and outside the organization and relevant sub-dimensions are at moderate level. In Gürdoğan's⁴ study, similar to our study findings, nurses' mean scores for the sub-dimensions of the clinical governance climate scale were at moderate level. On the other hand, in Gürdoğan's study, it is seen that older nurses perceive the clinical governance climate level more positively in the sub-dimensions of preventive risk management, crime and punishment environment compared to younger nurses. In the study carried out, nurses under the age of 25 and over the age of 36, which can be considered especially young generally perceived the clinical governance climate in the hospital more positively in the sub-dimensions of planned and integrated quality improvement program, preventive risk management, crime and punishment environment, training and development opportunities when compared with the nurses aged 26-35. This may be due to the fact that nurses between the ages of 26 and 35 perceive the clinical governance climate level more negatively, the group has passed the inexperienced period due to their age, and is more dynamic than the group over 36 years old physically. Because nurses in this age group are employed in more intensive units and cannot benefit from opportunities such as training offered, depending on the density, and

this may have caused a negative perception in them. Nurses who are younger than 25 years of age have a more positive view of the clinical governance climate regarding the sub-dimensions of working with colleagues and organizational learning. The fact that this group has a positive perspective may be due to the fact that they attach importance to bilateral relations or professional relations due to inexperience. However, in a study conducted with 112 executive nurses and 568 nurses working in a university hospital in order to determine the institutional climate perceptions of the executive nurses and nurses in Istanbul, it was concluded that the age of the nurses did not affect the institutional climate perceptions.¹⁵ In the study conducted in private hospitals operating in Gaziantep and Adiyaman provinces, it was concluded that the age of the employees did not affect their perceptions of the organizational climate.¹⁶ Furthermore, in some studies, it was determined that there was a correlation between age and corporate quality management.^{4,17-19}

It has been determined that besides age, gender also affects nurses' perceptions of clinical governance climate. In this respect, clinical governance climate level perception of female nurses is more positive than male nurses, except for the sub-dimensions of working with colleagues and organizational learning. In the study carried out with the participation of 300 health workers in Istanbul, it was determined that women's organizational climate perceptions were more positive than men.²⁰ In the study of Tambağ et al.²¹ it was concluded that female nurses attach more importance to quality management than male nurses. This may be due to the fact that women attach more importance to interpersonal relationships than men. In addition to these, there are also studies that concluded that gender does not affect the organizational climate.^{22,23}

In addition to gender, it is seen that the position of nurses affects the perception of the clinical governance climate level of their hospitals. From another point of view, it is seen that nurses in managerial positions, except for the dimension of working with colleagues, have a more positive view of the clinical governance climate in their hospitals than nurses who participate in one-to-one patient care, or this may be due to the fact that these nurses working in the management staff are involved in practices such as quality, risk management, continuous improvement and development activities in the institution and contribute to the formation of the clinical governance climate. Some of the study findings are also in parallel with these findings.^{4,13,19,24-28} However, clinical governance is a process that encompasses not only senior management but also all units and employees. However, it is an expected result that the level of perception/awareness of the nurse managers on the subject is high.

The educational status of nurses also affected clinical governance perception. Nurses who have undergraduate and graduate education and also work in public hospitals have a more negative perception of the clinical governance climate in their hospitals regarding opportunities to work with colleagues, training and development. This situation made us think that from the point of view of nurses working in public hospitals and having graduate/postgraduate education, the training and development opportunities offered to nurses are limited, that employees have problems with each other's working styles, understanding of their duties and responsibilities, and honesty, or that there is a negative perception. In addition, this situation may be due to the high expectations of nurses with undergraduate and graduate education. On the other hand, in the study of Paslı Gürdoğan, the crime

and punishment environment sub-dimension scores of the nurses who graduated from Health Vocational High School were found to be higher than the associate, undergraduate and graduate nurses.⁶ In the study of Mutlu Lale, similar to our study, a significant difference was found in the sub-dimensions of the education level of nurses, general clinical governance climate and preventive risk management, crime and punishment environment, working with colleagues, training and development opportunities.⁹ In addition, in our study, married nurses have a more negative perception of working with colleagues than single nurses. This may be due to the fact that married nurses cannot allocate much time to their colleagues and to understanding their duties and responsibilities due to the high family burden.

According to the findings of the study, it was determined that the nurses who voluntarily chose the service they worked for and were satisfied with the service, profession and manager perceived the clinical governance climate more positively. In another study, it is stated that satisfaction with work and workplace is one of the basic conditions for nurses to work effectively and efficiently, and this situation will reflect positively on patient satisfaction. In addition, it is stated that nurses who are satisfied with the institution they work for communicate and interact more positively with each other, they can use their skills and improve themselves.²⁸ Similarly, in the study of Gün and Söyük,³⁴ it is seen that choosing the profession voluntarily increases the organizational climate perception of the employees. Nurses who choose the nursing profession and the service they work for have high motivation because they are willing to work and adopt their jobs. This situation enables the creation of a positive climate in the organization and provides an opportunity to support clinical governance.²⁹

The number of patients they care for in a shift also affected nurses' perception of clinical governance climate. In the general perspective of clinical governance climate, in the sub-dimensions of planned and integrated quality improvement program and working with colleagues, it is seen that the clinical governance climate perception of nurses who care for patients is more positive between 11 and 20, especially compared to nurses who care less than 10 patients. The positive perception of these nurses who care for 11 to 20 patients is also better in the preventive risk management sub-dimension than the nurses who care for 10 or less and 21 or more patients. In addition, it has been determined that nurses who care for 11 or more patients perceive the clinical governance climate more positively in the organizational learning sub-dimension. The reason why the increase in the number of patients cared for has a positive effect on the perception of organizational learning may be due to the increase in the workload of nurses, the risks they may encounter, and their learning to cope with this difficult situation and the risks it brings out. Because organizational learning includes developing personnel through training, as well as self-development by taking lessons from mistakes.³⁰ In addition to these, the findings of the study show that between 11 and 20 patient caregivers have a more positive perception about taking preventive risks, working in a planned and integrated manner, or working with colleagues. In the study of Gürdoğan,⁴ contrary to our findings, it was determined that nurses caring for patients between 11 and 20 perceived the clinical governance climate more negatively in terms of preventive risk management than nurses caring for patients.

However, in literature it is stated that when number of patients who are provided care increases, risk in health institutions increases.³¹

On the other hand, nurses' years of professional experience influenced their perceptions of planned and integrated quality improvement and training and development opportunities. In other words, in the study, it was seen that the perception level of nurses with more than 16 years of professional experience regarding planned and integrated work and training and development opportunities was more positive. This may be due to the fact that as the years of professional experience increase, more training opportunities are offered to nurses for professional, quality management and personal development, and these nurses learn to work more planned and together in the face of problems and risks. To confirm this view, the findings of the study show that nurses' knowledge of clinical governance and their participation in activities such as training and meetings related to this subject positively affected the perceptions of hospitals regarding clinical governance climate levels. Mok and Au-Yeung³² also concluded in their study in Hong Kong that there is a close link between organizational climate and the empowerment of nurses, which supports our findings.

Limitations of the Study

The results of this study are limited to the opinions of nurses working at hospitals where the research was conducted.

Conclusion

As a result, the climate perceptions of nurses with moderate and positive governance climate perceptions are affected by age, gender, position, choosing the service and nursing willingly, the number of patients cared for, knowing clinical governance and attending a training/meeting on this subject.

In line with these conclusions,

In order to increase the perception of clinical governance climate, especially for nurses working in public hospitals, training seminars, certificate programs should be organized on this subject, and the opportunity to participate in scientific meetings such as congresses and workshops should be offered. In addition, nurses should be encouraged to participate in these trainings that will emphasize the importance of the subject. Again, it may be beneficial to inform these nurses, and to develop and implement improvement and corrective actions and policies in institutions regarding the sub-dimensions of clinical governance climate. In addition, in order to better understand the perception of clinical governance climate, this understanding should be reflected in the corporate culture and adopted by everyone.

In order to raise the clinical governance climate level in hospitals, nurses can be offered the opportunity to participate in quality and risk management, planning and integration studies. In addition, a more participatory and democratic working environment can be provided by providing teamwork opportunities to nurses.

By bringing the number of patients per nurse to international standards, necessary arrangements can be made to balance the nurse-patient ratios, and the issue can be reported to the senior management until the situation improves.

By balancing the workload of nurses, it can be ensured that they have a say in decisions and activities related to their own work and reflect their energies to patient care.

In addition, opinions of nurses can be taken in the selection of clinics where they will work. Satisfaction with their clinics/services, nursing and managers can be measured periodically and improvement studies can be carried out to increase the satisfaction of nurses by considering the results of these measurements.

In addition to these, nurses with few years of professional experience can be offered more training and courses for their personal and professional development, and environments that will increase the opportunities for sharing together can be provided to married nurses.

Ethics Committee Approval: Ethics committee approval was received for this study from the Karadeniz Technical University of Medicine Clinical Research Ethics Committee (October 23, 2017, 24237859-589).

Informed Consent: Written informed consent was obtained from nurses who participated in this study.

Peer-review: Externally peer-reviewed.

Author Contributions: Concept – N.K., H.Ö.; Design – N.K., H.Ö.; Supervision – N.K., H.Ö.; Resources – N.K., H.Ö.; Materials – N.K., H.Ö.; Data Collection and/or Processing – N.K., H.Ö.; Analysis and/or Interpretation – N.K., H.Ö.; Literature Search – N.K., H.Ö.; Writing Manuscript – N.K., H.Ö.; Critical Review – N.K., H.Ö.

Acknowledgments: The authors would like to thank the nurses participating in the research.

Declaration of Interests: The authors have no conflicts of interest to declare.

Funding: The authors declared that this study has received no financial support.

References

1. Arslaner H, KaracaY. Türk Kamu Yönetiminde Yönetişim Algısı: Aydın İli Vergi Dairelerinde bir Uygulama. *Adnan Menderes Univ Sosyal Bilimler Enstitüsü Derg.* 2017;4(4):128-151. Erişim adresi: <https://dergipark.org.tr/en/download/article-file/392231>.
2. Braithwaite J, Travaglia JF. An overview of clinical governance policies, practices and initiatives. *Aust Health Rev.* 2008;32(1):10-22. [CrossRef]
3. Tınaz P. *Çalışma Yaşamından Örnek Olaylar. Üçüncü Baskı.* İstanbul: Beta Basım Yayım; 2013:109-113.
4. Gürdoğan EP, Alpar ŞE. Klinik Yönetişim İklimi Ölçeği'nin Türkçe Geçerlik ve Güvenirliği. *Acıbadem Univ Sağlık Bilimleri Derg.* 2014;5(3):229-235. Erişim adresi: http://acibadem.dergisi.org/uploads/pdf/pdf_AUD_261.pdf.
5. Karassavidou E, Glaveli N, Zafiroopoulos K. Assessing hospital's readiness for clinical governance quality initiatives through organizational climate. *J Health Organ Manag.* 2011;25(2):214-240. [CrossRef]
6. Paslı Gürdoğan E. *Bir Üniversite Hastanesinde Klinik Yönetişim İkliminin Hemşirelerin İş Doyumu Üzerine Etkisi* [Doktora Tezi]. İstanbul: Marmara Üniversitesi, Sağlık Bilimleri Enstitüsü; 2012.
7. Burton MR, Loritsen J, Obel B. The impact of organizational climate and strategic fit on firm performance. *Hum Res Manag.* 2004;43:67-82. [CrossRef]
8. Vanu Som CV. Clinical governance: a freshlook at its definition. *Clin Gov Int J.* 2004;9(2):87-90. [CrossRef]
9. Mutlu Lale B. *Hemşirelerin çalışma ortamlarına ilişkin tutumları ve klinik yönetişim iklimi düzeyleri* [Yüksek Lisans Tezi]. İstanbul: Marmara Üniversitesi, Sağlık Bilimleri Enstitüsü; 2019.
10. Siu OL. Predictors of job satisfaction and absenteeism in two samples of Hong Kong nurses. *J Adv Nurs.* 2002;40(2):218-229. [CrossRef]
11. Ebadi Fardazar F, Safari H, Habibi F, Akbari Haghighi F, Rezapour A. Hospitals' readiness to implement clinical governance. *Int J Health Policy Manag.* 2015;4(2):69-74. [CrossRef]
12. Bahrani MA, Sabahi AA, Montazerifaraj R, Shamsi F, Ardekani SE. Hospitals' readiness for clinical governance implementation in educational hospitals of Yazd, Iran. *Electron Physician.* 2014;6(2):794-800. [CrossRef]
13. Freeman T. Measuring progress in clinical governance: assessing there liability and validity of the Clinical Governance Climate Questionnaire. *Health Serv Manag Res.* 2003;16(4):234-250. [CrossRef]
14. Gün İ, Söyüç S. Sağlık Kuruluşlarında Örgüt İklimi ve Örgütsel Güven Arasındaki İlişki. *Acıbadem Univ Sağlık Bilimleri Derg.* 2016;1:40-48. Erişim adresi: <https://pdfs.semanticscholar.org/a18d/9945d60a32426a84f96c13094354b33bc698.pdf>.
15. Tiryaki HŞ, Bahçecik N. Bir Üniversite Hastanesinde Çalışan Yönetici Hemşire ve Hemşirelerin Kurumsal İklimi Algılayışları. *Hacettepe Univ Hemşirelik Fak Derg.* 2014;1(1):1-15. Erişim adresi: <https://dergipark.org.tr/tr/download/article-file/88635>.
16. Yüksekbilgili Ö. Özel Sağlık İşletmeleri Çalışanlarının Örgüt İklimi Algılarının Demografik Özelliklerine Göre İncelenmesi. *İktisadi İdari Siyasal Araştırmalar Derg.* 2017;2(2):45-60. Erişim adresi: <https://dergipark.org.tr/tr/download/article-file/293785>.
17. Sezgin B. *Kalite Belgesi Alan Hastanelerde Çalışma Ortamı Hemşirelik Uygulamalarının Hasta ve Hemşire Güvenliği Açısından Değerlendirilmesi* [Doktora Tezi]. İstanbul: İstanbul Üniversitesi, Sağlık Bilimleri Enstitüsü; 2007.
18. Tan M, Polat H, Akgün Şahin Z. Hemşirelerin Çalışma Ortamlarına İlişkin Algılarının Değerlendirilmesi. *Sağlıkta Performans Kalite Derg.* 2012;4(2):67-78. Erişim adresi: <https://kalite.saglik.gov.tr/TR,8430/4-sayi-2012-2.html>.
19. Mollaoğlu M, Fertelli T, Özkan Tuncay F. Hastanede Çalışan Hemşirelerin, Çalışma Ortamlarına İlişkin Algılarının Değerlendirilmesi. *Fırat Sağlık Hizmetleri Derg.* 2010;5(15):17-30.
20. Demirbaş Z. *Sağlık İşletmelerinde Örgüt İklimi ve Çalışan Memnuniyeti İlişkisi Üzerine bir Araştırma* [Yüksek Lisans Tezi]. İstanbul: İstanbul Ticaret Üniversitesi, Sağlık Bilimleri Enstitüsü; 2017.
21. Tambağ H, Can R, Kahraman Y, Şahpolat M. Hemşirelerin Çalışma Ortamlarının İş Doyumu Üzerine Etkisi. *Bakırköy Tıp Derg.* 2015;11(4):143-149. Erişim adresi: http://cms.galenos.com.tr/uploads/Article_23579/BTD-11-143.pdf.
22. Yüksekbilgili Ö. *Sağlık İşletmelerinde Örgüt İklimi Unsurlarının Örgütsel Bağlılığa Etkileri Üzerine bir Araştırma* [Doktora Tezi]. Gaziantep: Hasan Kalyoncu Üniversitesi, Sosyal Bilimler Enstitüsü; 2016.
23. Kumar V. Job satisfaction and organizational climate in relation to college type and gender. *Sch Res J Hum Sci Engl Lang.* 2015;2(11):2657-2670. Available at: https://issuu.com/dr.yashpalnetraagonkar/docs/1_dr._vijay_kumar_phagawara.
24. Gormley DK. Are we on the same page? Staff nurse and manager perceptions of work environment, quality of care and anticipated nurse turnover. *J Nurs Manag.* 2011;19(1):33-40. [CrossRef]
25. Ying L, Kunaviktikul W, Tonmukayakal O. Nursing competency and organizational climate as perceived by staff nurses in a Chinese University Hospital. *Nurs Health Sci.* 2007;9(3):221-227. [CrossRef]
26. Gül H. Organizational climate and academic staff's perception on climate factors. *Hum Soc Sci J.* 2008;3(1):37-48.
27. Karamanoğlu A, Özer FG, Tuğcu A. Denizli İlindeki Hastanelerin Cerrahi Kliniklerinde Çalışan Hemşirelerin Mesleki Profesyonelliklerinin Değerlendirilmesi. *Fırat Tıp Derg.* 2009;14(1):12-17. Erişim adresi: http://www.firattipdergisi.com/pdf/pdf_FTD_532.pdf.
28. Cabar H, Serinkan C. Sağlık Çalışanlarının Güdülenmesi ile İlgili Etmenler: Devlet Hastanesi Çalışanlarına Yönelik bir Uygulama. *Organ Yönetim Bilimleri Derg.* 2010;2:57-64. Erişim adresi: <https://dergipark.org.tr/pub/oybd/issue/16335/171009>.
29. Öztürk H. Motivasyon ve İş Doyumu. In: Uyer G, Kocaman G, editörler. *Hemşirelik Hizmetleri Yönetimi El Kitabı.* İstanbul: Koç Vakfı Yayınları; 2016:376-378.
30. Bakan İ. *Çağdaş Yönetim Yaklaşımları İlkeler, Kavramlar ve Yaklaşımlar.* Beşinci Baskı. İstanbul: Beta Basım Yayım; 2011:443-445.
31. İntepeler ŞS. Risk Yönetimi. In: Tatar Baykal Ü, Ercan Türkmen E, editörler. *Hemşirelik Hizmetleri Yönetimi.* İstanbul: Akademik Basın; 2014:336-443.
32. Mok E, Au-Yeung B. Relationship between organizational climate and empowerment of nurses in Hong Kong. *J Nurs Manag.* 2002;10(3):129-137. [CrossRef]