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## Workplace violence frequency and relationship of violence with life quality, life satisfaction and job satisfaction in healthcare professionals in psychiatry clinics in Konya province

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### Abstract

It was aimed to determine the frequency of exposure to violence and the effect of violence on the quality of life, job satisfaction, life satisfaction, depression, and anxiety levels of mental healthcare professionals. Mental healthcare doctors and nurses in Konya city center hospitals were included in the research. Data collection tools were a sociodemographic data form, Professional Quality of Life Scale (ProQOL R-IV), Minnesota Satisfaction Questionnaire (MSQ), Satisfaction with Life Scale (SWLS), Beck Depression (BDI), and Beck Anxiety Inventory (BAI). One-hundred-twenty-one mental health professionals, 74 (61.2%) female and 47 male (38.8%) were included in the study. Throughout their professional life, 67.7% of them has been subjected to verbal violence, 38.9% to physical violence, 12.4% to sexual violence. In 54.5% of these incidents, the patient and his companion used violence together. Negative subscale scores of ProQOL R-IV were higher and the positive subscale score was lower in those who were exposed to violence. In the group exposed to violence, scores of all subscales of MSQ and total scores of SWLS ( $p = 0.01$ ) were lower, while BAI ( $p = 0.012$ ) and BDI scores were higher ( $p = 0.015$ ). A significant positive correlation was found between exposure to violence and intrinsic job-satisfaction ( $p = 0.001$ ), life satisfaction ( $p = 0.005$ ), depressive symptoms ( $p = 0.016$ ) and anxiety symptoms ( $p = 0.004$ ). Working conditions and workplace violence against mental health professionals in Konya city center negatively affect the life satisfaction, job satisfaction and mental health of mental health professionals.

**Keywords:** Mental health, violence, life satisfaction, job satisfaction, quality of life

### Introduction

Violence is defined as the purposeful application of physical coercion, use of force or threat against oneself, another person or a group that may lead to death, injury, mental injury, developmental disorder by the World Health Organization (WHO) [1]. Violence has become an important public health problem threatening public peace in health institutions and hospitals, as in many sectors. Violence in health institutions is defined as "the situation that comes from the patient, patient companions or any other person, that poses a risk to the healthcare worker, and consists of threatening behavior, verbal threat, physical assault and sexual

assault" [2]. In many studies, it has been reported that working in health institutions increases the risk of encountering violence 4 to 16 times compared to other professions [2-4]. Unfortunately, the frequency of violence against healthcare workers is increasing all over the world [5].

Many studies have been conducted in Turkey and abroad on violence against healthcare professionals. The results of these studies are inconsistent due to the perpetrators of violence, their causes and consequences, the lack of reporting, and the lack of investigative efforts by governing bodies [6]. As the common points of the findings obtained from the studies; it can be said that the violence that occurs in the field of health is much more than in other workplaces, only serious incidents such as injuries are perceived as violence, other types of violence are generally not reported and recorded [7-8].

Among the important risk factors, it can be said that the patient

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and patient attendants have high expectations about treatment, they want their patients to be taken care of more quickly because they think that their patients are more urgent than others, and they have doubts about the regularity of work in the hospital [9]. Other factors that increase the risk of violence include the insufficient number of health and security personnel, workload, working in an overcrowded environment, lack of training of healthcare professionals on dealing with violence, and communication problems [10].

In the literature, violence prevalence rates in health centers vary among countries. For example; The prevalence of violence in hospitals in Thailand was reported to be 54%, and 70% in Morocco [6]. According to a large national study reporting 12-month prevalence of verbal, written or physical violence in Australia's national medical practice, 70.6% of 9951 Australian doctors were subjected verbal / written violence and 32.3% were subjected physical violence in the last 12 months [11]. A recent systematic review and meta-analysis conducted in Australia has shown that approximately 1 to 172 of every 10,000 applications made to the emergency department are subjected to violence by healthcare workers and 44% of these occur in cases of drug and alcohol toxicity [12]. The methods and results of the studies are quite heterogeneous, making it difficult to compare between countries [6].

When we look at the results of research on violence in health in our country, it was reported that the verbal violence rates exposed in many different studies are between 46.7% and 100%; the rates of physical violence ranged from 1.8% to 52.5%, and sexual violence ranged from 1.1% to 73% [3]. It has been reported that violence in health centers occurs most frequently in emergency services and secondly in psychiatry clinics [8,13].

Some negative consequences arise as a result of the violence that healthcare workers are exposed to. Mental problems, some of which can become chronic, such as impaired quality of life and job satisfaction, exhaustion, depression and anxiety can be observed [4]. In addition, researchers warned that violence in the workplace can have serious negative consequences not only for employees, but also for patients and employers [14]. In summary, workplace violence affects production in employees, increases professional mistakes, decreases motivation, and negatively affects professional satisfaction, performance and quality of life [15].

In order to take protective precautions against the violence that mental health professionals are exposed to, it is important to have awareness of the frequency, form and consequences of violence. Therefore, in this study, it was aimed to determine the frequency of physical, verbal and sexual violence that physicians and nurses in psychiatry clinics of hospitals in Konya city center are exposed to. Also we aimed to examine the effects of violence on mental health professionals depression, anxiety, quality of life, life satisfaction and job satisfaction.

## Material and Methods

### Study protocol

Medical staff (physicians and nurses) working in psychiatry inpatient and outpatient clinics in Konya city center hospitals for

at least one year were included in the study after their voluntary consent. Mental health professionals who did not agree to participate in the study and/or could not complete the research scales on the same day were excluded from the study. They were asked whether they were subjected to any kind of violence from patients or patients' companions during their professional life in psychiatry, and their replies were recorded on the personal information form. We asked them to fill in the Professional Quality of Life Scale (ProQOL R-IV), the Minnesota Satisfaction Questionnaire (MSQ), the Satisfaction with Life Scale (SWLS), Beck Depression Inventory (BDI) and Beck Anxiety Inventory (BAI). The scales were given to the participants and collected back on the same day. A total of 137 healthcare workers were reached between July 2020 and December 2020, but the data of 121 healthcare professionals who completed all the scales and agreed to participate in the study were statistically analyzed in the study. Approval for the study was obtained from the KTO Karatay University Faculty of Medicine, Pharmaceuticals and Non-Medical Devices Research Ethics Committee. Written informed consents of the subjects were obtained after the entire study protocol was explained. Researchers have taken care to act in accordance with ethical principles.

### Data collection tools

#### Sociodemographic Data Form

It is prepared by the researchers. Some clinical features, such as their age, gender, educational status, marital status, economic level, whether they had a psychiatric illness in the past, the units they work in, the daily working hours (8 hours or more), whether they have nightshifts, and whether they were subjected to verbal, physical and sexual violence, were questioned and recorded with this form.

#### Professional Quality of Life Scale (ProQOL R-IV)

The scale was developed by Stamm (2005) and its Turkish validity and reliability study was conducted [16,17]. It consists of three subscales: Compassion Satisfaction positive subscale score; Burnout and Compassion Fatigue negative subscale scores. It is a five-point Likert-type, in-line, 30-item scale.

#### Minnesota Satisfaction Questionnaire (MSQ)

It is a five-point Likert-type scale consisting of 20 items in total. It was developed by Weiss, Dawis, England, and Lofquist (1967) to measure job satisfaction [18]. Total satisfaction, intrinsic and extrinsic satisfaction scores are obtained from the scale. The Turkish validity and reliability study of the scale was conducted [19].

#### Satisfaction with Life Scale (SWLS)

It was developed by Diener, Emmons, Laresen, and Griffin (1985) [20]. The scale, which aims to measure general life satisfaction, is suitable for all ages from adolescents to adults. The Turkish validity and reliability study of the scale was conducted by Dağlı and Baysal [21].

#### Beck Depression Inventory (BDI)

It was developed by Beck et al. To evaluate the level of depressive symptoms [22]. The high total score in this test indicates the severity of the depression level. The cut-off score was determined

as 17 in this test, for which validity and reliability studies were conducted for Turkish society [23].

### Beck Anxiety Inventory (BAI)

It is a scale developed to determine the level of anxiety in patients [24]. The validity and reliability study of the scale in our country was conducted by Ulusoy et al. In 1998 [25]. Beck Anxiety Inventory (BAI) evaluates the frequency of anxiety symptoms experienced by the individual. It is a self-rating scale scored between 0 and 3, consisting of 21 items. The higher the total score, the higher the anxiety experienced by the person.

### Statistical Analysis

SPSS 21.0 (Statistical Package for Social Sciences) package program was used for the statistical evaluation of the data. Percentage distributions mean and standard deviations of the data are given as descriptive statistics. Whether the numerical variables conformed to the normal distribution was examined with the One-sample Kolmogorov Smirnov test and it was observed that the data were not normally distributed. Chi-square test was used to compare categorical variables between independent groups, and Mann-Whitney U test was used to compare continuous variables. Correlation coefficients for relationships between variables were

calculated by Spearman correlation test. The predictive power of violence and other independent factors (whether having nightshifts and working hours) on dependent factors were determined by linear regression analysis. In all tests,  $p < 0.05$  was accepted as the statistical significance level.

### Results

A total of 121 mental health workers were included in the study, with an average age of  $34.97 \pm 6.44$  years, including 74 (61.2%) women and 47 men (38.8%) of the four health institutions located in Konya city center. 46(38%) of the mental health workers were physicians and 75(62%) were nurses. Their average education period was  $17.27 \pm 3.28$  years, and their average duration in the profession was  $11.1 \pm 7.49$  years. Sixty-one of the employees were married (50.4%). Details of the sociodemographic data are given in Table 1 (Table 1). Health workers who were exposed to violence were similar to those who were not exposed to violence in terms of age ( $p = 0.500$ ), education ( $p = 0.977$ ), occupation ( $p = 0.674$ ), duration in the profession ( $p = 0.223$ ), and past psychiatric illness ( $p = 0.061$ ). Women were exposed to more violence ( $p = 0.01$ ). Those who were exposed to violence had more daily working hours ( $p = 0.001$ ) and had nightshifts ( $p = 0.000$ ).

Throughout their professional life, mental health professionals

**Table 1.** Descriptive characteristics of mental health professionals

	No Violence (n=33, 27.3%)	Violence (n=88, 72.7%)	Total (s=121)	p
<b>Gender (n, %)</b>				
Female	14 (42.4)	60 (68.2)	74 (61.2)	.010
Male	19 (57.6)	28 (31.8)	47 (38.8)	
<b>Age (mean±sd)</b>	35.61±5.94	34.74±6.63	34.97±6.44	.500
<b>Education period (mean±sd)</b>	17.06±3.68	17.35±3.14	17.27±3.28	.977
<b>Marital status (n, %)</b>				
Single	21 (63.6)	39 (44.3)	60 (49.6)	.058
Married	12 (36.4)	49 (55.7)	61 (50.4)	
<b>Duration in the profession (years) (mean±sd)</b>	12.35±8.15	10.6±7.2	11.1±7.49	.223
<b>Profession (n, %)</b>				
Physician	11 (33.3)	35 (39.8)	46 (38)	.674
Nurse	22 (66.7)	53 (60.2)	75 (62)	
<b>Past psychiatric illness (n, %)</b>				
No	23 (69.7)	76 (86.4)	99 (81.8)	.061
Yes	10 (30.3)	12 (13.6)	22 (18.2)	
<b>Daily working hours (n, %)</b>				
8 hours	27 (81.8)	45 (51.1)	51 (42.1)	.001
More than 8 hours	6 (18.2)	43 (48.9)	70 (57.9)	
<b>Nightshifts (n, %)</b>				
No	19 (57.6)	10 (11.4)	29 (24)	.000
Yes	14 (42.4)	78 (88.6)	92 (76)	

frequently encountered verbal violence (67.7%, n = 82). Most of the severity of exposure was done by patients and their companions together (55%, n = 48). Detailed features of the violence suffered by mental health professionals are given in table 2.

**Table 2.** Characteristics of violence suffered by mental health professionals

Number of violence exposed (n, %)	
No violence	33 (27.3)
One time	60 (49.6)
More than one	28 (23.1)
Type of violence (n,%)	
Verbal violence	82 (67.7)
Physical violence	47 (38.9)
Sexual violence	15 (12.4)
Perpetrator of violence (n, %)	
Patient	21 (23.9)
The relatives of the patient	19 (21.6)
Patient's companion together	48 (54.5)

The healthcare workers exposed to violence had higher scores of burnout ( $p = 0.000$ ) and compassion fatigue ( $p = 0.024$ ), which are negative subscales of the ProQOL R-IV, and lower scores of compassion satisfaction, which is a positive subscale ( $p = 0.008$ ). BAI score ( $p = 0.012$ ) and BDI scores were higher in those exposed to violence ( $p = 0.015$ ). The total and all subscale scores of the MSQ scale were lower in healthcare workers who were exposed to violence than those who were not exposed to violence ( $p < 0.05$ ). The comparison of the groups is given in table 3.

A correlation analysis was performed with independent variables that differ between groups exposed to violence and those who didn't and may influence dependent variables (Table 4). In this analysis, the relationship between violence and other potential confounders (daily working hours, nightshifts), which were significantly different in those exposed to violence, was examined using logistic regression. In this model, after controlling the effects of other independent variables with regression analysis, it was calculated that exposure to violence was a predictor of intrinsic satisfaction, satisfaction with life, depression, and anxiety scores (Table 5).

**Table 3.** Comparison of the mental health professionals who were subjected to violence with those who were not subjected to violence in terms of scale scores used in the study

	No Violence (n=33, 27.3%)	Violence (n=88, 72.7%)	U ; p
<b>ProQOL R-IV (mean±sd)</b>			
Compassion satisfaction	32.03±5.02	27.87±8.23	971.5; 0.008
Burnout	15.79±4.45	22.3±8.69	693.5; 0.000
Compassion fatigue	12.36±6.76	17.37±10.03	1039; 0.024
<b>MSQ (mean±sd)</b>			
Intrinsic satisfaction	3.72±0.35	2.82±0.96	559; 0.000
Extrinsic satisfaction	3.37±0.47	3.01±0.59	838; 0.001
Total satisfaction	5.97±1.87	4.09±1.65	647; 0.000
<b>SWLS (mean±sd)</b>	22.88±4.38	19.39±6.38	1009.5; 0.010
<b>BDI (mean±sd)</b>	7.21±5.75	11.27±8.85	1033.5; 0.015
<b>BAI (mean±sd)</b>	7.0±5.29	12.55±10.44	1023; 0.012

ProQOL R-IV: Professional Quality of Life Scale, MSQ: Minnesota Satisfaction Questionnaire, SWLS: The Satisfaction with Life Scale, DBI: Beck Depression Inventory, BAI: Beck Depression Inventory, U: Mann-Whitney U test

**Table 4.** Correlation values between scale scores in the study and independent factors

	ProQOL R-IV			MSQ			SWLS	BDI	BAI
	Compassion Satisfaction	Burnout	Compassion Fatigue	Intrinsic Satisfaction	Extrinsic Satisfaction	Total Satisfaction			
<b>Violence</b>	-.125	.316**	.149	-.369**	-.347**	-.334**	-.198*	.237**	.263**
<b>Daily working hours</b>	.131	.008	-.044	.095	.235**	.260**	.125	-.062	.039
<b>Nightshifts</b>	-.220*	.301**	.190*	-.355**	-.238**	-.379**	-.164	.097	.074

ProQOL R-IV: Professional Quality of Life Scale, MSQ: Minnesota Satisfaction Questionnaire, SWLS: The Satisfaction with Life Scale, DBI: Beck Depression Inventory, BAI: Beck Depression Inventory, \*\* $p < .01$ , \* $p < .05$

**Table 5.** Multiple linear regression analysis with dependent variables exposure to violence

	$\beta$	Standard error	t	p
<b>ProQOL R-IV</b>				
<b>Burnout</b>	2.152	1.630	1.320	.190a
<b>MSQ</b>				
<b>Intrinsic satisfaction</b>	-.530	.149	-3.551	.001a
<b>Extrinsic satisfaction</b>	-.431	.174	-2.472	.540b
<b>Total satisfaction</b>	-.937	.507	-1.848	.068b
<b>SWLS</b>	-3.492	1.206	-2.895	.005
<b>BDI</b>	4.061	1.662	2.444	.016
<b>BAI</b>	5.545	1.907	2.909	.004

ProQOL R-IV: Professional Quality of Life Scale, MSQ: Minnesota Satisfaction Questionnaire, SWLS: The Satisfaction with Life Scale, BDI: Beck Depression Inventory, BAI: Beck Depression Inventory, \*\*p<.01, \*p<.05, a Assessment in stepwise multiple linear regression analysis was calculated excluding having nightshift status, b Assessment in stepwise multiple linear regression analysis was calculated excluding having nightshift status and daily working hours.

## Discussion

In this study, it was aimed to investigate the frequency of exposure to violence, the effect of violence on quality of life, job satisfaction, life satisfaction, and depressive and anxiety symptoms of mental health professionals working in Konya city center. It has been found that exposure to violence in mental health professionals reduces intrinsic professional satisfaction and life satisfaction and causes an increase in depressive and anxious symptoms.

Although the results of the study investigating the relationship of violence in Turkey with the sociodemographic and professional characteristics of health workers differed according to the provinces, these studies reported that the vast majority of health workers who were subjected to violence were woman, nurse, at the beginning of their profession and had shorter duration of education [8]. As a result of our study, the group exposed to violence was similar to the group not exposed to violence in terms of sociodemographic and occupational variables except female gender. Our result that female healthcare workers were exposed to violence more frequently was consistent with the literature [1,26]. It has been reported that especially young women with a small physical builds and who look anxious are considered an easier target than men, It has been argued that our patriarchal social structure causes women to be more sensitive to their reactions, and for these reasons women are exposed to violence more frequently [26,27]. Consequently, considering the risk of female mental health professionals to be more exposed to violence, it may be suggested to arrange their working conditions accordingly. We may not have found any difference between the groups in terms of other socio-demographic and mentioned occupational variables due to the small sample size. We suggest investigating the relationship between these variables and violence in a larger sample.

It was found that 73% of physicians and nurses working in the field of mental health in Konya city center were exposed to violence at least once during their career. This result was consistent with the results of both national and international studies conducted with mental health professionals [13,28-30]. In terms of the type

of violence, the frequency of verbal violence was the highest, consistent with the literature [30]. It has been argued that verbal violence is ignored more than physical violence and the complaint is not reported to official authorities, considering that it will not work [8,31]. Verbal violence is the most common but least reported type of violence [31]. Considering that verbal violence should not be ignored in terms of its negative effects and it causes negative psychological consequences such as physical violence on employees, it was stated that verbal violence reports are also important, and it was recommended to impose criminal sanctions on the person who committed verbal violence [32].

While patients constitute 23.9% of the perpetrators in our study; we found that patients and their companions were together in 54.5% of the violence applied. It has been suggested that it may be caused because the family structure of the people living in Turkey has not yet been transformed from the traditional to nuclear family structure [33]. When a family member becomes ill, all family members going to the hospital together, and the failure to inform companions about the diagnosis and treatment process may have caused the perpetrators to become companions of the patients. For this reason, it is recommended that patients be treated separately from their companions and the attendants should be informed about how the treatment will be and how long it will take [33].

Although there is a difference between mental health workers who were exposed to violence and mental health workers who were not exposed to violence in terms of all sub-dimensions of ProQOL R-IV (compassion satisfaction, burnout, compassion fatigue), as a result of the regression analysis, none of the sub-dimensions of the ProQOL R-IV score were affected by exposure to violence. Unlike our study, in the study conducted by Copeland et al. with emergency room workers, it was reported that all subscale scores of ProQOL R-IV are associated with exposure to violence in the workplace [34]. Itzhaki et al. found that most mental health nurses were exposed to physical and verbal violence, but they could not find a direct link between the ProQOL R-IV subscales and the workplace violence they were exposed to, and reported that their quality of life was associated with work stress rather than

workplace violence [35]. They explained that one of the reasons for this surprising result may be that mental health professionals see workplace violence as a part of their work and show a social tolerance to it [35]. In addition, the effects of working conditions such as having shift works and long working hours on the quality of life of employees can not be ignored [35]. In conclusion, when the effects of other independent factors (duration of working hours and whether having nightshifts) were removed, being exposed to violence was not impactful on the scores obtained from the ProQOL R-IV scale. This result is not compatible with the hypothesis we established while planning the research. In future studies in this area, it is recommended to investigate the relationship between violence and ProQOL R-IV subscale scores in a sample where other potential confounding factors are similar between groups.

Intrinsic satisfaction, which is one of the sub-scales of the MSQ scale; success depends on the internal characteristics of the job, such as recognition or appreciation, the job itself, job responsibility, job change due to promotion and promotion [18]. In our research, we found that violence negatively affects intrinsic satisfaction. This result is compatible with the literature [36]. A mental health worker who is subjected to violence can not experience intrinsic satisfaction. It may be that mental health professionals perceive the process of violence as not being appreciated and not seeing oneself successful. Extrinsic satisfaction, another sub-scale of MSQ, consists of elements related to the environment of the work such as corporate policy and management, mode of control, manager, relations with colleagues, working conditions, and salary [18]. In accordance with this definition, the effect of job-related conditions on the extrinsic satisfaction subscale of MSQ was also seen in our research. It is expected that having nightshifts and duration of daily working hours have an impact on extrinsic satisfaction as well as exposure to violence. We found that when these confounding factors were disabled in our sample, level of extrinsic satisfaction is not affected with violence. In an other study conducted by Itzhaki et al., it was found that the life satisfaction of mental health nurses is more affected by other factors such as work stress and staff resilience than workplace violence [13]. In this respect, our results are similar to the results of this research. In this respect, we would like to point out that improving working conditions is as important as protecting mental health professionals from violence to increase their professional satisfaction.

Life satisfaction is one of the most important indicators of individuals' well-being and constitutes the cognitive dimension of subjective well-being [20]. As a result of our study, in accordance with the literature, life satisfaction in mental health workers decreased in those who were exposed to violence at work [8]. A decrease in life satisfaction causes both a decrease in professional productivity and a tendency to mental illnesses [13,28,37]. Violence is a risk factor for many mental illnesses, including post-traumatic stress disorder, acute stress disorder, adjustment disorder, anxiety disorders, and depression [6,38-40]. Having a mental illness may predispose to developing a mental illness after violence [1]. There was no difference between mental health professionals who were exposed to violence and those who were not, in terms of having a history of mental illness in the past. Consistent with the literature, mental health workers exposed to workplace violence had more depression and anxiety symptoms. As a result, we would like to emphasize once again the importance of preventing violence in

the workplace in terms of increasing the life satisfaction of mental health professionals and protecting their mental health.

The results of this study are based on a cross-sectional study conducted in mental health units in health institutions in Konya. Although the whole sample was tried to be accessed, mental health professionals who could not complete the study on the same day due to their workload and did not agree to participate in the study could not be included in the study. For these reasons, we can not generalize our results to all mental health professionals in our country. In addition, this research includes the limitations of cross-sectional studies. Another limitation of the study is that some confounding factors such as working conditions (such as relationships with the supervisor and colleagues in the workplace) and social lives of the mental health professionals participating in the study that may have an effect on the dependent variables of this study are not questioned. It is recommended to include these issues in future research in this area. Despite these limitations, we think that our study will contribute to the literature in terms of drawing attention to the violence experienced by mental health professionals working in Konya, making plans for taking precautions and providing data.

As a result, workplace violence against employees in mental health centers in Konya city center is common. Particularly women are exposed to this violence more frequently. This situation negatively affects the life satisfaction, job satisfaction and mental health of mental health professionals. This situation should be taken into account when planning health policies to reduce and prevent violence, and strategies should be developed and implemented. In order to determine the impact of workplace violence on mental health professionals, it is recommended to conduct multi-center studies with larger samples and consider the effects of possible confounding factors.

#### **Conflict of interests**

*The authors declare that they have no competing interests.*

#### **Financial Disclosure**

*All authors declare no financial support.*

#### **Ethical approval**

*The experimental protocol was approved based on the ethical standards of the Declaration of Helsinki. To conduct this study, the required permission and consent was obtained from the Karatay University Medicine and Non-Medical Device Research Ethics Committee (Approval number: 24/06/2020-E.2101).*

#### **References**

1. World Health Organization. Violence and Health: Task Force on Violence and Health. Cenevre, WHO, 1998.
2. Elliott PP. Violence in health care. *J Nurs Manag.* 1997;28:38-42.
3. Özcan NK, Bilgin H. Türkiye'de Sağlık Çalışanlarına Yönelik Şiddet: Sistemik Derleme. *Türkiye Klinikleri J Med Sci.* 2011;31:1442-56.
4. Çelebi İ. Çanakkale 112 acil sağlık hizmetleri istasyonlarında görev yapan sağlık çalışanlarının şiddetle karşılaşma durumu ve bu durumun tükenmişlik sendromu üzerine etkisi. *Hastane Öncesi Dergisi.* 2016;1:1-13.
5. Wyatt R, Anderson-Dreves K, Van Male LM. Workplace violence in health care: a critical issue with a promising solution. *JAMA.* 2016;316:1037-38.
6. Nowrouzi-Kia B, Chai E, Usaba K, et al. Prevalence of type II and type III workplace violence against physicians: a systematic review and meta-analysis. *Int J Occup Environ Med.* 2019;10:99-110.
7. Gates DM. Workplace violence. *AAOHN J* 1995;43:536-543.

8. Annagür B. Sağlık çalışanlarına yönelik şiddet: risk faktörleri, etkileri, değerlendirilmesi ve önlenmesi. *Current Approaches in Psychiatry*. 2010;2:161-73.
9. Atan ŞÜ, Dönmez S. Hemşirelere Karşı İşyeri Şiddeti. *Adli Tıp Dergisi*. 2011;25:71-80.
10. Çamcı O, Kutlu Y. Kocaeli'nde sağlık çalışanlarına yönelik işyeri şiddetinin belirlenmesi. *Psikiyatri Hemşireliği Dergisi*. 2011;2:9-16.
11. Hills DJ, Joyce CM, Humphreys JS. A national study of workplace aggression in Australian clinical medical practice. *MJA* 2012;197:336-40.
12. Nikathil S, Olaussen A, Gocentas RA, et al. Review article: workplace violence in the emergency department: a systematic review and meta analysis. *EMA*. 2017;29:265-275.
13. Itzhaki M, Peles-Bortz A, Kostistky H, et al. Exposure of mental health nurses to violence associated with job stress, life satisfaction, staff resilience, and post-traumatic growth. *Int J Ment Health Nurs*. 2015;24:403-412.
14. Gates DM, Gillespie GL, Succop P. Violence against nurses and its impact on stress and productivity. *Nurs Econ*. 2011;29(2):59-66.
15. Milet M, Yanık A. Sağlık çalışanlarına karşı işyeri şiddeti. *Uluslararası Sağlık Yönetimi ve Stratejileri Araştırma Dergisi*. 2017;3:25-36.
16. Stamm BH. *The ProQOL manual: The Professional Quality of Life Scale: Compassion Satisfaction, Burnout and Compassion Fatigue/ Secondary Trauma scales*. Pocatello: Idaho State University and Sidran Press; 2005
17. Yeşil A, Ergün Ü, Amasyalı C, et al. Çalışanlar İçin Yaşam Kalitesi Ölçeği Türkçe Uyarlaması Geçerlik ve Güvenilirlik Çalışması. *Noro Psikiyatrs Ars*. 2010;47:111-17.
18. Weiss DJ, Dawis RV, England GW, et al. *Manual for the Minnesota Satisfaction Questionnaire*. Minneapolis, MN: University of Minnesota Industrial Relations Center, 1967.
19. Baycan FA. Farklı gruplarda çalışan gruplarda iş doyumunun bazı yönlerinin analizi. Ph.D. thesis, Boğaziçi University, İstanbul, 1985.
20. Diener E, Emmons RA, Larsen RJ, et al. The Satisfaction with Life Scale. *J Pers Assess*. 1985;49:71-75.
21. Dağlı A, Baysal N. Yaşam doyumunu ölçeğinin Türkçe'ye uyarlanması: geçerlik ve güvenilirlik çalışması. *Electronic J Social Sci*. 2016;15:1250-262.
22. Beck AT, Ward C, Mendelson M. Beck depression inventory (BDI). *Arch Gen Psychiatry*. 1961;4:561-71.
23. Hisli N. Beck Depresyon Envanteri'nin geçerliliği üzerine bir çalışma. *Psikoloji Dergisi*. 1988;6:118-122.
24. Beck AT, Epstein N, Brown G, et al. An inventory for measuring clinical anxiety: Psychometric properties. *J Consult Clin Psychol* 1988;56:893-97.
25. Ulusoy M, Şahin N, Erkmen H. Turkish version of the Beck Anxiety Inventory: Psychometric properties. *J Cogn Psychother*. 1998;12:28-35.
26. Oğuz M, Sayın E, Gürses D. Violence against health employees in a child health and diseases clinic: A tertiary-level hospital example. *Turk Pediatri Ars*. 2020;55:117-23.
27. İlhan MN, Çakır M, Tunca MZ, et al. Toplum gözüyle sağlık çalışanlarına şiddet: nedenler, tutumlar, davranışlar. *Gazi Med J*. 2013;24:5-10.
28. Duan X, Ni X, Shi L, et al. The impact of workplace violence on job satisfaction, job burnout, and turnover intention: the mediating role of social support. *Health Qual Life Outcomes*. 2019;17:93.
29. Gökçe T, Dündar C. Samsun Ruh ve Sinir Hastalıkları Hastanesi'nde Çalışan Hekim ve Hemşirelerde Şiddete Maruziyet Sıklığı ve Kaygı Düzeylerine Etkisi. *İnönü Üniversitesi Tıp Fakültesi Dergisi*. 2008;15:25-28.
30. Liu J, Gan Y, Jiang H, et al. Prevalence of workplace violence against healthcare workers: a systematic review and meta-analysis. *Occup Environ Med*. 2019;76:927-37.
31. Hamzaoglu N, Türk B. Prevalence of physical and verbal violence against health care workers in Turkey. *Int J Health Serv*. 2019;49:844-861.
32. Rosenthal LJ, Byerly A, Taylor AD, et al. Impact and prevalence of physical and verbal violence toward healthcare workers. *Psychosomatics*. 2018;59:584-90.
33. Ayrancı U. Violence toward health care workers in emergency departments in west Turkey. *J Emerg Med*. 2005;28:361-65.
34. Copeland D, Henry M. The relationship between workplace violence, perceptions of safety, and professional quality of life among emergency department staff members in a level 1 trauma centre. *Int Emerg Nurs*. 2018;39:26-32.
35. Itzhaki M, Bluvstein I, Peles Bortz A, et al. Mental Health Nurse's Exposure to Workplace Violence Leads to Job Stress, Which Leads to Reduced Professional Quality of Life. *Front Psychiatry*. 2018;27:59.
36. Hıdıroğlu S, Tanrıöver Ö, Tosun M, et al. Birinci Basamak Sağlık Çalışanlarının Şiddete Maruziyet Düzeyleri ile İş Doyumu Arasındaki İlişkinin Değerlendirilmesi. *J Turk Family Physician*. 2019;10:173-84.
37. Erol A, Akarca F, Değerli V, et al. Acil servis çalışanlarında tükenmişlik ve iş doyumunu. *J Clin Psy*. 2012;15:103-10.
38. Choi ES, Jung HS, Kim SH, et al. The influence of workplace violence on work-related anxiety and depression experience among Korean employees. *J Korean Acad Nurs*. 2010;40:650-61.
39. Franz S, Zeh A, Schablon A, et al. Aggression and violence against health care workers in Germany-a cross sectional retrospective survey. *BMC Health Serv Res*. 2010;10:51.
40. Lee J, Daffern M, Ogloff JRP, et al. Towards a model for understanding the development of post-traumatic stress and general distress in mental health nurses. *Int J Ment Health Nurs*. 2015;24:49-58.