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Association between Anxiety Levels of Patient Relatives and Violence Tendencies in the Emergency Department

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Abstract

Aim: To examine the association between anxiety, depression, and tendency toward violence among relatives of patients in emergency departments.

Materials and Methods: The study was conducted among 371 relatives of patients in the emergency department of a district state hospital between February and May 2025. Data were collected using a personal information form the Hospital Anxiety and Depression scale (HADS), and the Violence Tendency scale (VTS).

Results: The mean HADS-anxiety score of patient relatives was 8.16±3.93, and the mean depression score was 7.10±3.66. The mean VTS score was 36.97±9.19. Analysis showed a positive, weak, and statistically significant association between the VTS and the HADS-anxiety subscale ($r=0.254$; $p<0.001$), and between the VTS and the HADS-depression subscale ($r=0.218$; $p<0.001$). Multiple linear regression analysis showed that anxiety and depression scores were significantly associated with a tendency toward violence.

Conclusion: Anxiety and depression levels among relatives of patients were significantly associated with their tendencies toward violence. Emergency department staff and administrators should develop strategies to prevent violence and to reduce the anxiety of patients' relatives.

Keywords: Emergency department, patient relatives, anxiety, violence tendency

Introduction

Emergency departments, which are the busiest, most stressful, and most time-pressured units in healthcare systems, are environments of high emotional and psychological strain for both patients and their relatives. Within this dynamic structure, nurses are the healthcare professionals who communicate most with patients and their relatives, serve as the first point of contact, and play a critical role in crisis management (1). Relatives of patients visiting emergency departments experience uncertainty regarding the lives of their loved ones, which can lead to intense emotions such as anxiety, stress, and fear (2). Traumatic cases and critical health conditions, in particular, can challenge the psychological resilience of patient relatives and increase their levels of anxiety (3).

Anxiety is a psychological response to perceived threats, which can reduce rational thinking and lead to reactive behaviors (4). The literature indicates that individuals with high levels of anxiety may exhibit violence tendencies in social interactions, and in environments where a sense of control is lost, these behaviors can escalate into violence (5). The emergency department is a high-risk psychosocial setting for both patient relatives and healthcare professionals due to the intensity of uncertainties, limited information sharing, and heavy workload (6,7).

Research conducted in Türkiye and worldwide indicates that factors such as lack of information, insufficient communication, inadequate physical conditions, and prolonged waiting times in emergency departments can trigger violent behaviors by patient relatives toward healthcare professionals, particularly nurses who often serve as the first point of contact (8-11). Violence against healthcare workers not only threatens staff safety but also negatively affects the quality of healthcare delivery (12). Among the psychological factors contributing to such violent behaviors, anxiety has been identified as a significant determinant (13).

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In emergency settings, deficiencies in information provision, ineffective communication, and the inability of healthcare personnel to allocate adequate time to patient relatives due to heavy workloads may increase anxiety levels and contribute to conflictual behaviors and violence tendencies (14). Consequently, this study was conducted to determine the relationship between anxiety and depression levels in relatives of patients and their tendencies toward violence.

Materials and Methods

Research Design

This study used an analytical cross-sectional (correlational) design, a quantitative research method.

Study Setting and Time

The research was conducted between February and May 2025 in the emergency department of a secondary-level district state hospital. The emergency department receives an average of 650 patient visits per day, indicating a high patient turnover. Data were collected during peak hours when family members of patients meeting the inclusion criteria were present in the emergency department.

Population and Sample

The study sample consisted of relatives of patients treated in the emergency department of the district state hospital. The sample was obtained by inviting relatives of patients treated in the yellow and green zones of the emergency department and selecting them using simple random sampling. Individuals in the sample were over 18 years of age, had no communication difficulties, were fluent in Turkish, and voluntarily agreed to participate in the study.

To justify the sample size, a post-hoc power analysis was performed using G*Power 3.1.9.7 software. For the multiple linear regression model involving two predictors (anxiety and depression) and a sample size of 371, the statistical power was calculated to be greater than 0.95 at an alpha level of 0.05 for a small-to-medium effect size (f^2=0.08). This result confirms that the study has sufficient power to detect the reported associations between psychological factors and the tendency toward violence.

Data Collection

Participants who agreed to take part in the study were provided with written and verbal information about the study's purpose, confidentiality, and voluntary participation, and they signed informed consent forms. The personal information form, the Hospital Anxiety and Depression scale (HADS), and the Violence Tendency scale (VTS) were then administered face-to-face by the researcher. The personal information form developed by the researcher, was used to determine the demographic characteristics of the participants, such as age, gender, education level, marital status, and frequency of emergency department visits. The HADS, developed by Zigmond and Snaith (15) and validated in Türkiye by Aydemir et al. (16), is designed to assess anxiety and depression levels in hospitalized individuals. It consists of 14 items, including 7 assessing anxiety and 7 assessing depression. In this study, both the anxiety and depression subscales were used. Scores are evaluated using a 4-point Likert scale, with higher scores indicating higher levels of anxiety. In Aydemir et al. (16) study, the Cronbach's alpha value was 0.8525 for the anxiety subscale and 0.7784 for the depression subscale. In the current study, the Cronbach's alpha was 0.744 for the anxiety subscale and 0.649 for the depression subscale. The VTS was developed by the Turkish Prime Ministry Family Research Institution (17). This 20-item scale uses a 4-point Likert format to measure individuals' attitudes toward aggression and violent behaviors. Scores range from 1 to 80, with higher scores indicating a higher tendency toward violence. This scale is considered an efficient tool for assessing violence tendencies in individuals (17). In its reliability study, Cronbach's alpha 0.87; in the current study it was 0.854. Data collection took approximately 15-20 minutes per participant, with explanatory support provided as needed.

Prior to the study, all necessary legal and ethical approvals were obtained. The research protocol was reviewed and approved by Karabük University Rectorate Social and Human Sciences Research Ethics Committee (decision number: 2025/01, date: 03.01.2025), and institutional permission was obtained from the district state hospital where the study was conducted. Participants were informed verbally and in writing about the purpose, scope, data collection process, and voluntary nature of the study. Participation was entirely voluntary, and participants were informed of their right to withdraw from the study at any time without providing a reason. Informed consent was obtained from all participants.

Throughout the study, strict adherence to participant confidentiality and data security principles was maintained. Personal information was not shared with third parties; data were used solely for scientific purposes, and anonymity was preserved. The study was conducted in accordance with the ethical principles outlined in the Helsinki Declaration.

Statistical Analysis

The data were analyzed using the IBM SPSS Statistics for Windows, version 25.0 (IBM Corp., Armonk, NY, USA). The data obtained from the study were analyzed using descriptive statistics. Categorical variables are presented in summary form using frequency (n) and

percentage (%) values. Descriptive statistics, Pearson correlation, multiple linear regression, independent- samples t-test, and ANOVA were performed. The level of statistical significance was set at $p<0.05$. Pearson correlation analysis was performed to examine the relationships among anxiety, depression, and tendency toward violence. To investigate whether anxiety and violence tendency scores differed according to demographic variables, appropriate analyses such as independent samples t-test, one-way ANOVA, and, if necessary, chi-square tests were applied (18). A significance level of $p<0.05$ was accepted.

Results

A total of 371 relatives of patients participated in the study. Examination of the participants' age distribution showed that the largest group was aged 18–25 (n=157, 42.3%). 69.5% of the participants were women (n=258), and 61.4% (n=228) were university graduates. Of the participants, 55.5% (n=206) were single and 38.0% (n=141) were employed. When health habits were evaluated, 62.8% of the participants had no specific habits (n=233). Among individuals reporting a habit, smoking was the most common behavior (n=112, 30.2%) (Table 1).

Table 1. Socio-demographic characteristics of the participants

Variable	Category	n (%)
Age	18-25 years	157 (42.3)
	26-35 years	83 (22.4)
	36-45 years	83 (22.4)
	46-55 years	41 (11.0)
	56 years and above	7 (1.9)
Gender	Female	258 (69.5)
	Male	113 (30.5)
Education	University	228 (61.4)
	High school	63 (17.0)
	Master's/Doctorate	45 (12.1)
	Primary school	24 (6.5)
	Middle school	11 (3.0)
Marital status	Married	165 (44.5)
	Single	206 (55.5)
Occupation	Employed	141 (38.0)
	Student	128 (34.5)
	Housewife	56 (15.1)
	Other	32 (8.6)
	Retired	14 (3.8)
Habits	No habits	233 (62.8)
	Smoking	112 (30.2)
	Alcohol	26 (7.0)

The vast majority of participants had previously visited a healthcare institution (n=341, 91.9%), and according to the distribution of diagnoses, the most common disease groups were gastrointestinal system diseases (n=126, 34.0%) and respiratory system diseases (n=113, 30.5%). Regarding treatment outcomes, 72.0% (n=267) of participants reported a positive improvement in their patients, while the highest level of anxiety was observed in the "slightly anxious" group (n=202, 54.5%). Regarding their history of violence, almost all participants reported having never been involved in any violent incident before (n=368, 99.2%). The situation that angered or disturbed participants the most was "not being paid attention to" (n=111, 29.9%). This was followed by a lack of patient information and a crowded hospital environment (both n=81, 21.8%). When redress behavior was examined, the highest percentage of participants indicated they would file a formal complaint (n=181, 48.8%) (Table 2).

Table 2. Participants' experiences, emotional states, and hospital-related characteristics

Variable	Category	n (%)
Psychiatric disorder	No	333 (89.8)
	Yes	38 (10.2)
Relationship with patient	Family	187 (50.4)
	Friend	96 (25.9)
	Other	88 (23.7)
Previous hospital visit	Yes	341 (91.9)
	No	30 (8.1)
Type of illness	Gastrointestinal system diseases	126 (34.0)
	Respiratory system diseases	113 (30.5)
	Musculoskeletal system diseases	46 (12.4)
	Neurological diseases	43 (11.6)
	Trauma	19 (5.1)
	Urinary system diseases	12 (3.2)
	Cardiac system diseases	12 (3.2)
Treatment outcome	Positive improvement	267 (72.0)
	No improvement	104 (28.0)
Level of concern	Slightly concerned	202 (54.5)
	Not concerned at all	120 (32.3)
	Moderately concerned	33 (8.9)
	Very concerned	16 (4.3)

Table 2. Continued		
Variable	**Category**	**n (%)**
History of violence	No	368 (99.2)
	Yes	3 (0.8)
Most upsetting/angering reasons	Not being addressed	111 (29.9)
	Lack of information about patient	81 (21.8)
	Crowded hospital environment	81 (21.8)
	Long treatment duration	31 (8.4)
	Other	27 (7.3)
	Insufficient hospital comfort	13 (3.5)
	No available bed for patient	12 (3.2)
	Healthcare staff shouting	9 (2.5)
	Patient's condition not improving	6 (1.6)
Seeking justice	I will file a formal complaint	181 (48.8)
	Do not feel victimized	83 (22.4)
	Manage/I do nothing	51 (13.7)
	No response	38 (10.2)
	Other	18 (4.9)

In the study, the mean HADS-anxiety score of patients' relatives was 8.16±3.93, indicating a mild level of anxiety; the mean HADS-depression score was 7.10±3.66, indicating a low/normal level of depression; and the mean VTS score was 36.97±9.19, indicating a low level of violence tendency (Table 3).

As shown in Table 3, there were statistically significant relationships between the HADS and VTS scores of patients' relatives. Accordingly, a weak positive correlation was found between anxiety levels and tendency toward violence ($r=0.254$, $p<0.001$). Similarly, a weak positive correlation was found between depression levels and tendency toward violence ($r=0.218$; $p<0.001$) (Table 4).

As a result of the multiple linear regression analysis, the model was found to be statistically significant ($F=15.015$, $p<0.001$), with an explanatory power (R^2) of 0.075 This indicates that the anxiety and depression variables included in the model explain 7.5% of the total variance in the tendency toward violence. An analysis of the regression coefficients showed that anxiety scores were positively and significantly associated with a tendency toward violence ($\beta=0.193$, $p=0.001$). Similarly, depression scores were positively and significantly associated with a tendency toward violence ($\beta=0.121$, $p=0.036$). The model's intercept ($B=31.115$) indicates that even when anxiety and depression scores are zero, patients' relatives still exhibit some tendency toward violence (Table 5).

Participants' descriptive characteristics were compared with their HADS and VTS scores. Anxiety levels were significantly higher in females ($p<0.001$), single individuals ($p=0.030$), and those with a psychiatric history ($p<0.001$). Similarly, depression scores were significantly higher in participants with a psychiatric history ($p=0.001$). With respect to violent tendencies, no statistically significant differences were found among demographic groups ($p>0.05$) (Table 6). Additionally, the mean anxiety score of relatives who stated they were "not anxious at all" about their patient's condition was significantly lower than that of relatives who reported being "fairly anxious" or "very anxious" ($p=0.003$). Regarding tendencies to seek redress, mean anxiety and depression scores among relatives who stated "I will manage/do nothing" were significantly higher than among relatives who stated "I do not feel victimized" ($p<0.05$) (Table 6).

Table 3. Mean scores of participants on the Hospital Anxiety and Depression scale and Violence Tendency scale					
	Number of items	**Mean ± SD**	**Min**	**Max**	**Cronbach's Alpha**
Hospital Anxiety and Depression scale					
Anxiety	7	8.16±3.93	0	21	0.744
Depression	7	7.10±3.66	0	18	0.649
Violence Tendency scale					
Total	20	36.97±9.19	20	72	0.854
SD: Standard deviation					

Table 4. Relationship between participants' HADS scores and Violence Tendency scale scores		
		Violence Tendency scale
Anxiety	r	0.254
	p	**<0.001**
Depression	r	0.218
	p	**<0.001**
r: Pearson's correlation analysis, p: Significance level, p<0.001		

Table 5. Associations between Hospital Anxiety and Depression scale scores and participants' Violence Tendency					
	B	**SE**	**Beta**	**t**	**p**
Constant	31.115	1.166		26.674	<0.001
Anxiety	0.452	0.135	0.193	3.344	**0.001**
Depression	0.305	0.145	0.121	2.101	**0.036**
$R=0.275$. $R^2=0.075$. $F=15.015$. p<0.001 SE: Standard error, t: t-value, p: Significance level, p<0.001					

Table 6. Comparison of participants' descriptive characteristics with HADS and VTS scores					
Variable	**Category**	**Anxiety (mean ± SD)**	**Depression (mean ± SD)**	**VTS (mean ± SD)**	**p-value**
Gender	Female	8.65±3.85	7.04±3.74	36.41±9.00	A: <0.001 D: 0.643 V: 0.073
	Male	7.04±3.90	7.23±3.48	38.27±9.54	
Marital status	Married	7.67±4.01	6.90±3.60	35.98±8.75	A: 0.030 D: 0.407 V: 0.052
	Single	8.56±3.82	7.26±3.70	37.77±9.48	
Psychiatric history	Yes	10.32±3.90	8.89±3.70	37.26±7.12	A: <0.001 D: 0.001 V: 0.814
	No	7.92±3.86	6.89±3.60	36.94±9.41	
Level of concern	Not concerned at all	7.39±3.92	7.24±3.86	37.21±9.61	A: 0.003 D: 0.280 V: 0.170
	Slightly concerned	8.20±3.82	6.86±3.60	36.86±8.69	
	Moderately concerned	9.73±4.15	8.09±3.76	38.94±9.43	
	Very concerned	10.19±3.49	7.00±2.22	32.63±10.98	
Age category	18-25 years	8.51±3.78	7.07±3.66	38.40±9.81	A: 0.108 D: 0.051 V: 0.082
	26-35 years	7.46±4.12	6.28±3.69	36.76±8.03	
	36-45 years	8.12±4.16	7.40±3.76	35.86±9.49	
	46-55 years	8.76±3.35	8.32±3.08	34.56±8.38	
	56+ years	5.71±3.95	6.71±3.59	34.86±3.29	
Education level	Primary school	8.13±2.46	8.71±3.09	33.54±8.86	A: 0.336 D: 0.130 V: 0.310
	Secondary school	7.45±4.41	8.18± 4.38	38.91±10.49	
	High school	7.29±4.46	6.57±3.48	38.10±10.36	
	University	8.43±3.92	7.00±3.74	36.90±9.03	
	Postgraduate	8.22±3.65	7.18±3.42	37.11±7.94	
For multi-group variables (age, education), A: Anxiety, D: Depression, V: Violence Tendency p-values are presented, SD: Standard deviation					

Discussion

This study examined the levels of anxiety, depression, and violent tendencies among relatives of patients in the emergency department, and the associations between demographic factors and these variables.

Our study found that female participants and single individuals had significantly higher levels of anxiety. This finding is consistent with the existing literature. Indeed, in a study conducted by Yılmaz and Onan (6) on relatives of emergency department patients, women were reported to have higher levels of anger and anxiety compared to men. Similarly, Durna et al. (19) indicated that female employees are at a higher risk regarding stress and anxiety. When considered alongside the higher anxiety levels observed among single participants in our study, this trend suggests that the demographic characteristics of relatives of patients in the emergency department may play a determining role in their psychological well-being and, consequently, their propensity for violence.

The higher emotional reactivity in women, greater susceptibility to stressful life events, and gender-related differences in social support mechanisms are possible explanations for the higher anxiety levels observed in female participants (19). Among single individuals, factors such as lack of intra-family social support, feelings of loneliness, and reduced relational trust contribute to increased anxiety (13). Furthermore, in our study, participants with a psychiatric disorder (10.2%) had statistically significantly higher anxiety scores, suggesting that individuals with a psychiatric history may experience heightened anxiety levels when exposed to stressful healthcare environments. This result highlights the importance of closely monitoring patient relatives with a psychiatric history and providing them with psychosocial support, particularly in high-stress clinical areas such as emergency departments, to safeguard both the well-being of relatives and the safety of nurses.

In our study, the mean HADS-anxiety and HADS-depression scores were found to be at low-moderate levels (8.16±3.93; 7.10±3.66), while the mean VTS score was at a moderate level (36.97±9.19). Studies conducted in Türkiye indicate that relatives of patients in emergency departments often experience high levels of anxiety and stress. Yılmaz and Onan (6) reported that the intensity, uncertainty, and communication deficiencies in emergency departments are key factors increasing anxiety among patient relatives, while Aydemir et. al. (9) emphasized that long waiting times, difficulty accessing information, and inability to reach healthcare personnel elevate anxiety levels. Similar findings have been reported in the international literature. Hou et al. (7) noted that stress in the emergency department environment can increase both anxiety and violence tendencies, while Mol et al. (20) highlighted that uncertainty and insufficient information may lead to anger and increased violence learned helplessness among patient relatives. Accordingly, the dynamic, high-stress nature of emergency departments may increase anxiety and violent tendencies among relatives of patients if effective provision of information is not ensured. In this context, the critical roles of emergency department nurses and healthcare professionals in effective communication, crisis management, and empathetic approaches become evident. Regularly informing patients and their relatives, providing transparent explanations of processes, offering emotional support, and establishing a trustworthy communication environment are key components of nursing care and can directly contribute to reducing anxiety and tendencies toward violence. Therefore, strengthening healthcare professionals' communication skills, adopting care approaches that are sensitive to the psychological needs of patients' relatives, and increasing supportive nursing practices are crucial to reducing anxiety, stress, and tendencies toward violence in emergency departments.

The significant relationship found between "level of concern" and anxiety scores in the study ($p=0.003$) indicates that individuals experiencing high concern regarding their patient's condition are likely to have elevated anxiety. Literature also suggests that uncertainty in critical health situations increases anxiety among patient relatives (21). Moreover, individuals displaying passive attitudes toward seeking redress had higher anxiety and depression scores, which can be explained by loss of control and learned helplessness. Based on these findings, nurses in emergency departments can help reduce anxiety levels and prevent by establishing effective communication with patients' relatives, providing regular information, and offering emotional support. Strengthening nursing care in this way can reduce the risk of violence associated with anxiety, thereby supporting both the psychological well-being of relatives of patients and a safe working environment for healthcare professionals.

No significant differences were found in the descriptive characteristics of patient relatives with respect to their violence tendency scores ($p>0.05$). This finding is noteworthy when compared with other studies. While Yılmaz and Onan (6) reported that male individuals are more prone to physical violence, O'Brien et al. (12) reported that demographic characteristics alone are insufficient to explain violent behaviors and highlighted the significant influence of organizational, environmental, and psychosocial factors. The findings of our study suggest that violent tendencies may be more closely related to the conditions and quality of communication in the emergency department than to individual characteristics. Notably, patient relatives

identified "not being acknowledged" as the situation provoking the most anger, indicating that communication deficiencies are a critical trigger for violent behavior. Accordingly, the roles of emergency department nurses in communicating effectively, providing information, and involving relatives of patients in the care process are crucial in both reducing the risk of violence and ensuring a safe working environment.

In the study, a weak but statistically significant positive relationship was found between anxiety scores and violence tendency scores, and between depression scores and violence tendency scores (anxiety: $r=0.254$, $p<0.001$; depression: $r=0.218$, $p<0.001$). This finding is consistent with previous research indicating that elevated levels of anxiety and depression may impair emotional regulation, weaken anger control, and increase susceptibility to violence tendencies (5,22). High levels of anxiety may increase vulnerability to interpersonal conflicts, potentially contributing to the development of violence tendencies. Similarly, Roberton et al. (22) reported that both inadequate and maladaptive emotion regulation strategies may increase the likelihood of aggressive behaviors. Collectively, these findings suggest that heightened anxiety and depression are associated with violent tendencies, potentially by amplifying threat perception, increasing irritability, and lowering individuals' tolerance thresholds. Beyond individual psychological factors, the World Health Organization underscores that violence in healthcare settings is a complex, multidimensional issue shaped by organizational and systemic conditions, including excessive workload, prolonged waiting times, communication breakdowns, workplace stressors, and insufficient safety measures (23). Accordingly, effective strategies for violence prevention should extend beyond individual-level interventions and incorporate institutional and structural approaches. Within this framework, the results of the present study highlight the critical importance of the psychological well-being of patients' relatives in emergency departments, both to mitigate the risk of violence and to promote a safer working environment for nurses. Based on these findings, it is recommended that healthcare institutions implement regular psychosocial screening programs, expand stress management and anger regulation training, strengthen communication-based interventions between staff and patients' families, and enhance physical security measures in high-risk clinical settings. Given that emergency department nurses are the healthcare professionals who establish first contact with patients and their relatives, their role in identifying individuals experiencing psychological distress, developing appropriate communication strategies, and activating necessary psychosocial support mechanisms is key to preventing violence.

The finding in the multiple linear regression model that anxiety and depression were significantly associated with a tendency toward violence ($F=15.015$, $p<0.001$) indicates that psychological distress is related to the risk of violence in environments with high uncertainty and emotional burden, such as emergency departments. Although the explanatory power of the model was modest ($R^2=0.075$), it was statistically significant ($p<0.001$). This modest R^2 value is expected, given that the tendency toward violence in healthcare settings is a multifaceted phenomenon influenced by numerous systemic, environmental, and situational factors beyond individual psychological distress. Nevertheless, our findings indicate that levels of anxiety and depression remain significant independent factors associated with the psychological background of violent tendencies in the emergency department. Violence is not solely a result of individual psychological symptoms; it is a phenomenon shaped by a combination of factors including overcrowding, waiting times, lack of information, communication breakdowns, safety regulations, and organizational stressors. The World Health Organization also emphasizes that systemic and institutional measures are critical in preventing violence against healthcare workers (24).

The study's model coefficients show that anxiety has a stronger association with the tendency toward violence than depression does ($\beta=0.193$, $p=0.001$). Relatives of patients in emergency departments often experience feelings of loss of control, uncertainty, and perceived threat. Therefore, the resulting increases in anxiety levels are believed to reinforce individuals' perception of threat, increase irritability, and thus create an environment more prone to conflict and violent tendencies. Indeed, studies examining the prevalence and contextual triggers of violence in emergency departments reveal that such incidents are closely linked not only to "personal characteristics" but also to environmental conditions and interaction dynamics (6,25). The finding that depression also has an independent and significant positive association ($\beta=0.121$, $p=0.036$) suggests that the tendency toward violence should be evaluated not only for anxiety but also for factors such as negative mood, hopelessness, low coping capacity, and irritability. This was found to be consistent with current syntheses that address the psychosocial background of violence through the dimensions of emotion regulation and stress response (26). The high constant term ($B=31.115$) suggests that even when anxiety and depression are close to zero, the tendency toward violence persists at a baseline level. This situation indicates that violent behavior by relatives of patients is related not only to psychological variables but also to structural characteristics of the emergency department admission process (waiting times, overcrowding, lack of understanding of triage decisions), to security practices, and

to institutional communication factors. Policy documents and professional materials aimed at reducing violence need to provide a holistic framework that includes education, communication, environmental and safety regulations, reporting, and zero-tolerance approaches (27).

Study Limitations

This study has several limitations. First, it was conducted in a single secondary-level district state hospital, which may limit the generalizability of the findings to other healthcare settings. Second, the data were based on self-reported measures (HADS and VTS), which may be subject to social desirability bias and may reflect temporary psychological states. Future multicenter studies involving diverse socio-demographic populations are needed to enhance the generalizability and robustness of the findings.

Conclusion

This study identified a positive association between anxiety levels and violent tendencies among relatives of patients in emergency departments, highlighting the critical role of nursing practices in this context. The findings revealed that females, single individuals, and relatives with a psychiatric history experienced higher levels of anxiety, which could influence communication with nurses and potentially increase the risk of violence. Accordingly, it is recommended that emergency department nurses provide regular information, strengthen their empathetic and therapeutic communication skills, identify high-risk relatives early, and offer appropriate guidance and psychosocial support. Furthermore, to enhance nurse safety, it is important to strengthen intra-team communication, expand training in violence risk management, and establish safe working environments that support nurses. Future research should include multicenter studies that encompass diverse socio-demographic groups and healthcare settings, because the results could guide policy development for nursing services.

Ethics

Ethics Committee Approval: The research protocol was reviewed and approved by Karabük University Rectorate Social and Human Sciences Research Ethics Committee (decision number: 2025/01, date: 03.01.2025).

Informed Consent: Informed consent was obtained from all participants.

Footnotes

Authorship Contributions

Concept: S.Ö., Design: S.Ö., D.Y.G., Data Collection or Processing: S.Ö., Analysis or Interpretation: D.Y.G., Literature Search: S.Ö., Writing: S.Ö., D.Y.G.

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