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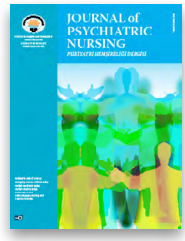

Original Article

# The effects of emergency psychiatric care training for emergency department nurses

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## Abstract

**Objectives:** This study was designed to examine the effect of training on emergency psychiatric care on the thoughts, feelings, and attitude of emergency nurses toward patients with mental disorders.

**Methods:** This was a quasi-experimental, cross-sectional, single-group study that included a pretest, posttest, and follow-up evaluation. The study was conducted between May 2018 and March 2019 with 30 nurses (68.18%) who participated in a training program for nurses working in the emergency department of a university hospital in Türkiye. The Emergency Psychiatric Care training program consisted of approximately 19 hours. A weekend session was offered for 5 consecutive weeks in order to make it accessible to all of the nurses. The feelings, thoughts, and attitudes of the nurses toward patients with mental disorders were evaluated immediately before and after the training, as well as 3 months after the program. Parametric and nonparametric tests were used to analyze the data.

**Results:** The findings revealed a statistically significant increase in the nurses' level of knowledge and self-confidence related to emergency psychiatric care after participating in the training program, and their workload perception decreased ($p<0.05$). The nurses' average job satisfaction perception score also increased ($p>0.05$). The nurses exhibited a positive change in their thoughts and feelings toward psychiatric care after training, but importantly, the nurses' attitude, a more long-standing measure, did not change significantly.

**Conclusion:** The training program had a positive impact on the nurses' level of knowledge related to providing psychiatric care, as well as their workload perception, self-confidence, feelings, and thoughts. This is valuable, however, regular training and other adjustments to working conditions will be necessary to establish a true attitude change.

**Keywords:** Emergency department; emergency nursing; psychiatric care; training program.

All medical cases requiring immediate treatment—life-threatening or not—are deemed an "emergency."[1] Emergency psychiatry is a dynamic and compelling discipline requiring comprehensive knowledge and unique clinical skills in order to provide the best possible care.[2] Emergency psychiatric cases may arise from severe or mild chronic mental disorders, behavioral disorders, self-mutilative ideation or behavior, stress disorders and psychosocial problems, as well as from medical diseases that cause psychiatric symptoms, intoxication, substance abuse, or adverse effects of medication.[3]

The need for emergency psychiatric care is increasing; however, this often presents multiple challenges. The systems and resources in place are often inadequate, creating additional stress for both patients and healthcare providers. Emergency nurses are often the first healthcare professionals a presenting patient encounters at the emergency department.[4] These nurses are expected to have the ability to evaluate patients with mental disorders physically, psychologically, and psychosocially in order to identify the risk of harm to the patient or others.[1] An appropriate first intervention by these nurses could facilitate adaptation to necessary treatment and

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**What is presently known on this subject?**

- It has been reported that emergency service nurses around the world often have a negative attitude toward patients with mental disorders. This is frequently a result of a lack of knowledge about emergency psychiatric care as well as difficult and insufficient conditions.

**What does this article add to the existing knowledge?**

- The results of this study demonstrated that training in emergency psychiatric care improved the knowledge, thoughts, and emotions of emergency nurses toward psychiatric patients and emergency care, but a single training session was not sufficient to create lasting attitude change.

**What are the implications for practice?**

- Comprehensive and regularly implemented training will improve the quality of care, benefitting both healthcare staff and patients. An approved standard program should be developed and implemented to provide consistent education on emergency psychiatric care.

increase the quality of care as well as prevent repeat emergency admissions for similar reasons.[1,2,5] However, studies have shown that the knowledge and skills of emergency department nurses are often insufficient in terms of evaluating, treating, and providing care for patients with mental disorders.[6,7] Studies have also concluded that a negative attitude among healthcare professionals and others contributes to stigmatization and can prevent the fulfillment of a patients' right to efficient care.[7,8] This attitude may be a result of several factors, including inadequate education as well as workplace conditions, including increased occupational safety risk, which can lead to a reduction in job satisfaction and performance. Higher treatment costs and lower quality of service are among the potential consequences of negative attitudes among nurses.[9,10] However, education has been demonstrated to have a positive impact on the knowledge, competence, and attitude toward care of emergency department nurses.[6,11,12]

An insufficient level of knowledge and skills among nurses in terms of the evaluation, classification, and treatment of patients with mental health difficulties has previously been reported in studies conducted in Türkiye.[3,13] This inadequacy is likely related to the lack of a relevant standardized training program supported by the Ministry of Health, as well as the increased burden of care due to the high number of patient presentations seen in general hospitals as a result of the community-based service approach implemented under the National Mental Health Action Plan (2011–2023) and other conditions.[14] The lack of a psychiatric nurse or a nurse trained in psychosocial care in the emergency department prevents assurance of the effective implementation of psychosocial support and a crisis intervention plan, critical for those who have attempted suicide or are undergoing a crisis, for example. The provision of education on emergency psychiatric care to emergency nurses could have a significant effect on the quality care. Improved ability to provide appropriate care will benefit both the patient and healthcare staff.

The aim of the current study was to examine the effect of emergency psychiatric care training on the approach of emergency nurses toward patients with mental disorders. This research, believed to be the first of its kind in Türkiye, evaluated the effect of an emergency psychiatric care training program on the level of knowledge and the feelings, thoughts, and attitudes of emergency nurses toward patients with a need for psychiatric care, as well as their job satisfaction and workload perception, self-confidence, and perceived difficulty in providing care in the emergency department of a tertiary healthcare service.

The following questions were examined:

1. Will an education program on emergency psychiatric care affect the knowledge level of emergency nurses?
2. Will an education program on emergency psychiatric care affect the nurses' job satisfaction, workload perception, self-confidence, and perceived difficulty in providing care to patients with mental disorders?
3. Will an education program on emergency psychiatric care affect the emotions, thoughts, and attitudes of nurses toward providing care to patients with mental disorders?

## Materials and Method

### Ethical Considerations

Ethical approval for this study was obtained from the Ege University Faculty of Medicine Clinical Research Ethical Committee on March 20, 2018 (No: 18-3.1/28) and institutional approval for the study was also granted by the Ege University Faculty of Medicine Department of Emergency Medicine (No: 194886). All of the nurses who participated in this research did so voluntarily and gave both written and verbal informed consent. Nurses who worked in the emergency department and wanted to receive information about emergency psychiatric care but who did not meet the inclusion criteria were permitted to join the program, but their results were not included in the study analysis.

### Study Design

This semi-experimental study was designed to investigate the effect of training on emergency psychiatric care provided to emergency service nurses. The research included a pretest, posttest, and a follow-up evaluation of nurses working in the emergency department of a tertiary university hospital. The nurses were assessed between May 4, 2018 and March 3, 2019. The hospital serves patients referred from different regions of the country. The 1600 $m^2$ emergency service unit, which has an inpatient bed capacity of 107 patients, includes a psychiatry interview room designed for providing care to patients with mental disorders. The hospital records indicated that a total of 185, 242 patients presented at the Emergency Medicine Clinic in 2018, with a mean of 700 patients per day. The records indicated that 1969 patients presented at the clinic due to a mental disorder in 2015, while the total was 2500 in 2018. This hospital was chosen for the current study because it is a tertiary hospital that is able to provide the most comprehensive service in the region, and because nurses in the emergency department provide psychiatric triage service.

In all, 68 nurses worked in the Emergency Medicine Clinic during the study period. Of these, 44 met the inclusion criterion for this research (emergency service experience of >1 year) and agreed to participate in the study. Ultimately, a total of 30 nurses who completed the training program, were included in the final research sample. The final participation rate was 68.18% of the total. The nurses' self-confidence and perceived difficulty in providing care as well as their level of knowledge, feelings, thoughts, and attitude about providing care to patients with mental disorders, as well as their job satisfaction and workload perceptions were evaluated prior to the training, post training, and 3 months after the program.

### Training Program

The content of the training program, titled Emergency Psychiatric Care, comprised 13 subjects: communication in the emergency department, mental status assessment of emergency patients, general approach for triage, psychotic disorders, neurocognitive disorders, anxiety disorders, somatoform disorders, mood disorders, alcohol and substance abuse disorders, aggressive patients, patients experiencing a crisis or suicidal behavior, forensic cases, and psychopharmacology. The program was designed based on Australian and Canadian training programs for nurses that offered guidance on how to approach patients with mental disorders, depression, suicide attempt/ideation, anxiety disorder, acute psychosis, personality disorder, and thinking-process disorders, and particularly addressed triage, treatment, care, and discharge.[2,15] The program was carried out face-to-face using a PowerPoint (Microsoft Corp., Redmond, WA, USA) presentation. The presentation was followed by a discussion of clinical experiences alongside training topics. Algorithms nurses might use for assessment, lectures on relevant topics, and discussion periods were used to provide a comprehensive view of various aspects of emergency psychiatric care and the application of triage care.

The training program consisted of 10 segments. In the first session, the participants were informed about the purpose and scope of this research, and a pretest form was administered to provide data for a baseline evaluation and an assessment of the training. In the final session, the participants provided feedback on the program as a posttest measure. The posttest form was readministered 3 months after the training to gauge the effect over time. The entire program was completed in 19 hours over the course of a weekend (Saturday-Sunday, full-time). The Canadian Psychiatric Association advised that their training program on emergency psychiatric care should be provided within a period of approximately 20 hours.[2] The program was repeated on a regular basis over 5 weekends to ensure availability to the broadest possible audience. As a measure to increase participant motivation and training effectiveness, each participant who completed the course was given a certificate of attendance as well as a booklet and a guidebook as reference material for subsequent use.

The training program was conducted by one of the researchers of this study and was supervised by the other researcher of this study. Both have clinical experience (emergency department, intensive care, psychiatry clinic) at a training and research hospital, as well as academic experience.

### Measurement Tools

The study data were collected using an introductory knowledge form, a vocational knowledge evaluation form, and a training program evaluation form. The data collection tools were applied prior to training, post training, and 3 months after training using the pretest–posttest method.

### Introductory Knowledge Form

This form included questions to elicit the nurses' sociodemographic characteristics (age, gender, marital status, educational status, etc.), the length of time working in the profession, length of time working in the emergency department, work schedule, previous education in emergency psychiatric care, and the source of relevant education.

### Vocational Knowledge Evaluation Form

This form, comprising 11 items, was developed by the researchers based on the literature. The nurses were asked about their self-confidence and difficulty experienced providing care to patients with mental disorders,[15,16] job satisfaction and perception of workload,[3,17] their feelings (while giving care), thoughts (factors affecting difficulties, situations in which they experienced difficulties, opinions about provision of care, etc.), and attitude (including behaviors while providing care).[6,18] A 5-point, Likert-type scale was used to score 1 question related to each of the following: self-confidence, difficulties, job satisfaction and workload perception (1: I strongly disagree, 5: I strongly agree) and the average was calculated and evaluated.

### Training Program Evaluation Form

This form was prepared by the researchers in accordance with samples in the literature to evaluate the effect of the training on the knowledge level of the participant nurses.[18] This self-report form consisted of 32 items; each correct answer was given a score of 1 point, yielding a total possible score of 32. A higher total score indicated a greater level of knowledge.

Prior to the study, the content validity of the form was assessed and confirmed based on consultation with 6 experts in the field (professors in the Department of Psychiatric Nursing) using the Lawshe technique. The experts were asked to evaluate each item in terms of the clarity of the item, its suitability for its purpose, and its suitability for the target audience.[19] The form items were reviewed and revised as necessary based on feedback received from the subject matter experts. The content validity index of the final version of the form was >0.80 ($p<0.05$).

### Data Analysis

IBM SPSS Statistics for Windows, Version 22.0 software (IBM Corp., Armonk, NY, USA) was used to analyze the study data. Descriptive statistics (number, percentage, mean, SD, median) were used to summarize the findings. Variance analysis in repeated measurements was performed to compare the knowledge level of the nurses pretest, posttest, and retest 3 months after training. Variance analysis and a dependent samples t-test were used in repeated measurements and were also used to evaluate the effect of the training on the job satisfaction and workload perception of the participants. The Friedman test was used to assess the effect of the education on self-confidence and difficulty when providing care. The Bonferroni method was used to provide advanced analysis of the period (pretest, posttest, and 3 months after training) in which differences in knowledge and self-confidence were seen. The data were evaluated with a 95% confidence interval and statistical significance was set at $p<0.05$.

## Results

### Sociodemographic Characteristics

Of the nurses, 22 (73.3%) were female, 20 (66.7%) were single, 26 (86.7%) had a bachelor's degree, and 4 (13.3%) had a postgraduate degree. The mean age of the group was 28.53±4.77 years. The mean length of time the participants had been working in the profession and in the emergency department was 5.55±3.89 years and 4.57±3.83 years, respectively. In all, 96.8% of the nurses worked day and night shifts. More than half (56.7%) had previously received training on an emergency psychiatric approach, with some (40%) having received such training as part of their formal nursing education (Table 1).

### Knowledge Level, Job Satisfaction and Workload Perception, Self-Confidence, Difficulty Providing Emergency Psychiatric Care

The mean knowledge score recorded prior to training, post training, and 3 months after the training was 12.87±2.76, 21.27±2.83, and 19.47±3.80, respectively ($p<0.05$). The results

**Table 1. Sociodemographic characteristics of the emergency care nurses**

| Sociodemographic characteristics | Mean±SD | Min–Max | Median |
|---|---|---|---|
| Age (years) | 28.53±4.77 | 22–43 | 28 |
| Years in profession | 5.55±3.89 | 1–19 | 4 |
| Years in emergency department | 4.57±3.83 | 1–19 | 3 |
| | **n** | **%** | |
| Gender | | | |
| Female | 22 | 73.3 | |
| Male | 8 | 26.7 | |
| Marital status | | | |
| Single | 20 | 66.7 | |
| Married | 10 | 33.3 | |
| Educational status | | | |
| University graduate | 26 | 86.7 | |
| Postgraduate | 4 | 13.3 | |
| Work schedule | | | |
| Day work | 1 | 3.3 | |
| Day work/night duty | 29 | 96.7 | |
| Provision of care to emergency psychiatric patient | | | |
| Yes | 28 | 93.3 | |
| Education on emergency psychiatric approach | | | |
| Yes | 17 | 56.7 | |
| Source of education (if any) (More than 1 option may be selected.) | | | |
| Friend | 2 | 6.6 | |
| University class | 12 | 40.0 | |
| In-service training program | 2 | 6.6 | |
| Internet/book/magazine | 1 | 3.3 | |
| Total | 30 | 100 | |

Descriptive statistics. SD: Standard deviation.

demonstrated that the nurses' level of knowledge increased significantly in both measures recorded after the training when compared with the pre-training period (Bonferroni; p<0.05). The mean score reflecting their perception of job satisfaction was also higher in the immediate post-training assessment and 3 months after training compared with the pre-training level, but the difference was not statistically significant (p>0.05). The mean pre-training and post-training job workload perception scores were higher 3 months after receiving training, and the difference was statistically significant (p<0.05). The nurses' mean score reflecting self-confidence in providing care 3 months after training was significantly higher than the pre-training self-confidence score (p<0.05). The mean score indicating difficulty in providing care seen in both post-training measures was low, but the difference between these scores was not statistically significant (p>0.05) (Table 2).

## Emergency Nurses' Thoughts, Feelings, and Attitudes Toward Providing Care to Patients with Mental Disorders

### *Nurses' Thoughts*

While the factor nurses viewed as responsible for difficulty in providing care was frequently related to the patients in the pre-training period, notably, in the post-training and 3-month evaluation, the difficulty factors were most often related to the physical conditions of the emergency department.

The most frequent circumstances in which nurses experienced difficulty providing care were cases of a suicide attempt or suicidal ideation in the post-training period and aggression and risk of harm in the 3-month post-training assessment. In all 3 evaluation periods, most often, nurses stated that they had difficulty providing care to patients who spoke abusively to them or refused treatment.

Common initial reasons nurses provided as a source of difficulty when providing care, such as "it is very time consuming," "not knowing how to approach the patients," "feeling incompetent and lacking self-confidence," and "patients with physical injury complaints have priority," decreased in the immediate post-training and 3-month evaluation, while responses of a "lack of communication and cooperation with psychiatry professionals" and "I could get hurt" increased.

Before the training, 8 (20.6%) of the nurses responded that patients with mental health needs should be cared for in a "psychiatry clinic or specially designed emergency psychiatric unit," whereas, 3 months after the training, 14 (46.6%) of the nurses responded that these patients should be cared for in a "general emergency service by psychiatric care personnel or professionals who have received special training in this field, if there are appropriately secure waiting room conditions, there is an interview room, etc." (Table 3).

### *Nurses' Feelings*

The nurses reported that they felt the following emotions with the greatest frequency while providing care in each of the 3 periods. In the pre-training period, they most often indicated feeling anger, anxiety, and helplessness; in the period immediately following the training, they most often cited sorrow, anxiety, helplessness, and pity; and 3 months after the training, the most common responses were anxiety, fear, and helplessness (Table 3).

### *Nurses' Attitudes*

The overall attitude did not change significantly among the study participants. Notably, in all 3 periods, most of the nurses stated that that they hesitated to be in close proximity to patients when providing care (Table 3).

**Table 2. Emergency nurses' knowledge level, job satisfaction and workload perception, self-confidence, and difficulty providing emergency psychiatric care (n=30)**

| | Before training | Immediately after training | 3 months after training | F/t/$X^2$ | p/Bonferroni |
|---|---|---|---|---|---|
| | Mean±SD | Mean±SD | Mean±SD | | |
| Knowledge level | 12.87±2.76 | 21.27±2.83 | 19.47±3.80 | F=72.14 | .000* Pre<Post Pre<3 months after |
| Job satisfaction perception | 2.80±0.89 | 2.97±0.93 | 3.07±0.63 | F=1.173 | .317 |
| Job workload perception | 3.33±1.06 | 3.30±0.95 | 2.97±0.93 | t=2.483<br>t=2.163 | .019* (3 months after <Pre)<br>0.039** (3 months after <Post) |
| Self-confidence | 1.60±0.15 | 2.17±0.56 | 2.23±0.95 | X2=15.034 | .001* Pre<3 months after |
| Difficulty providing care | 3.63±1.00 | 3.43±1.01 | 3.27±1.11 | X2=1.100 | .340 |

*p<.001; **p<.05.

**Table 3. Emergency nurses' feelings, thoughts, and attitudes toward providing care to patients with mental disorders (n=30)**

| | Before training | Immediately after training | 3 months after training |
|---|---|---|---|
| Thoughts, n (%) | | | |
| Factors affecting difficulty providing care | | | |
| Related to the patients | 23 (76.6) | 17 (56.7) | 13 (43.3) |
| Related to the patients' relatives | 22 (73.3) | 21 (70.0) | 19 (63.3) |
| Related to physical conditions | 14 (46.6) | 21 (70.0) | 24 (80.0) |
| Situations where nurses had difficulty providing care | | | |
| Abusive speech | 26 (86.7) | 25 (83.3) | 25 (83.3) |
| Refusal of treatment | 27 (90.0) | 26 (86.7) | 25 (83.3) |
| Unresponsiveness, remains silent | 12 (40.0) | 13 (43.3) | 11 (36.7) |
| Patient skepticism | 13 (43.3) | 11 (36.7) | 17 (56.7) |
| Hallucinations/delusions | 15 (50.0) | 15 (50.0) | 19 (63.3) |
| Other | 3 (10.0) | 5 (16.7) | 2 (6.7) |
| Presentation circumstances that contributed to difficulty providing care | | | |
| Patient aggression/risk of harm to healthcare workers | 16 (53.3) | 15 (50.0) | 24 (80.0) |
| Suicide attempt, suicidal ideation | 13 (43.3) | 19 (63.3) | 15 (50.0) |
| Acute psychosis, manic episode | 12 (40.0) | 14 (46.6) | 9 (30.0) |
| Alcohol/substance abuse | 16 (53.3) | 10 (33.3) | 7 (23.3) |
| Conversion disorder | 3 (10.0) | 14 (46.6) | 3 (10.0) |
| Reasons nurses cited as contributing to difficulty providing care | | | |
| Provision of care takes a long time | 19 (63.3) | 15 (50.0) | 14 (46.6) |
| Insufficient knowledge of how to approach the patient | 18 (60.0) | 13 (43.3) | 10 (33.3) |
| Feeling incompetent | 15 (50.0) | 11 (36.6) | 4 (13.3) |
| Lack of self-confidence | 10 (33.3) | 7 (23.3) | 3 (10.0) |
| Opinion: "I could get hurt" | 19 (63.3) | 22 (73.3) | 24 (80.0) |
| Patients with physical injuries have priority | 18 (60.0) | 18 (60.0) | 16 (53.3) |
| Lack of communication with psychiatry professionals | 22 (73.3) | 25 (83.3) | 27 (90.0) |
| Lack of cooperation with psychiatry professionals | 26 (86.7) | 28 (93.3) | 27 (90.0) |
| Place where patients should be given care | | | |
| General emergency service | 7 (23.3) | 12 (40.0) | 14 (46.6) |
| Psychiatry clinic or specially designed emergency psychiatric unit | 8 (26.6) | 12 (40.0) | 10 (33.3) |
| Feelings, n (%) | | | |
| Emotions nurses felt while providing care | | | |
| Helplessness | 12 (40.0) | 10 (33.3) | 13 (43.3) |
| Anxiety | 15 (50.0) | 17 (56.7) | 21 (70.0) |
| Weakness | 9 (30.0) | 3 (10.0) | 5 (16.7) |
| Hopelessness | 3 (10.0) | 5 (16.7) | 3 (10.0) |
| Sorrow | 10 (33.3) | 18 (60.0) | 12 (40.0) |
| Pity | 5 (16.7) | 10 (33.3) | 9 (30.0) |
| Fear | 5 (16.7) | 9 (30.0) | 19 (63.3) |
| Anger | 16 (53.3) | 9 (30.0) | 3 (10.0) |
| Trust in others | 9 (30.0) | 1 (3.3) | 0 (0.0) |
| Self-confidence | 1 (3.3) | 6 (20.0) | 1 (3.3) |
| Pleasure | 2 (6.7) | 0 (0.0) | 0 (0.0) |
| Pride | 1 (3.3) | 0 (0.0) | 0 (0.0) |
| Peace | 2 (6.7) | 2 (6.7) | 1 (3.3) |
| Attitudes, n (%) | | | |
| Nurses' attitudes toward providing care | | | |
| There are times when I delay a visit to the patient | 6 (20.0) | 8 (26.7) | 7 (23.3) |
| There are times when I delay the patient's treatment | 4 (13.3) | 2 (6.7) | 3 (10.0) |
| I hesitate to be in close proximity to the patient | 20 (66.7) | 23 (76.7) | 24 (80.0) |
| I do not want to talk to the patient at all | 6 (20.0) | 6 (20.0) | 3 (10.0) |
| Sometimes I want to hurt a patient | 6 (20.0) | 6 (20.0) | 7 (23.3) |

## Discussion

This study examined the level of knowledge and the feelings, thoughts, and attitudes of emergency department nurses toward providing care to patients with mental disorders, their job satisfaction and workload perception, self-confidence, and views regarding difficulty providing care before and after receiving training about emergency psychiatric care.

The knowledge level measurement of the participants prior to the training was partially sufficient and increased significantly in the post-training period. There was a downward trend 3 months after the training ($p<0.05$) (Table 2). Similar results have been reported in other studies in the literature.[2,20] Yıldırım et al.[3] observed that nurses who had not received any special training on mental disorders had a partially sufficient level of knowledge and the authors recommended training on emergency psychiatric care. AlShibi and Hamdan-Mansour[21] concluded that the majority of the nurses in their study had a low level of knowledge of the psychological and physical signs and symptoms of psychological distress. Many researchers have reported a valuable increase in the level of knowledge among nurses after training about emergency psychiatric care.[11,20] One study in India noted that that a structured teaching program effectively improved emergency nurses' knowledge concerning the identification and management of psychiatric emergencies.[22] Reshetukha et al.[23] reported that emergency physicians demonstrated improved suicidal risk assessment skills after training and that the ability had been preserved 6 months later. In their study, Winokur, Loucks, and Rutledge[12] concluded that nurses' competence to care for patients with behavioral disorders in the emergency department increased significantly after a concentrated 7-hour conference. Hall et al.[6] observed that emergency nurses found training in trauma-informed care helpful; many noted a change in their own attitude toward mental illness and the importance of considering the possible association between past trauma and a patient's current illness.

The results of the current study also indicated that the training led to a higher level of knowledge. The opportunity to share personal experiences and engage in discussion that included how to use algorithms as a tool add to the effectiveness of training. Brunero et al.[15] suggested that supervised clinical experience, role play activities, and case scenarios can increase the benefits of mental health education programs for mental health professionals. The partial decrease in the level of knowledge 3 months after the training observed in our research may also be an important indicator that training programs should be conducted periodically, as has been noted in previous studies.[2]

It was a significant finding that the workload perception of the nurses was reduced in the 3-month post-training evaluation, suggesting that the training had a positive effect (Table 2). Broadbent et al.[17] also observed that training about psychiatric care and mental health triage improved workload perception. Regular training on issues such as aggressive patient management and involuntary hospitalization as well as review of policies and improvement of the physical environment of the emergency department are among the recommendations to improve immediate care.[24] Comprehensive training and support can reduce the perception of workload and increase a sense of capacity, competency, and confidence among nurses. A poor workload perception contributes to negative emotional effects and burnout. Although it was not statistically significant, a quantitative increase in the perception of job satisfaction between training periods was also seen in our study findings (Table 2).

Among other variables, the practice of patient boarding, holding psychiatric patients in the emergency department or other temporary locations after medical clearance, often a consequence of the reduction in psychiatric facilities and available beds, is a factor reported to have a negative effect on nursing job satisfaction.[9] Additional detailed research to examine the numerous influences on job satisfaction among emergency nurses concerning the provision of care to patients with mental disorders remains an urgent necessity.

This study also determined that the nurses felt self-confident when providing care to patients with mental disorders after the training, and that this sentiment was maintained 3 months later (Table 2). Similarly, it has been reported in the literature that emergency department nurses often did not feel self-confident regarding their approach toward caring for patients with mental disorders,[21,25,26] and that nurses' self-confidence increased after they had been given training.[26,27] Self-confidence is important to the professionalism of nurses and the development of their skills and their career, as well as to providing appropriate care in the emergency department. Enhanced training opportunities that support confidence will improve the quality of care and contribute to retention in the nursing field.

Several studies in the literature have also demonstrated that nurses frequently experienced difficulty providing care to patients with mental disorders.[3,10,11,21] The participants in the current study expressed similar challenges prior to the training, however, the results indicated decreased difficulty following additional education (Table 2). This finding could be particularly instructive, especially as a means to improve negative attitudes toward patients with psychiatric illness.

Thoughts are a means of sorting information to understand and interpret events and experiences. Elements such as incorrect or insufficient information or previous experiences can affect thoughts. Importantly, thoughts can trigger feelings, and feelings can direct action.[28] Attitude, on the other hand, is the organization of thoughts, feelings, and behavioral tendencies toward objects, events, and other people.[29] Attitude is not a directly observable feature; it is the integration of the components of thoughts, feelings, and behavioral tendencies. Thoughts, emotions, and attitude are associated with learning and can be influenced by education.[28,29] The effect of the training program implemented in this study on the

thoughts, feelings, and attitudes of the nurses is evaluated in Table 3.

Examination of the nurses' thoughts toward patients in emergency psychiatric care revealed that, while in the pre-training evaluation, the responses indicated that the difficulties they experienced in providing care to patients were most often related to the patients, the post-training responses were most frequently associated difficulties related to the physical conditions of the emergency department. Inadequate physical conditions in a general emergency department have been cited many times in the literature as an important factor that adds to the difficulty of providing care.[11,20,21] The nurses reported experiencing difficulty in providing care to patients who refused treatment, those who were abusive, and those with a presentation that included aggression, a suicide attempt, or suicidal ideation. These findings are consistent with other reports in the literature.[1,7,21,26] Our results suggest that the training provided contributed to adjusting negative thoughts and attitudes toward psychiatric patients, and improved nurses' ability to provide care, despite other limitations in the environment.

It has frequently been reported that emergency department nurses may have negative stereotypes about patients with mental health disorders[7,11,21,26,30,31] and believe that patients with physical injuries should have priority.[7,30] This kind of attitude, alongside already challenging conditions, contributes to the real and perceived difficulties of providing care to psychiatric patients. In the current study, the initial remarks of the nurses indicating that providing care takes a long time, feelings of not knowing how to approach psychiatric patients, feelings of a lack of competence and self-confidence, and opinions that patients with physical injuries should have priority diminished in importance. Observations that there was a lack of communication and cooperation with psychiatry professionals increased after receiving education related to emergency psychiatric care. This finding also shows that the training program had a positive effect on the thoughts of nurses regarding the possibilities for the provision of care to patients with mental disorders. The perception of insufficient cooperation and communication with psychiatry professionals may indicate the need for measures to foster greater team collaboration. The current study also found that the response of "I could get hurt" increased post training. This was an unexpected result, however, it may be related to a parallel increase in anxiety with increased knowledge.

In addition, we found that more nurses expressed the opinion that emergency psychiatric care could be performed in a general emergency service (an emergency room with psychiatric care personnel or persons who have received special training in this field, with a secure interview room and appropriate physical conditions) after training rather than the previous majority view that it should be performed at a psychiatry clinic or psychiatric emergency unit. Studies have shown that patients with mental disorders often prefer to seek immediate care at general emergency departments that have individual interview rooms in order to maintain their privacy and avoid stigmatization[1] rather than a psychiatric emergency unit.[30] The training appears to have provided some additional insight into the complex nature of emergency psychiatric care. The improved awareness concerning standards of care was evidenced by the view that "a general emergency service environment that is equipped according to the needs of the patient would be more appropriate." This will be important in terms of improving the quality of patient care and preventing stigmatization.

Our evaluation of nurses' feelings revealed anxiety and expressions of helplessness in all 3 time periods. Earlier feelings of anger/resentment before the training were largely replaced by feelings of sorrow and pity/compassion in the post-training period, as well as lingering feelings of fear 3 months after the training. Emergency nurses have expressed negative emotions about providing care to patients in previous studies.[16,21,31] Emergency nurses often suffer from stress[21,31] and feelings of helplessness[7] and hopelessness due to conditions such as repeated presentations,[30] feeling angry or professionally dissatisfied with regard to patients with substance abuse disorders,[16] limited empathy,[31] frustration with and fear of patients who may self-harm,[8,32] and feelings of despair,[32] sorrow, and anxiety.[3] However, the fact that the nurses in this study felt more sorrow, anxiety, and pity rather than anger after the training may indicate that they were ready to approach patients with a more empathetic perspective, and that they had developed an increased sensitivity toward giving care to patients with mental disorders, which demonstrates a positive effect of the training.

Literature studies of nurses' attitudes toward providing care to patients with mental disorders has noted that they may be more cautious and controlled[3] and avoid the provision of care until a crisis occurs.[11,26,32] Negative attitudes and behaviors toward patients with mental health issues,[11,31] ignoring physical illnesses,[7,30] and being reluctant to ask patients about substance abuse[16] have been reported. However, many studies have demonstrated that these attitudes can be improved with training.[8,31] AlShibi and Hamdan-Mansour[21] determined that there was a significant and positive correlation between nurses' knowledge and their skills regarding the management of patients in psychological distress. The behavioral tendencies expressed by the nurses reflect their general attitude. In this study, as in previous research, it was found that nurses often tended to avoid being close to patients in need of psychiatric care (Table 3). This finding, despite the increase in the knowledge level and positive thoughts of nurses, shows that the lasting attitude toward the patients did not change, and that it was difficult to transform nurses' knowledge into new behaviors and attitudes. A single educational intervention is not sufficient to substantially change attitude.[15,30] Clinical simulation methods using standardized patients may be more effective to effect a lasting change in nurses' attitudes.[2,33]

### Limitations

Sudden and unexpected situations arising due to the natural circumstance of an emergency department, as well as the fact that the training program was administered over weekends, may have influenced the rate of voluntary participation. The small number of participants in the study is an important limitation.

When the effect size was examined, it was determined that the Cohen d value was <0.2. However, in the literature it has been observed that even a d value of 0.2 can be considered a strong effect in a special situation.[34] Given that, to the best of our knowledge, there has been no similar study in Türkiye, this might be considered a special situation.

The inability to evaluate the Cronbach's alpha reliability coefficient of the forms developed by the researchers is also a limitation.

## Conclusion

The training program conducted with emergency department nurses in this study yielded positive impacts on the level of knowledge, workload perception, and the thoughts and feelings of the participants, as well as the provision of care to patients with mental disorders. While the nurses did comment that the training had a therapeutic effect, a lasting, positive change in nurses' attitudes was not observed in the final evaluation. These results reveal the necessity of providing comprehensive and regular training in emergency psychiatric care to emergency department nurses. A single training course was insufficient to effect lasting attitudinal change.

It is recommended that an appropriate training program that will serve to establish behavioral and attitudinal changes in nurses—and to improve quality of care—be widely implemented. A standard program administered nationally could be very beneficial. To ensure effectiveness, it is important that the training be conducted by professional mental health nurses and other professionals. A psychiatric consultation-liaison nursing service may also be helpful to change negative feelings, thoughts, and attitudes. Efforts to improve the understanding of emergency psychiatric care and the conditions of delivery could be of great benefit to nurses, patients, and society.

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