



# Level of Work-Related Anxiety and Potential Causes of Anxiety in Healthcare Workers in the Emergency Department

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**Objective** The present study evaluated the work-related anxiety scores of healthcare workers in emergency departments (ED) and aimed to determine the factors affecting these scores.

**Methods** The data was obtained through a survey administered to the emergency staff. Beck's Anxiety Inventory (BAI) and the Mini-International Neuropsychiatric Interview (MINI) work anxiety interview were used to predict and determine the type of anxiety experienced by the participants. The survey was administered to 147 volunteers, and questionnaires from 130 participants were included in the study.

**Results** It was found that 43.8% of the participants had a BAI score greater than 7. The study results showed a negative correlation and a linear regression model between age and the BAI score. Additionally, the BAI score was significantly higher in female, singles, physicians, those who were dissatisfied with their jobs, and those who were dissatisfied with their salaries ( $p < 0.05$ ). The results also showed that having a history of anxiety disorder or depression, being a physician, and being dissatisfied with one's job were 6.277, 5.583, and 4.005 times higher, respectively, in terms of suspicion of anxiety ( $p < 0.001$ ). In the MINI job anxiety interview, work-related posttraumatic stress disorder (38.6%) was predicted most frequently, and indiscriminative work-related social phobia (5.3%) was predicted least frequently in participants at risk for anxiety according to the BAI score.

**Conclusion** This study suggests that teaching healthcare workers how to cope with workplace trauma and workplace-related situational phobias can be an effective solution to prevent anxiety disorders in healthcare workers working in ED.

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**Keywords** Anxiety; Anxiety disorders; Beck's anxiety inventory; Emergency; Workplace; Health personnel.

## INTRODUCTION

Anxiety, commonly defined as a state of worry and unease without a concrete danger or clear cause,<sup>1</sup> can manifest as work-related anxiety, such as hypochondriacal anxiety, phobia, fear of inadequacy, social anxiety, or general anxiety towards work, colleagues, or superiors.<sup>1</sup> In a study that evaluated employees using the Mini-International Neuropsychiatric Interview (MINI) work anxiety questions based on the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV) criteria, 67.4% of employees reported work-

related concerns, with situational workplace phobia being the most common.<sup>2,3</sup> Anxiety is particularly prevalent among healthcare workers in high-stress environments.<sup>4</sup> During the coronavirus disease-2019 (COVID-19) pandemic, when healthcare workers experienced a significant increase in workload, numerous studies examined anxiety in healthcare workers.<sup>1-3,5</sup> The most common psychiatric disorders observed in healthcare workers working in emergencies were anxiety and depression.<sup>6,7</sup> Although anxiety among healthcare workers, especially during the pandemic, has been widely investigated, there is a lack of descriptive studies in the literature, particularly on the incidence and types of anxiety among emergency service workers. This study aimed to determine the work- or shift-related anxiety scores of healthcare workers in the emergency department (ED) and to evaluate the factors affecting work- or shift-related anxiety.

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## METHODS

### Ethical issues

This study was conducted with the approval of the Niğde Ömer Halisdemir University Ethics Committee (dated November 29, 2023, and decision number 2023/18-35). Participants were informed verbally and in writing before the survey, and each participant was asked to fill out a voluntary consent form, and informed consent was obtained. During the survey interviews, no personal data of the participants, except for their title and job information, were questioned and recorded.

### Study design and participants

This study had a prospective and cross-sectional design. The study data were obtained through a face-to-face questionnaire administered to the staff of the ED of Niğde Ömer Halisdemir Training and Research Hospital. The questionnaires were administered by a single interviewer using a face-to-face interview and the questionnaire forms were filled out instantly. The survey questions were organized into three main sections. In the first section, the demographic characteristics of the participants, including age, sex, marital status and work parameters, including years of employment, years of working in the ED, job satisfaction, salary satisfaction, and working hours were questioned. In the first section, the participants were also questioned about their current diagnosis of anxiety or depression and their previous history of anxiety or depression. In the second part of the survey, Beck's Anxiety Inventory (BAI) questions were asked. The BAI has high internal consistency and test-retest reliability after 1 week ( $\alpha=0.92$ ,  $r[81]=0.75$ ) and is used to define the suspicion of anxiety and is scored between 0 and 63. According to the BAI, a score of 0–7 suggests no suspicion of anxiety, a score of 8–15 suggests mild anxiety, a score of 16–25 suggests moderate anxiety, and a score of 26 and above suggests severe anxiety.<sup>8</sup> In the third part of the questionnaire, the participants were administered the MINI work anxiety interview questions derived from the MINI interview used to determine the type of anxiety according to DSM-IV criteria.<sup>2</sup>

### Exclusion criteria for the study

In the study, no questionnaire was administered to ED staff who had not yet received their license (interns). The questionnaires of participants who answered more than one question during the survey interview were excluded from the study. The questionnaires of the participants who did not want to answer some questions during the survey interviews, regardless of the reason were excluded from the study.

### Statistical analysis

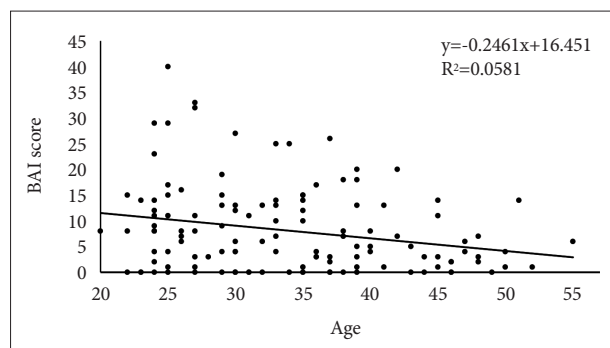
The normality of the study data was tested according to normality criteria (mean value, median value, mode and bell curve) and with skewness and kurtosis as normality tests. Descriptive data were given as mean $\pm$ standard deviation if continuous and normally distributed, and as median (minimum-maximum) if not normally distributed. Categorical variables were presented as frequency and percentage.  $\chi^2$  was used to test for significant differences between categorical variables, and appropriate statistical tests (t-test, analysis of variance, etc.) were used for 2-way or multiple comparisons of categorical variables and continuous variables. Regression analyses were performed, and regression equations were calculated between continuous variables with significant or very significant correlations in the correlation analysis. Univariable and multivariable regression analyses were performed to evaluate the effects of parameters on suspicion of anxiety.

Receiver operating characteristic (ROC) curve analysis was performed for continuous variables thought to have an effect on anxiety and optimum cutoff values with the highest sensitivity and specificity were calculated and continuous data were categorized according to the cutoff values obtained. The SPSS Statistics for Windows, Version 22.0 (IBM Corp., Armonk, NY, USA) package program was used to analyze the data obtained from the questionnaires. Graphic and table breakdowns of data analysis results were made with the Microsoft Office Excel<sup>®</sup> (Microsoft Corp., Redmond, WA, USA) program. All statistical analysis was performed at a 95% confidence level, and  $p<0.05$  was considered statistically significant. Post hoc power analysis was conducted for the main findings obtained after the study. G\*Power 3.1 (Heinrich Heine University, Düsseldorf, Germany) was used for post hoc analysis. According to the post hoc analysis, the power of the test, in which all risk coefficients obtained in regression analyses are considered statistically significant at the  $\alpha=0.05$  level, was found to be a minimum of 0.852 in our study on 130 participants.

## RESULTS

This study was conducted with 147 healthcare workers. Twelve of the questionnaires were not included in the study due to blank answers and five were excluded due to more than one marking. The median age of the total 130 participants included in the study was 33 years (20–55). The median duration of active employment was 8.5 (1–29) years and the median duration of employment in the ED was 4 (1–20) years. The median BAI score of the participants was calculated as 6 (0–58). A significant correlation ( $R=-0.186$ ,  $p=0.034$ ) was found between the participants' BAI scores and age. In order to explain the correlation between the BAI scores and age, z

values were calculated for the BAI scores and three questionnaire results that were considered outliers were excluded from the study, and the data were fit to the normal distribution. Re-



**Figure 1.** The regression graphic between ages and BAI scores of participants. Figure 1 shows a negative correlation between BAI score and age. BAI, Beck's Anxiety Inventory.

gression analysis was performed ( $y = -0.2461x + 16.451$ ,  $R^2 = 0.0581$ ) (Figure 1). The relationship between the descriptive characteristics of the people who volunteered to participate in the survey and the BAI scores was analyzed using Mann-Whitney U tests, as shown in Table 1. Among the participants, 85 (65.4%) were male and 45 (34.6%) were female, and the median BAI score was significantly higher in female (median: 11.0 [0–52]) than in male (median: 4.0 [0–58];  $p < 0.001$ ).

A total of 77 participants (59.2%) were married and 53 participants (40.8%) were single; the median BAI score of single participants was 9.0 (0–52) and the median BAI score of married participants was 4.0 (0–58). The anxiety scores of the married participants were significantly lower than those of the single participants ( $p = 0.004$ ). In total, 11 (8.5%) participants reported having an ongoing diagnosis of anxiety disorder or depression and were receiving treatment. Overall, 23

**Table 1.** The relation between BAI scores and non-scalar parameters of the study (N=130)

	N	Med (min-max)	Mean rank	U	p
Sex				1226.5	<0.001
Male	85	4.0 (0–58)	57.43		
Female	45	11.0 (0–52)	80.74		
Marital status				1441.0	0.004
Married	77	4.0 (0–58)	57.71		
Single	53	9.0 (0–52)	76.81		
Anxiety disorder or depression diagnosis				153.5	<0.001
Yes	11	25.0 (5–58)	111.05		
No	119	5.0 (0–52)	61.29		
Anxiety disorder or depression history				517.5	<0.001
Yes	23	14.0 (1–58)	96.50		
No	107	4.0 (0–52)	58.84		
Task in the emergency department				790.0	0.002
Physician	25	12.0 (0–33)	86.40		
Not physician	105	4.0 (0–58)	60.52		
Job satisfaction				1108.5	<0.001
Satisfied	86	4.0 (0–32)	56.39		
Dissatisfied	44	12.5 (0–58)	83.31		
Salary satisfaction				1420.5	0.002
Satisfied	55	3.0 (0–32)	53.83		
Dissatisfied	75	8.0 (0–58)	74.06		
Overtime				1085.5	0.925
≤40 h/w	20	6.5 (0–52)	64.78		
>40 h/w	110	6.0 (0–58)	65.63		
Overtime status*				946.0	0.022
Voluntarily	38	3.5 (0–58)	44.39		
Involuntary	68	8.5 (0–52)	58.59		

\*24 individuals who responded “not specified” were omitted. BAI, Beck's Anxiety Inventor; Med, median; min-max, minimum-maximum; U, Mann-Whitney U test; h/w, hours per week

(17.7%) participants reported that they had previously used medication for anxiety disorders or depression and had recovered. The median BAI score of participants with ongoing anxiety disorder or depression was calculated as 25.0 (5–58), and the median BAI score of participants with a history of

anxiety disorder or depression was calculated as 14.0 (1–58). In both groups, the BAI scores were significantly higher than in those without a diagnosis or history of anxiety or depression ( $p < 0.001$ ).

Of the ED healthcare workers who participated in the study,

**Table 2.** Crosstabs and significance values that show the relation between BAI result groups and non-scalar parameters of the study

	BAI Results				Total	Sig.
	No anxiety suspicion	Low anxiety suspicion	Mid anxiety suspicion	High anxiety suspicion		
Sex						0.052
Male	55	19	7	4	85	
Female	18	17	5	5	45	
Total	73	36	12	9	130	
Marital status						0.007
Married	52	17	6	2	77	
Single	21	9	6	7	53	
Total	73	36	12	9	130	
Anxiety disorder or depression diagnosis						<0.001
Yes	1	2	4	4	11	
No	72	34	8	5	119	
Total	73	36	12	9	130	
Anxiety disorder or depression history						<0.001
Yes	5	7	8	3	23	
No	68	29	4	6	107	
Total	73	36	12	9	130	
Task in the emergency department						0.002
Physician	6	13	3	3	25	
Not physician	67	23	9	6	105	
Total	73	36	12	9	130	
Job satisfaction						0.001
Satisfied	58	21	4	3	86	
Dissatisfied	15	15	8	6	44	
Total	73	36	12	9	130	
Salary satisfaction						0.022
Satisfied	37	15	1	2	55	
Dissatisfied	36	21	11	7	75	
Total	73	36	12	9	130	
Overtime						0.481
≤40 h/w	12	7	0	1	20	
>40 h/w	61	29	12	8	110	
Total	73	36	12	9	130	
Overtime status*						0.046
Voluntarily	28	6	3	1	38	
Involuntary	31	21	9	7	68	
Total	59	27	12	8	106	

\*24 individuals who responded “not specified” were omitted. BAI, Beck’s Anxiety Inventory; Sig., significance; h/w, hours per week

25 (19.2%) were doctors and 105 (80.8%) were nondoctors. The median BAI score for doctors was 12.0 (0–33) and the BAI score was higher than that of non-doctors ( $p=0.002$ ). A total of 86 (66.2%) survey participants stated that they were satisfied with their jobs, and the median BAI score of those who were satisfied with their jobs was 4.0 (0–32), whereas the median BAI score of those who were dissatisfied with their jobs was 12.5 (0–58), and the BAI score of those who were dissatisfied with their jobs was significantly higher ( $p<0.001$ ). Of the volunteers who participated in the survey, 55 (42.3%) stated that they were satisfied with their salaries, whereas 75 (57.7%) stated that they did not think they were financially compensated for their work. The median BAI score of participants who were dissatisfied with their salary was 8.0 (0–58), which was significantly higher than that of participants who were satisfied with their salary (median: 3.0 [0–32];  $p=0.002$ ). Only 20 (15.4%) respondents reported working  $\leq 40$  hours per week. Of the 110 (84.6%) participants who stated that they worked overtime, 38 (35.8%) stated that they worked overtime voluntarily and 68 (64.2%) stated that they worked overtime involuntarily.

The median BAI score of participants who did not work overtime hours was 6.5 (0–52) and the median BAI score of participants who reported working overtime hours was 6.0 (0–58), and there was no statistically significant difference between them ( $p=0.925$ ). However, it was found that participants who worked overtime involuntarily (median: 8.5 [0–52]) were significantly different from those who worked overtime voluntarily (median: 3.5 [0–58];  $p=0.022$ ). When the BAI test results were grouped according to the suspicion of anxiety, the BAI scores were similar. Cross-tabulations and

significance levels (using chi-square or Fisher's exact test) are shown in Table 2. Suspicion of anxiety was higher in single participants than in married participants ( $p=0.007$ ). Anxiety was significantly higher in those with a diagnosis of anxiety or depression and in those who had previously received treatment for these diagnoses ( $p<0.001$ ). Suspicion of moderate and high anxiety was higher in patients with a current diagnosis of anxiety or depression, and suspicion of low and moderate anxiety was higher in patients with a history of anxiety or depression. Suspicion of anxiety was higher in doctors than in other healthcare professionals ( $p=0.002$ ). Those who were satisfied with their job and salary had more anxiety than those who were unsatisfied ( $p=0.001$  and  $p=0.022$ , respectively). While there was no significant difference in suspicion of anxiety between those who worked overtime and those who worked normal hours in the ED ( $p=0.481$ ), suspicion of anxiety was higher in those who worked overtime and those who worked overtime reluctantly than in those who worked overtime voluntarily (0.046).

The effects of the demographic characteristics of the participants on anxiety were analyzed using univariable and multivariable regressions. According to univariable regression analyses, those with a history of anxiety disorder or depression were 6.277 times more likely to be suspected of anxiety than those without a history of anxiety disorder or depression (odds ratio: 6.277; 95% confidence interval [CI] 2.161–18.229;  $p<0.001$ ). The age of the participants was analyzed by drawing the ROC curve according to the suspicion of anxiety according to the BAI, and a cutoff value of 35.5 was calculated with a sensitivity of 0.754 and a specificity of 0.521 according to the Youden index. Participants below 35.5 years of age were

**Table 3.** Univariable regression analysis of study parameters with anxiety suspection according to BAI

Factor	B	p	Odds ratio	95% CI
Anxiety disorder or depression history	1.836	<0.001	6.277	2.161–18.229
Task in the emergency department	1.720	<0.001	5.583	2.053–15.184
Job satisfaction	1.387	<0.001	4.005	1.855–8.644
Age	1.204	0.002	3.335	1.563–7.117
Marital Status	1.154	0.002	3.170	1.530–6.566
Sex	1.012	0.008	2.750	1.307–5.787
Salary Satisfaction	0.801	0.030	2.227	1.081–4.588

BAI, Beck's Anxiety Inventory; CI, confidence interval

**Table 4.** Analyze of the multivariable regression model of three parameters of the study

Factor	B	p	Odds ratio	95% CI
Having an anxiety disorder or depression history	2.058	<0.001	7.830	2.409–25.453
Female sex	1.035	0.015	2.815	1.223–6.482
Age <35.5	1.527	<0.001	4.602	1.913–11.074

CI, confidence interval

**Table 5.** The relation between suspected participants according to BAI and predictions of MINI work related anxiety interview

Anxiety type	BAI results			
	Low anxiety suspicion (N=36)	Mid anxiety suspicion (N=12)	High anxiety suspicion (N=9)	Total (N=57)
Work-related panic disorder	5 (13.9)	7 (58.3)	4 (44.4)	16 (28.1)
Situational workplace phobia	9 (25.0)	3 (25.0)	5 (55.6)	17 (29.8)
Indiscriminate work-related social phobia	1 (2.8)	1 (8.3)	1 (11.1)	3 (5.3)
Discriminate work-related social phobia	5 (13.9)	2 (16.7)	1 (11.1)	8 (14.0)
Work-related generalized anxiety disorder	10 (27.8)	3 (25.0)	2 (22.2)	15 (26.3)
Work-related posttraumatic stress disorder	11 (30.6)	6 (50.0)	5 (55.6)	22 (38.6)

Values are presented as number (%). BAI, Beck's Anxiety Inventory; MINI, Mini-International Neuropsychiatric Interview

considered one group, and participants aged 35.5 years and above were considered another group and subjected to univariable regression. Those younger than 35.5 years were 3.335 times more likely to have suspected anxiety (odds ratio: 3.335; 95% CI 1.563–7.117;  $p=0.002$ ). The univariable regression results for the other parameters are given in Table 3. According to univariable analysis, the factors that had a statistical effect on anxiety were subjected to multiple regression analyses, and a model was created to explain the suspicion of anxiety. In the model, having a history of anxiety disorder or depression, female sex, and/or being under 35.5 years of age explained 29.8% of the probability of anxiety suspicion (Nagelkerke  $R^2=0.298$ ). The data for the three-parameter model are listed in Table 4.

In this study, the distribution of possible anxiety types obtained as a result of the MINI job anxiety interview in participants with a BAI score greater than 7 ( $n=57$ ) was analyzed by preparing a cross-tabulation, as shown in Table 5. Responses to the MINI work anxiety interview predicted work-related posttraumatic stress disorder in 22 (38.6%) participants, situational workplace phobia in 17 (29.8%) participants, work-related panic disorder in 16 (28.1%) participants, work-related generalized anxiety disorder in 15 (26.3%) participants, discriminative work-related social phobia in 8 (14.0%) participants, and indiscriminate work-related social phobia in 3 (5.3%) participants. Of the 16 participants with work-related panic disorder, 7 (43.8%) had a moderate level of suspicion of anxiety according to the BAI, and the BAI results differed significantly from the expected distribution ( $p=0.006$ ). The distribution of the other anxiety types did not differ significantly from the expected distribution ( $p>0.05$ ).

## DISCUSSION

The average cost of generalized anxiety disorder alone per individual is more than 5,000 euros, and three-fourth of this cost consists of indirect costs.<sup>9</sup> These costs increase even more

for employees who ensure the flow of services and production. In the literature, job anxiety has been examined under many different headings, and studies investigating the job anxiety of both healthcare workers and other employees have focused on the level of anxiety. Anxiety was higher in healthcare workers than in community samples.<sup>10</sup> Moreover, anxiety among healthcare workers is likely to cause disruptions in healthcare services, which may have serious consequences as well as financial costs. For these reasons, it has become necessary to give special importance to anxiety among healthcare workers and analyze it in detail.

During the COVID-19 pandemic period, the BAI was studied in healthcare personnel working in the ED, and it was found that the BAI score was higher in the female sex compared to the male sex and in nurses and doctors compared to other healthcare professionals. In the same study, the ages of the participants were examined in two groups, and no statistically significant difference was found between these two groups.<sup>11</sup> In our study, similar to this study, females had higher BAI scores, but when the groups were evaluated according to the results of the test, no significant difference was found according to sex. We think that the BAI score was found to be higher in female as a result of the fact that female are more active in housework than male due to social structure and physiologically as a result of hormonal changes related to the menstrual cycle. In addition, our results showed a negative correlation between age and BAI score. Similar to our study, in a study conducted on anxiety in emergency healthcare workers, the probability of anxiety suspicion was found to be high in older age groups.<sup>7</sup> We anticipate that reasons such as the fact that young people have just started their professional lives and a lack of experience lead to this result.

During the COVID-19 pandemic, prolonged working hours, increased workload, and increased work stress have been shown to increase anxiety among healthcare workers.<sup>12</sup> We did not make a comparison measuring workload in our study; however, in our study, anxiety levels were found to be signifi-

cantly lower in participants who said that they were satisfied with their jobs and that their salaries paid for their work. We believe that people who love their jobs by nature will be able to solve problems at work and work more easily, making them less of a problem. Therefore, we believe that this inverse correlation between job satisfaction and anxiety is expected. A cohort study showed that the risk of anxiety and depression was higher in shift workers than in non-shift workers.<sup>13</sup> Similarly, in a study conducted on anxiety and sleep quality in nurses, 38.7% of the participants were suspected of having anxiety, according to the BAI. Anxiety was suspected in 26.5% of nurses working only during the day, 34.3% of nurses working only at night, and 49.1% of nurses working rotationally during the day and night. In the same study, a significant relationship was found between age, years of employment, parental status, and anxiety.<sup>14</sup> In another study, a statistically significant difference was found between insomnia and chronic fatigue between nurses who worked at night and those who did not work at night, but no statistically significant difference was found, although working at night increased anxiety and depression.<sup>15</sup> These studies examining nurses, who constitute the most important population among healthcare workers and play a key role in the rotation of the system, have shown the importance of anxiety in EDs that work in shifts by nature.

In a study conducted in the United Arab Emirates (UAE), similar to ours, approximately 66% of the participants were male, 50% were aged between 30–40 years and the majority were nurses (37%). It was found that 23.7% of the participants had mild anxiety, 20.7% had moderate anxiety, and 7.4% had severe anxiety disorder risk, and the results were similar to our population. However, in contrast to our study, a positive correlation was found between age and anxiety scores. In addition, anxiety scores were found to be higher among healthcare workers than among doctors and nurses. Healthcare workers' professional experience and nationality were not found to be associated with high anxiety scores.<sup>7</sup> In contrast to our study, a positive correlation was found between age and anxiety scores. In addition, anxiety scores were found to be higher among healthcare workers than among doctors and nurses. Healthcare workers' professional experience and nationality were not found to be associated with high anxiety scores.<sup>7</sup> Another important feature of this UAE study is that most healthcare workers were foreign nationals due to the conditions of the country. In the aforementioned study, it was reported that anxiety increases with age. However, this result does not support our results. In a study conducted in a radiology unit on BAI, a positive correlation was found between age and tenure among healthcare workers.<sup>16</sup> In our study, a negative correlation was observed between age and BAI. We believe that the main reason for this difference between the

results is that the studies were conducted on different branches, and each branch has its own difficulties. In other words, in radiology workers, there is an increase in mood disorders due to anxiety caused by health problems that may develop due to radiation and impaired circadian rhythm due to working in a dark environment for a long time.<sup>17</sup> whereas in ED workers, inexperience at a young age and malpractice anxiety are at the forefront. Again, suspicion of anxiety was found to be lower in doctors working in community health centers, which are non-emergency healthcare units, than in other healthcare professionals working in community health centers.<sup>18</sup> The fact that there were no critical patients in community health centers and that most of the workload consisted of routine and relatively low-risk procedures for physicians may explain this result.

In a univariable analysis performed in a review study on the prevalence of anxiety disorders, anxiety disorder was 2.2 times higher in the female sex, and anxiety disorder was 0.8 times higher in those over 55 years of age.<sup>19</sup> In our study, we similarly found that females and younger age groups had higher odds ratios for anxiety disorder. In addition, we showed that the regression model created using age, sex, and anxiety disorder/depression history parameters can detect a significant proportion of ED patients with suspected anxiety. We believe that these parameters will enable hospital or ED clinical managers to perform more efficient, focused, and sustainable screening in terms of anxiety risk. In another study analyzing the depression scores of nurses working in hospitals, univariable regression analysis showed that nurses who were more satisfied with their jobs had lower depression scores.<sup>20</sup> Similarly, job satisfaction was associated with lower anxiety scores in our study. Although attempts have been made to identify the possible causes of work-related anxiety, few studies have investigated which type of anxiety is associated with work-related anxiety.

Our colleagues who developed the MINI work anxiety interview, which we also used in our study, investigated the types of work anxiety observed in the general population in the same publication. In this study, in which participants were randomly selected from professions, they predicted that the most common type of work-related anxiety was situational workplace phobia (53.8%) and work-related generalized anxiety disorder (39.4%) and the least common type was work-related posttraumatic stress disorder (1.5%).<sup>2</sup> In our study, in which we conducted the same interview with emergency healthcare workers, we evaluated work-related stress disorder as the most common type and indiscriminative work-related social phobia as the rarest type. The risk of exposure to emotional and physical trauma is higher in emergency service workers than in healthcare workers working in other units.<sup>21</sup>

We believe that the main reason we obtained different results from the general population according to the MINI job anxiety interview in this study is the risk of exposure to violence among ED workers.

### Limitations

The primary limitation of this study was that it was performed at a single location. Although all queries were posed verbally and participants were provided with explanations during the survey, the administration of the MINI job anxiety interview in Turkish for the first time constituted a significant limitation of our study. Furthermore, it is widely recognized that the premenstrual period can exacerbate anxiety in female. Beck's anxiety scale, which was utilized in our study, is designed to assess the participants' anxiety levels instantaneously, and we did not inquire about the participants' menstrual cycles to ascertain whether they were in the premenstrual phase. This oversight may have had an impact on the study's outcomes.

### Conclusion

This study investigated the probability and causes of anxiety in emergency service workers. This study found that work-related stress disorders were the primary cause of anxiety among emergency service workers. Anxiety was more prevalent among young emergency service workers. However, a history of anxiety disorder or depression, working as a physician, being dissatisfied with one's job, being female, being unmarried, and being dissatisfied with one's salary can all affect anxiety levels among emergency service workers. Additionally, a history of anxiety disorder or depression, being a physician, and dissatisfaction with one's job were independent high-risk factors in the model used to explain the risk of anxiety suspicion.

### Availability of Data and Material

The datasets generated or analyzed during the study are available from the corresponding author on reasonable request.

### Conflicts of Interest

The authors have no potential conflicts of interest to disclose.

### Author Contributions

Conceptualization: Turgut Dolanbay, Abdussamed Vural. Data curation: Turgut Dolanbay, Mustafa Cihan Altay. Investigation: Turgut Dolanbay, Abdussamed Vural. Methodology: Turgut Dolanbay, Abdussamed Vural. Project administration: Turgut Dolanbay, Abdussamed Vural. Resources: Mustafa Cihan Altay, Nesibe Sultan Çınaroglu. Software: Turgut Dolanbay, Abdussamed Vural. Supervision: Turgut Dolanbay, Abdussamed Vural, Mustafa Cihan Altay. Validation: Nesibe Sultan Çınaroglu, Turgut Dolanbay, Abdussamed Vural. Visualization: Abdussamed Vural, Turgut Dolanbay. Writing—original draft: Turgut Dolanbay, Abdussamed Vural, Mustafa Cihan Altay. Writing—review & editing: Turgut Dolanbay, Abdussamed Vural.

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