

SAFETY CULTURE AND BURNOUT IN SURGICAL TEAMS: ANALYSIS FROM PUBLIC HEALTH PERSPECTIVE

BACKGROUND

Safety culture refers to the shared beliefs and behaviors among team members regarding safe practices. A low level of safety culture in surgical settings jeopardizes the safety of both patients and healthcare workers. From a public health standpoint, this issue is systemic and requires structural solutions through organizational behavior and environmental regulations.

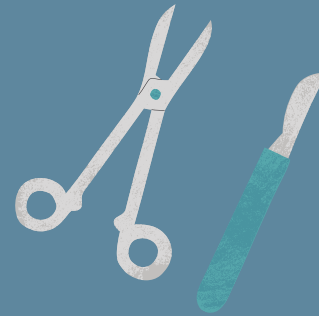


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OBJECTIVES

This study aims to examine the relationship between safety culture and burnout levels among healthcare professionals working in surgical units and to evaluate the findings from a public health perspective.



METHODS

This descriptive and correlational cross-sectional study was conducted in 2025 with nurses and surgical team members employed in surgical units of three hospitals in Izmir. A total of 150 healthcare workers participated voluntarily. Data were collected via online or paper-based questionnaires. The "Hospital Survey on Patient Safety Culture" and the "Maslach Burnout Inventory" were used as data collection tools. Hospital Survey on Patient Safety Culture consists of 42 items and 12 sub-dimensions. The Maslach Burnout Scale consists of a total of 22 items and 3 sub-dimensions (emotional exhaustion, depersonalization, and personal accomplishment). Data were analyzed using SPSS 26.0. Descriptive statistics, Pearson correlation, and multiple regression analyses were performed, with significance set at $p < 0.05$.

Table 1. Descriptive Characteristics of Participants (n = 150)

Variable		n	%
Gender	Female	98	65.3
	Male	52	34.7
Professional Group	Nurse	108	72.0
	Anesthesia Technician	27	18.0
	Surgeon	15	10.0
Hospital Work Experience	1-4 years	63	42.0
	5-14 years	56	37.3
	≥15 years	31	20.7
Operating Room Work Experience	1-4 years	80	53.3
	5-14 years	50	33.3
	≥15 years	20	13.4
Age (years)		34.2 ± 6.7	

Table 2. Mean Scores of Scales

Scale	Mean ± SD	Min-Max
1. Emotional Exhaustion	24.8 ± 7.3	10-36
2. Depersonalization	9.6 ± 4.2	9-20
3. Personal Accomplishment	19.3 ± 5.5	8-32
4. Patient Safety Culture	143.6 ± 28.56	42-210

RESULTS

Among participants, 72% were nurses and 65% were female. The mean scores on the Safety Culture Scale and burnout level were moderate.

A significant negative correlation was found between safety culture and burnout levels ($r = -0.46, p < 0.001$). Particularly, communication and management support sub-dimensions showed an inverse relationship with emotional exhaustion. Multiple regression analysis revealed that safety culture significantly predicted burnout scores ($\beta = -0.38, p < 0.01$).

These results indicate that higher safety culture levels are associated with lower burnout levels.

CONCLUSIONS

This study demonstrates a significant inverse relationship between perceived safety culture and burnout among healthcare workers in surgical units. Environments with strong safety culture contribute to lower burnout levels among staff. Key factors such as managerial support, effective communication, and teamwork play a critical role in reducing emotional exhaustion. From a public health perspective, this relationship impacts not only individual well-being but also the quality and sustainability of healthcare services. Therefore, institutional support for safety culture and systematic approaches to combat burnout are essential.

IMPLICATIONS FOR PRACTICE

Regular safety culture assessments and improvement strategies based on employee feedback should be implemented in surgical units. Additionally, psychosocial support programs and stress management training should be expanded to reduce burnout risk. Preventive interventions targeting worker health should be increased within public health policies, and inter-institutional collaboration encouraged.

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