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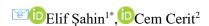
SHORT COMMUNICATION

**Expanded English Abstract** 

**Full Text of The Paper** 

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# A RESEARCH OF POST-TRAUMATIC STRESS AND DEPRESSION SYMPTOMS IN EMERGENCY AMBULANCE STAFF: DISTRICTS OF MERSIN CASE STUDY



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#### **Abstract**

**Objective:** Emergency ambulance staff is witnessing intense traumatic life events due to their profession. The aim of this study was to investigate the extent to which these testimony experiences affect their own lives psychologically by looking at the symptoms of post-traumatic stress and depression.

**Methods:** The sample of the study was composed of 59 ambulance staff consisting of 27 women and 32 men working in Mersin Emergency Health Services Stations. Personal Information Form, Occupational Information Form, Traumatic Stress Symptom Scale, Severity of Disability Scale and Beck Depression Scale were used as data collection tools. Descriptive analyzes are given mean, standard deviation and percentage. Mann Whitney U test, student t test, One- Way Anova test, chi- square test, pearson or spearman correlation analysis was used for data analysis.

**Results:** Diagnosis of traumatic stress disorder in ambulance workers with professional trauma experiences was 16.9%; depression symptoms rate was found to be in the mild, moderate, and severe range, at total of 47.4%. There was a significant positive correlation between the participant's Traumatic Stress Symptom subscales and total scores and Beck Depression Scale scores (p<0.05). Higher posttraumatic stress disorder and depression was found in women compared to man and also re-experiencing symptoms were higher in university graduates than in high school graduates.

**Conclusion:** The findings of the study showed that the ambulance staff showed traumatic stress and depression symptoms of their occupational trauma experiences. It is suggested that, adding preventive occupational counseling into the institutive strategy systems will be beneficial in order to prevent the traumatic stress and depression symptoms in ambulance staff.

**Keywords:** Ambulance staff, posttraumatic stress disorder, depression

# Introduction

Ambulance workers are constantly dealing with people who have received physical threats and who have been physically harmed. Although they are prepared for these sights, sounds and smells due to the nature of their work, they might be severely affected by the shocking things they have witnessed.<sup>1,2</sup> It is foreseen that they can easily develop PTSD due to repeated high stress situations outside of daily life which may cause

mental disorders.<sup>3–5</sup> In a literature review study, the rate of PTSD was found to be 20% and depression, anxiety and sleep problems were reported as a comorbid psychological problem.<sup>6</sup>

# **Objective**

This study examines the extent to which the traumatic events experienced by ambulance staff while at work affects their lives. It does this by looking at the symptoms of PTSD and depression, and in doing so it aims to contribute to the field by looking at the socio-demographic parameters that may be associated with PTSD and depression from an occupational point of view.

# **Study Subject**

The duty of the ambulance staff is to stabilize the traumatized person by protecting him/her from risks and to start treatment.<sup>7</sup> In doing so, they get information beforehand, predict the likelihood of occupational trauma, look at staff and equipment, and determine the training and experiences which have protective effects for their psychological health.<sup>8</sup> However, the stress of helping a traumatized person and indirectly witnessing that traumatic event imposes a stress on the help provider and brings with it some psychological risks.<sup>1</sup> The subject of our research is to determine these risks and to create information data for preventive studies.

### Methods

The research is in the category of observational research and is a descriptive research. 85 employees working at Mersin Emergency Health Services stations were contacted and 62 employees voluntarily participated in the study. Because the information given in the surveys of three people was insufficient, these were removed from the sample, and the data of the remaining 59 ambulance workers (27 women, 32 men) were evaluated. Personal Information Form, Occupational Information Form, Traumatic Stress Symptom Scale, Severity of Disability Scale and Beck Depression Scale were used as data collection tools. The data were evaluated in SPSS 21.0 program and the findings were presented.

## **Results and Discussion**

The diagnosis rate of traumatic stress disorder was found to be 16.9% in ambulance workers with occupational trauma experiences. The mean PTSD score was 17% for women and 10.47% for men. The mean score of PTSDs seen in women is consistent with literature studies and shows that women are at greater risk of PTSD development.

The subscale of the Traumatic Stress Symptom Scale had higher recurring symptoms among university graduates than high school graduates.

In the participants, 20.3% mild, 23.7% moderate, and 3.4% severe depression symptoms were reported. When the total score of depression was compared with the population and demographic data of the participants, the depression symptom rate of 14.70% in women and 8.78% in men was consistent with the literature studies. The study shows that female ambulance staff are at risk of developing depression in addition to PTSD.

There was a positive correlation between the subscales and total score of the traumatic stress symptoms scale and the Beck Depression Scale score (p<0.05). Participants who showed symptoms of PTSD also had high depression symptom scores. This finding is consistent with the literature where the most common disorder accompanying PTSD is major depression.

# **Conclusion and Suggestions**

With this study it is possible to say that ambulance workers have occupational risks by looking at the positive correlation between traumatic stress and depression symptoms in ambulance workers. Because female ambulance workers have a higher risk of developing PTSD and concomitant depression, it is recommended that informative, protective and preventive studies are developed and methods that differ according to gender are developed. It is necessary to put training in place, and to offer professional counseling and psychological debriefing, support groups, which can protect ambulance employees from PTSD and depression, increase

mental stamina, and strengthen stress and emotion management skills. The university education curriculum of health personnel such as EMT, paramedics, nurses, and doctors should include stress management, knowledge of occupational burnout, PTSD, depression, and occupational risk factors and should give guidance taking the necessary protective measures.<sup>2</sup>

### References

- 1. Herman J. Travma ve İyileşme. Literatür Yayıncılık; 2011.
- 2. Figley CR. Compassion fatigue as secondary traumatic stress disorder: An overview. Compassion fatigue Coping with Second Trauma Stress Disord those who treat traumatized. 1995;(September):1-20.
- 3. Yeşil A. 112 Acil Sağlık Hizmetlerinde Çalışan Sağlık Çalışanlarında Ruhsal Travma ve İlişkili Sorunların Yaygınlığı. *Uzm Tezi, Kocaeli Üniversitesi Sağlık Bilim.* 2010.
- 4. Baysak E. Acil Ve Yoğun Bakım Çalışanlarında Travma Sonrası Stres Bozukluğu. 2010.
- 5. Jonsson A. Post-traumatic stress among Swedish ambulance personnel. Emerg Med J. 2003;20(1):79-84. doi:10.1136/emj.20.1.79
- 6. Smith A, Roberts K. Interventions for post-traumatic stress disorder and psychological distress in emergency ambulance personnel: a review of the literature. *Emerg Med J.* 2003;20(1):75-78. doi:10.1136/emj.20.1.75
- 7. Sukayar E. Paramedik Mesleğini Tanıyalım. https://www.acilcalisanlari.com/paramedik-meslegini.html. Published 2018.
- 8. Dyregrov A, Kristoffersen JI, Gjestad R. Voluntary and professional disaster-workers: Similarities and differences in reactions. *J Trauma Stress*. 1996;9(3):541-555. doi:10.1002/jts.2490090310