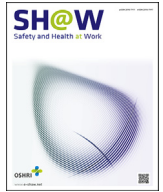




Contents lists available at ScienceDirect

# Safety and Health at Work

journal homepage: [www.e-shaw.net](http://www.e-shaw.net)

## Review Article

# Determination of the Society's Perceptions, Experiences, and Intentions to Use Violence Against Health Professionals

Şanlıtürk Döndü, Boy Yasemin\*

Tokat Gaziosmanpaşa University, Faculty of Health Sciences, Nursing Department, Tokat, Turkey

## ARTICLE INFO

### Article history:

Received 17 September 2020

Received in revised form

27 November 2020

Accepted 9 December 2020

Available online 16 December 2020

### Keywords:

Health professional

Intention of violence

Perception of violence

Society

Theory of planned behavior

## ABSTRACT

**Background:** Violence against health professionals is an increasing problem in Turkey. This study aims to determine the societal perception of violence, experience of violence, and the intentions to use violence against health professionals.

**Methods:** This descriptive study sample comprised 484 individuals. Data were collected by using the “Descriptive Information Form” and “Intentions to Use Violence against Health Professionals Scale.”

**Results:** Of the participants, 8.3% used violence against health professionals. Most of the participants (81.2%) stated that violence was not a solution, and 65.9% believed that health professionals did not deserve violence. Past behavior of the participants was the most influential factor on the intention to use violence ( $\beta = .473, p = 0.000$ ).

**Conclusions:** More than half of the participants believed that health professionals did not deserve violence and violence was not a solution. We found that intention to use violence was affected by past experiences.

© 2021 Occupational Safety and Health Research Institute, Published by Elsevier Korea LLC. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

## 1. Introduction

Violence against health professionals is an increasing problem in Turkey. A study in Turkey found that the incidence of violence in the health sector increased from 28.4% in 2016 to 39.71% in 2018 [1]. As per the World Health Organization, violence includes physical and verbal abuse, murder, and emotional, sexual, or racial harassment. Workplace violence influences all employees from all sectors, but the health sector is especially prone to high risk. The joint report prepared by the World Health Organization, the International Labor Organization, and the International Council of Nurses, entitled “Workplace Violence in the Health Sector,” states that violence in the health sector nearly comprises one-fourth of all violence incidents at work [2].

Nurses are the health professionals who are under the highest risk to experience violence and aggression of patients and their families or friends [3–5]. The risk of violence against nurses is relatively high because they constitute the majority of health professionals, spend most of their time to provide direct health care to patients, and are in close contact with the patient's relatives [3,6,7]. A systematic review of violence against health professionals in Turkey found that health professionals mostly suffered from verbal

abuse, which ranged between 46.7% and 100% in different studies, and that nurses were the health professionals who experienced violence the most [4]. The study of Çamcı and Kutlu [8] found that 72.6% of the participants working in the health sector suffered from violence of any form in their entire working life and 72.4% experienced violence in the last 12 months.

Results of experiencing violence for health professionals include feelings of anger, fear, despair and abasement, physical and psychological injuries that include alienation and even depression, decrease in work motivation and health-care quality, and increase in absenteeism [9–12]. Existing studies suggest that effective management of the health institution, increasing the rights of health professionals and punishment for violence against health professionals, research to prevent health-care violence, and the educating health professionals about risky situations and ways to cope with violence risk may decrease the risk of health-care violence [9,13]. To prevent violence against health professionals, a unit, entitled “The White Code,” was established in Turkey in 2012. “The White Code” helped health professionals to communicate with police forces in case of threat, gain time for correct intervention, prevent panic, and maintain safety [14]. Determining the intentions to use violence is required for this unit to function

\* Corresponding author. Tokat Gaziosmanpaşa University, Faculty of Health Sciences, Nursing Department, Tokat, Turkey.

E-mail addresses: [dtuna@windowslive.com](mailto:dtuna@windowslive.com) (Ş. Döndü), [yaseminboy55560@gmail.com](mailto:yaseminboy55560@gmail.com) (B. Yasemin).

effectively. The theory of planned behavior (TPB) is used in this study to determine the intentions.

The TPB is one of the most popular behavioral approaches to determine intentions [15]. Developed by Ajzen [16], the TPB is based on the assumption that there are certain reasons behind behaviors. Accordingly, people first think of the consequences of their behaviors, then make a decision to reach their goal, and finally implement their decisions. In other words, behaviors are consequences of certain intentions. As per the TPB, intentions, rather than attitudes, determine behaviors. Intentions comprise the motivational factors influencing behaviors and reflect the extent to which the individual is willing to perform a certain behavior. A certain behavior will occur to the extent that the individual has intentions to perform the behavior. Intentions are influenced by three factors, namely, attitude toward behavior (ATB), subjective norms (SNs), and perceived behavioral control (PBC). Attitudes are the overall evaluations of the behaviors. SN refers to the perception about the extent to which family and the social environment is supportive to perform the behavior. Finally, PBC is the perception about the degree of difficulty of the behavior [17–20]. In addition, past behavior influences the intentions of the individual to perform the behavior [18].

Effectiveness of the measures to prevent violence against health professionals depends on the cooperation between policymakers, health professionals, and societal actors [9,21]. However, studies on health-care violence mostly dealt with perceptions of health professionals, patients, and their relatives [10,12,13,21]. Attitudes of society toward violence have not been thoroughly investigated to date. This study aims to determine the perceptions about, experiences with, and the intentions to use violence against health-care professionals by the members of the Turkish society.

## 2. Materials and methods

This descriptive study was planned to determine the perceptions of the members of society about violence in the health sector, their past behavior of violence against health professionals, and their intentions to use violence. Data were collected from the members of the society sitting in the city square.

Permission was obtained from the ethics committee for the study. Individuals between the ages of 18 and 75 years, who resided in Erbaa district of Tokat province of Turkey, constituted the universe of the study. The sample comprised 484 individuals sitting in the city square, who visited the hospital as a patient or attendant in the last one year.

The inclusion criteria were as follows:

- Participants aged 18–75 years
- Participants who are volunteering
- Participants who are not a health-care professional
- Participants who visited the hospital as a patient or attendant in the last one year
- Participants who had no communication problems
- Participants not in the process of receiving health-related education (faculty of medicine, vocational health high schools, nursing schools).

The exclusion criteria were as follows:

- Health professionals and students of any department related to health
- Participants who hesitated to complete the questionnaire for any reason
- Participants who failed to return the questionnaire

- Participants who failed to “perceive or understand” the questions in the questionnaire form
- Participants diagnosed with neuropsychiatric disorders.

Data were collected between January and February 2020 by using the “Descriptive Information Form” and “Intentions to Use Violence against Health Professionals Scale” (IUVHPS), which were developed by researchers by using the relevant literature [9,22,23].

Descriptive information form was composed of 2 parts and 20 questions. The first part included eight questions on age, gender, marital status, education, chronic diseases, health professionals in the family, and hospital visit in the last 12 months. The second part had 12 questions on the use, target and type of violence, department that the incidence of violence took place, reason of using violence, and other questions on violence against health professionals.

The IUVHPS was developed by researchers by using the work of Ajzen [24], entitled “Constructing a Theory of Planned Behavior Questionnaire.” The scale had five subscales, including one item (item 1) on the intention of participants to use violence, one item (item 2) on their past behavior of violence, six items (items 3–8) on the ATB, five items (items 9–13) on the SN, and two items (items 14–15) on the PBC factors of the TPB. Items were scored on a 5-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). Scores obtained from each subscale were calculated separately to obtain the total score. The average score for each subscale was calculated by dividing the total score obtained from the items of the scale by the number of items of the subscale. There was no negative statement in the scale.

The number marked in the first item on the measurement of general intention referred to behavioral intention. The score to be obtained from subscales ranged between one and five. While evaluating the scale, we used the calculation method mentioned previously and searched for the impact of the factors that influenced the intentions of the participants on behaviors. Higher scores from the ATB, SN, PBC, and general intention subscales indicated positive considerations about the behavior, higher environmental pressure to perform the target behavior, higher control to perform the behavior, and higher intentions to perform violence, respectively.

### 2.1. Administration of data collection tools

Face-to-face interviews were conducted to administer the questionnaires prepared by the researchers. Participants sitting in the city square were asked to answer the questions, and the questions were read to the participants if they had problems with reading the questions. While answering the questions, the participants were asked to consider not only their last hospital visit but also their previous visits.

### 2.2. Data analysis

Data obtained were analyzed by using SPSS version 24 software. Percentages, the chi-square test, and multiple regression analysis were used for data analysis.

## 3. Results

Of the 484 participants, 50.6% were men, 65.5% did not work, 31.8% had a health professional in their families, 16.3% had chronic diseases, and 5.6% had hypertension. We did not find a statistically significant relationship between gender, marital status, health professional in family, number of hospital visits, and the use of violence ( $P > .05$ ). On the other hand, unemployed participants and

**Table 1**  
Sociodemographic variables

	n	%	t	p
<b>Gender</b>				
Female	239	49.4	1.600	.110
Male	245	50.6		
<b>Marital status</b>				
Married	152	31.4	-1.760	.080
Single	332	68.6		
<b>Working status</b>				
Employed	167	34.5	-2.496	.013
Unemployed	317	65.5		
<b>Chronic disease</b>				
Yes	79	16.3	-2.589	.011
No	405	83.7		
<b>Health professionals in family</b>				
Yes	154	31.8	-.424	.671
No	330	68.2		

t, independent samples t-test.

participants without any chronic disease used violence more than the other participants ( $P < .05$ ) (Table 1).

### 3.1. Opinions about violence against health professionals

Of the participants, 8.3% stated that they used violence against health professionals. Of the violence, 77.5% was verbal abuse, 47.5% was against nurses, and 52.5% took place in polyclinics (Table 2).

Of the participants, 65.9% stated that health professionals did not deserve violence, 81.2% expressed that violence was not a solution for problems, 68.6% had no information on the punishment of violence against health professionals, and 71.1% believed that incidences of violence might be prevented. Long waiting periods (45%) and being insulted by nurses (40%) were expressed as the main reasons of violence against health professionals. Regarding the question on the reasons of the increase in violence, 52.3% of the participants stated that health professionals were not good humored and polite, 48.1% explained with reference to the impatience

**Table 2**  
Characteristics of violence against health professionals

	n	%
<b>Violence against health professionals</b>		
Yes	40	8.3
No	444	91.7
<b>Unit of violence applied</b>		
Emergency care	16	40.0
Polyclinic	21	52.5
Inpatient service	2	5.0
Intensive care service	1	2.5
<b>Against whom was violence used</b>		
Myself	22	55.0
My patient	18	45.0
<b>Types of violence committed</b>		
Verbal abuse	31	77.5
Physical	6	15.0
Psychological	3	7.5
<b>Health-care staff subjected to violence</b>		
Doctor	9	22.5
Nurse	19	47.5
Medical secretary	10	25.0
Assistant medical staff	2	5.0

**Table 3**  
Opinions on the use of violence against health professionals

	n	%
<b>Opinions of participants about violence</b>		
Health professionals do not deserve violence	319	65.9
I do not believe that violence against health professionals will solve problems	393	81.2
I think that no one deserves violence when I hear news about murdered health professionals	260	53.7
I have no information about the punishment for people using violence against health professionals	332	68.6
Violence against health professionals may be prevented	344	71.1
<b>Reasons of use of violence*</b>		
Long waiting periods for examination	18	45.0
Me/my patient was insulted by health professionals	16	40.0
Inadequate time was spent for examination	7	17.5
Health professionals were not good-humored and polite	7	17.5
I was not sufficiently informed about myself or my patient	6	15.0
Physician did not take the patient's expectations and demands about examination-prescription into consideration	3	7.5
There was no room for me/my patient at the inpatient treatment center	1	2.5
<b>Causes of increase in violence in the health sector*</b>		
Health professionals were not good-humored and polite	253	52.3
Patients and their relatives were impatient	233	48.1
Insufficient number of health professionals	190	39.2
Long waiting periods	190	39.2
Too much crowd in health center	169	34.9
News in media against health professionals	135	27.9
People using violence are uneducated	123	25.4
Health professionals are unsuccessful	60	12.3
Technical capabilities of health centers are insufficient	31	6.4

\* Participants had more than one response.

of the patients and relatives, and 39.2% pointed out the insufficiency of health professionals and long waiting periods (Table 3).

### 3.2. Intentions about using violence against health professionals

Table 4 shows the average scores obtained from the subscales of the IUVHPS. The average scores obtained from the general intention, past behavior, ATB, SN, and PBC were  $4.55 \pm 0.92$ ,  $4.59 \pm 0.92$ ,  $3.27 \pm 0.57$ ,  $3.83 \pm 0.84$ , and  $4.00 \pm 1.05$ , respectively. Table 4 demonstrates that the participants' mean score of using violence in the past was quite high and that they had high levels of intention to use violence and low positive attitudes toward violent behavior. Besides, the participants' intentions to use violence were not affected by their environment, and their perception of control to use violence was high (Table 4).

We conducted multiple linear regression to find out the factors that influenced the intention to use violence and found that the predictability of the model was high ( $R^2 = 0.43$ ,  $p < .001$ ). Past

**Table 4**  
Average scores from the subscales of the IUVHPS

IUVHPS subscales	n	Minimum	Maximum	Mean	Standard deviation
Intention	484	1	5	4.55	0.92
Past behaviour	484	1	5	4.59	0.92
ATB	484	1	5	3.27	0.57
SN	484	1	5	3.83	0.84
PBC	484	1	5	4.00	1.05

ATB, attitude toward behavior; IUVHPS, Intentions to Use Violence against Health Professionals Scale; PBC, perceived behavioral control; SN, subjective norm.

behavior, ATB, SN, and PBC were influential over the intention to use violence ( $p < .05$ ), and past behavior was the main factor with the highest level of influence ( $\beta = .473$ ,  $p < .001$ ) (Fig. 1).

#### 4. Discussion

Violence is one of the most negative developments in the professional life of health professionals and one of the most important problems in today's Turkey. The solution to this problem requires the analysis of the reasons of violence against health professionals, opinions of the society on violence, the intentions to use violence against health professionals, and the factors that influence such intentions. Most of the studies on violence in the health sector analyzed the issue from the perspective of health professionals [12,25–38], whereas a limited number of studies dealt with the opinions and attitudes of the patients, their relatives, and the society in general in the hospital [9,14,22,23,39–41]. Our study dealt with the attitudes of the society toward the violence against health professionals, intentions to use violence, and the factors influencing this intention. The participants considered violence against health professionals as a negative event and supported preventive and punitive measures against violence in the health sector.

Works in the literature found emergency units as the department where incidences of violence mostly occurred because these departments are overcrowded [21,36,40–46]. Unlike these findings, this study showed that polyclinics were the places where incidences of violence mostly occurred. This difference may stem from the fact that patients and their relatives are exposed to long waiting periods in polyclinics. Thus, 45% of the participants of our study related violence in the health sector to long waiting periods for examination.

Violence against health professionals in this study is 8.3%. This was similar to the findings of Takak and Artantaş [22], which was 12.3%. The rate of violence (and verbal abuse) toward health-care staff was lower than that found in many previous studies. Existing studies found that verbal abuse was the main type of violence, with a percentage ranging between 29% and 100% [21,39,46,47]. In the study by Takak and Arslantaş [22], verbal abuse was not considered violence and was believed to have less punishment by the members of society, so it was a more common type of violence. Low incidence of use of violence against health professionals in our

study may be related to the fact that data were collected by using face-to-face interviews so that the participants may have been reluctant to express their experiences about the use of violence. Another reason may be that the data were collected from people in the city square. In other studies, data were collected from individuals in a hospital setting. It is thought that being in a hospital environment has an effect on the rate of violence.

We also found that more than half of the participants did not have any information on the punishment of violence against health professionals. As per the law in Turkey, “A person who uses violence and threat against a public official to prevent him from performing his duty is punished with imprisonment from six months to three years” [48]. To date, no research has been conducted to examine this issue among the public in Turkey. This finding points to the public's lack of knowledge with regard to the law and punishment of those who act violently against health staff and may indicate the need for more focused efforts by the health and judicial systems to inform the public for the purpose of deterrence. Based on these findings, we may suggest that participants used verbal abuse because they did not consider it a type of violence and were not aware of the fact that they may be punished for verbal abuse.

We may group the reasons of violence against health professionals into three factors, namely, “factors about the health-care system,” factors about patients and relatives,” and “factors about healthcare professionals.” These three factors can be inferred from the statements of both the health professionals and the patients and their relatives in the literature [9,12,21–23,25–30,32,33,35–37,39–41]. Similar to other studies, we found that long waiting periods for examination and being insulted by health professionals were the main reasons of using violence against health professionals [9,21–23,39,41,47,49,50].

The participants in our study explained using violence against health profession with reference to not-good-humored and not-polite health professionals, impatience of patients and their relatives, and long waiting periods. Other studies had similar findings [9,12,21–23,25–30,32,33,35–37,39–41]. These stated reasons of violence against health professions are common in various studies on the source of problem, problems of the health system, and the negative attitudes of both health professionals and patients.

Past behavior of violence is one of the factors that have been cited with the potential to increase the use of violence [7]. Our

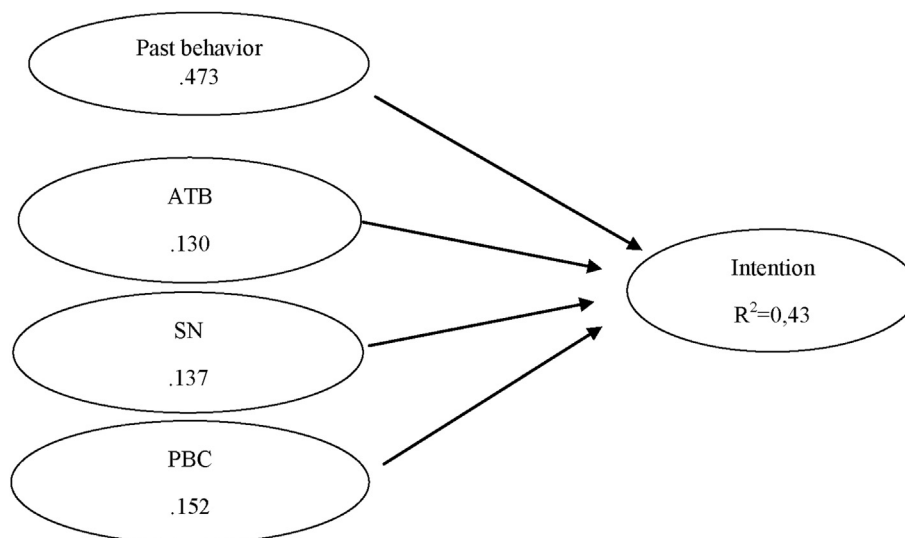


Fig. 1. Multiple linear regression of factors affecting the IUHVPS. ATB, attitude toward behavior; IUHVPS, Intentions to Use Violence against Health Professionals Scale; PBC, perceived behavioral control; SN, subjective norm.

study found that past behavior with an average score of  $4.59 \pm 0.91$  was the most influential factor on the intention to use violence against health professionals. This finding indicates that people with past behavior of violence may be inclined to use violence in future.

Individuals are more motivated to use violence when they believe that the benefits to be gained from using violence are higher [9]. Our study evaluated the societal attitude toward the behavior of violence against health profession by using the ATB subscale of the IUVHPS and found an average score of  $3.27 \pm 0.56$  for the subscale. This finding shows that the participants had a negative attitude toward violence against health professionals. In addition, we may conclude that the society has a negative attitude toward violence because most of the participants stated that violence was not a solution and expressed their sorrow for the murder of health professionals.

Opinions of other people, including family and people with the same disease, or media are factors that influence the individual to perform the targeted behavior. In our study, the SN subscale of the IUVHPS, which evaluated the impact of the social environment on the use of violence, was an influential factor. This finding indicates the impact of other people on targeted behavior. When the question "Did you witness violence against health professionals" rather than the question "Did you use violence against health professional" was asked, positive responses increased significantly (32.7% to 59.5%) [9,41,47]. These findings indicate that individuals, who are influenced by the society, refrain from the reactions of other people when deciding to use violence.

The PBC dimension indicates the perceived control level of using violence. In our study, PBC, which had an average score of  $4.00 \pm 1.04$ , was the second most important factor determining the intentions to use violence. Statements of the participants that health professionals did not deserve violence and that violence could be prevented may be considered as supportive to this finding. Opinions of the participants of our study that violence is an unjust and preventable action are parallel with the findings in the literature [9,21,39,41,41,47].

## 5. Conclusion

Our study is one of the few studies that analyze violence against health professionals from the perspective of the society. Violence in the health sector is a global problem that requires to be solved. Based on our findings, we may conclude that the Turkish society has a negative attitude toward the use of violence against health professionals, believes that violence may be prevented, and does not consider violence a method to claim rights. We also found that systematic factors were reasons behind the use of violence and people who used violence in the past were more likely to use in future.

Based on the findings in the literature and our study, we may suggest that action plans should be developed for emergency units and polyclinics, which are the places where incidences of violence are more likely to occur. Special attention should be paid for the design, organization, and management of these places. Appointment systems should be reinforced, the number of maximum patients to be examined by physicians should be reconsidered by taking the time necessary for examination of patients, and the number of health professionals working at crowded departments should be increased. An insufficient number of health professionals leads to a higher workload and consequent exhaustion of health professionals, which, in turn, results in negative communication between health professionals and patients. Owing to this reason, work plans of health professionals should be reconsidered by managers of health institutions to decrease violence.

Consideration of violence as a negative phenomenon is not sufficient to prevent violence in the health sector. Owing to this reason, a clear definition of violence against health professionals should be provided, and the society should be informed about the punishments against violence in the health sector. Posters that inform masses about the punishment against violence should appear in the entrance of hospitals and other public areas. Incidences of violence against health professionals that occur in the region should be shared with the public to serve as an example.

Because we found that the social environment is an influential factor over the intentions to use violence, news agencies, which have a considerable impact on the intentions to use violence, should be more sensitive about the news against health professionals and be punished in case of violating the dignity of the profession. Media should also inform citizens about the punishments for violence against health professionals, especially during the prime time. In addition, it is thought that reducing the number of patients per nurse and shortening the waiting period will be effective in decreasing violence incidents.

This study showed that intentions to use violence may be revealed and determining the intentions may be used to empower health professionals against people with high risk of using violence. Our findings may be used in nursing education and clinical care to improve patient–nurse communication, measure the intentions to use violence, determine the reasons behind the use of violence, and take necessary measures to prevent it. Nurses, who are in close contact with patients, should lead the struggle against the use of violence in the health sector and force policymakers to develop and implement strategies and policies against violence.

## Funding

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

## Conflicts of interest

The authors declare no conflict of interest.

## References

- [1] Polat O, Çırak M. Evaluation of violence in the health with white code data. *Medical J Bakırköy* 2019;15(4):393–8. <https://doi.org/10.4274/BTDMJB.galenos.20190918115436>.
- [2] World Health Organization (Who). International labor organization (ILO) & international nurses association (ICN). Internet. Frame Work Guidelines Addressing Work Place Violence Health Sector 2002 [cited 2020 March 3]. Available from: [http://www.ilo.org/wcmsp5/groups/public/-ed\\_dialogue/-sector/documents/publication/wcms\\_161953.pdf](http://www.ilo.org/wcmsp5/groups/public/-ed_dialogue/-sector/documents/publication/wcms_161953.pdf); 2002.
- [3] Al-Omari H, Abu Khait A, Al-Modallal H, Al-Awabdeh E, Hamaideh S. Work place violence against nurses working in psychiatric hospitals in Jordan. *Archives Psychiatric Nursing* 2019;33:58–62. <https://doi.org/10.1016/j.apnu.2019.08.002>.
- [4] Keser-Özcan N, Bilgin H. Violence towards healthcare workers in Turkey: a systematic Review. *Türkiye Klinikleri J Med Sci* 2011;31:1442–56. <https://doi.org/10.5336/medsci.2010-20795>.
- [5] Rosenthal LJ, Byerly A, Taylor AD, Martinovich Z. Impact and prevalence of physical and verbal violence toward healthcare workers. *Psychosomatics* 2018;59:584–90. <https://doi.org/10.1016/j.psych.2018.04.007>.
- [6] Chen X, Lv M, Wang M, Wang X, Liu J, Zheng N, et al. Incidence and risk factors of work place violence against nurses in a Chinese top-level teaching hospital: a cross-sectional study. *Applied Nursing Res* 2018;40:122–8. <https://doi.org/10.1016/j.apnr.2018.01.003>.
- [7] Yeşilbaş H. A general overview of violence in healthcare. *J Health Nursing Management* 2016;1:44–54. <https://doi.org/10.5222/SHYD.2016.044>.
- [8] Çamcı O, Kutlu Y. Determination of workplace violence toward health workers in kocaeli. *J Psychiatric Nursing* 2011;2:9–16.
- [9] Aharon AA, Warshawski S, Itzhaki M. Public knowledge, attitudes, and intention to act violently, with regard to violence directed at health care staff. *Nursing Outlook* 2019;68:220–30. <https://doi.org/10.1016/j.outlook.2019.08.005>.

- [10] Büyükbayram A, Okçam H. The socio-cultural factors that affect violence in health care personnel. *J Psychiatric Nursing* 2013;4:46–53. <https://doi.org/10.5505/phd.2013.14622>.
- [11] Hacer TY, Ali A. Burnout in physicians who are exposed to work place violence. *J Forensic Legal Med* 2020;69:101874. <https://doi.org/10.1016/j.jflm.2019.101874>.
- [12] Phillips JM. Work place violence against healthcare workers in the United States. *New England J Med* 2016;374:1661–9. <https://doi.org/10.1056/NEJMr1501998>.
- [13] Lenagha PA, Cirrincione NM, Henrich S. Preventing emergency department violence through design. *J Emerg Nurs* 2018;44:7–12. <https://doi.org/10.1016/j.jen.2017.06.012>.
- [14] Regulation on ensuring patient and employee safety. Official Newspaper (No: 27897) 2011 [cited 2020 November 24]. Available from, <https://www.resmigazete.gov.tr/eskiler/2011/04/20110406-3.htm>; 2011.
- [15] Karayagız-Muslu G, Başbakkal Z. The planned behavior theory and breastfeeding behavior: Review. *Turkiye Clin J Nurs Sci* 2013;5:28–40.
- [16] Ajzen I. The theory of planned behavior. *Organ Behav Hum Decis Process* 1991;50:179–211.
- [17] Bassett-Gunter RL, Levy-Milne R, Naylor PJ, Downs DS, Benoit C, Warburton DER, et al. A comparison of theory of planned behavior beliefs and healthy eating between couples with out children and first-time parents. *J Nutr Educ Behav* 2015;47:216–24. <https://doi.org/10.1016/j.jneb.2015.01.003>.
- [18] Fishbein M, Ajzen I. *Predicting and changing behavior: the reasoned action approach*. New York (United States of America): Psychology Press; 2011. 216 p.
- [19] Lapkin S, Levett-Jones T, Gilligan C. Using the theory of planned behaviour to examine health Professional students' behavioural intentions in relation to medication safety and collaborativ epractice. *Nurse Educ Today* 2015;35:935–40. <https://doi.org/10.1016/j.nedt.2015.03.018>.
- [20] Ünal A. Tourists' desires to move away and antinomy of distance in destination choice. *J Tourism Gastronomy Studies* 2020;8:608–22. <https://doi.org/10.12325/jotags.2020.567>.
- [21] Al B, Sarcan E, Zengi S, Yildirim C, Dogan M, Kabul S. The public's view of increasing violence toward health care staff. *J Academic Emergency Med* 2015;14:19. <https://doi.org/10.5152/jaem.2015.57855>.
- [22] Takak SÖ, Artantaş AB. Evaluation of patients' and their relatives' opinions and attitudes about violence against health care workers. *Ankara Medical J* 2018;18:103–16. <https://doi.org/10.17098/amj.409020>.
- [23] Yaşar ZF, Durukan E, Büken E. A university hospital patients and their relatives' opinions on violence in health. *Romanian Soc Legal Medicine* 2017;25: 65–9. <https://doi.org/10.4323/rjlm.2017.65>.
- [24] Ajzen I. Theory of planned behaviour questionnaire. *Measurement Instrument Database Soc Sci* 2013:2–9.
- [25] Akbaş M, Boz A, Dursun A, Çetin S, Kılıçaslan A. Determination of exposure status to violence of 112 employees and their behavior towards violence. *Dokuz Eylül University E-J Nursing Faculty* 2016;9:93–100.
- [26] Aydemir İ, Üçlü R, Aydoğan A. According to the emergency room staff the reasons for violence. *J Ist Faculty Med* 2020;83:60–8. <https://doi.org/10.26650/IJITFD.2019.0018>.
- [27] Cerit K, Keskin ST, Erdem R. Investigation of exposure to nurses' violence in the work place and related factors. *Pamukkale Uni J Soc Sci Institute* 2018;31: 231–42. <https://doi.org/10.30794/pausbed.414829>.
- [28] Erten R, Öztora S, Dağdeviren HN. Evaluation of exposure to violence against doctors in health care facilities. *Turkish J Family Practice* 2019;23:52–63. <https://doi.org/10.15511/tahd.19.00252>.
- [29] Ferri P, Silvestri M, Artoni C, DiLorenzo R. Work place violence in different settings and among various health professionals in an Italian general hospital: cross-sectional study. *Psychol Res Behav Manag* 2016;23:263–75. <https://doi.org/10.2147/PRBM.S114870>.
- [30] Hıdıroğlu S, Tanrıöver Ö, Tosun M, Turan CA, Günaydin BS, Eser B, Htoo KM, Karavuş M. Job satisfaction of primary health care professionals in primary health care and their exposure levels to violence. *J Turkish Family Phys* 2019;10:173–84. <https://doi.org/10.15511/tjtfp.19.00473>.
- [31] Kaya S, Demir IB, Karsavuran S, Ürek D, Ilgın G. Violence against doctors and nurses in hospitals in Turkey. *J Forensic Nurs* 2016;12:26–34. <https://doi.org/10.1097/JFN.000000000000100>.
- [32] Kvas A, Seljak J. Sources of work place violence against nurses. *Work* 2015;52: 177–84. <https://doi.org/10.3233/WOR-152040>.
- [33] Nowrouzi-Kia B, Isidro R, Chai E, Usuba K, Chen A. Antecedent factors in different types of work place violence against nurses: a systematic review. *Aggression Violent Behavior* 2019;44:1–7. <https://doi.org/10.1016/j.avb.2018.11.002>.
- [34] Ridenour M, Lanza M, Hendricks S, Hartley D, Rierdan J, Zeiss R, Amandus H. Incidence and risk factors of work place violence on psychiatric staff. *Work* 2015;51:19–28. <https://doi.org/10.3233/WOR-141894>.
- [35] Üzümcü F, Oksay A. Evaluation of violence against physicians and nurses working in a university hospital. *Suleyman Demirel University Visionary J* 2019;10:584–98. <https://doi.org/10.21076/vizyoner.616664>.
- [36] Yıldız MS. Violence against healthcare professionals in Turkey: a research in Ankara. *Hacettepe J Health Administration* 2019;22:135–56.
- [37] Zhao S, Xie F, Wang J, Shi Y, Zhang S, Han X, et al. Prevalence of work place violence against Chinese nurses and its association with mental health: across-sectional survey. *Arch Psychiatr Nurs* 2018;32:242–7. <https://doi.org/10.1016/j.apnu.2017.11.009>.
- [38] Zeng JY, An FR, Xiang YT, Qi YK, Ungvari GS, Newhouse R, Yu DSF, Lai KYC, Yu LY, Ding YM, Tang WK, Wu PP, Hou ZJ, Chiu HFK. Frequency and risk factors of work place violence on psychiatric nurses and its impact on their quality of life in China. *Psychiatry Res* 2013;210:510–4. <https://doi.org/10.1016/j.psychres.2013.06.013>.
- [39] Fener E, Aydıntuğ N. Evaluation of the causes of violence in health sector from community perspective. *J Int Social Res* 2019;12:1272–82. <https://doi.org/10.17719/jisr.2019.3136>.
- [40] Uyar M, Öztürk ENY, Şahin TK. Determination of perspectives of violence on health workers of 18 years and older adults who apply to family health centers in meram district of Konya province. *ESTUDAM Public Health J* 2019;5:113–20. <https://doi.org/10.35232/estudamhsd.648576>.
- [41] Yılmaz C. The anger expression styles of the relatives of the patients admitted to the emergency department and preparation of the perspectives of violence against health workers (Doctoral dissertation); 2020 [cited 2020 April 7]. Available from: <http://acikerisim.karabuk.edu.tr:8080/xmlui/handle/123456789/627/>.
- [42] Aktaş E, Aydemir İ. Determining the opinions of the health care workers who have been subjected to violence regarding the white code implementation. *Turkiye Clin J Health Sci* 2018;3:32–47. <https://doi.org/10.5336/healthsci.2017-57385>.
- [43] Baig LA, Shaikh S, Polkowski M, Ali SK, Jamali S, Mazharullah L, Soomro M, Kumari B, Menon S, Maheshwari G, Arif S. Violence against health care providers: a mixed-methods study from Karachi, Pakistan. *J Emergency Med* 2018;54:558–66. <https://doi.org/10.1016/j.jemermed.2017.12.047>.
- [44] Hahn S, Hantikainen V, Needham I, Kok G, Dassen T, Halfens RJ. Patient and visitor violence in the general hospital, occurrence, staff interventions and consequences: a cross-sectional survey. *J Adv Nurs* 2012;68:2685–99. <https://doi.org/10.1111/j.1365-2648.2012.05967.x>.
- [45] Taylor JL, Rew L. A systematic review of the literature: work place violence in the emergency department. *J Clin Nurs* 2011;20:1072–85. <https://doi.org/10.1111/j.1365-2702.2010.03342.x>.
- [46] Türkmenoğlu B, Sümer HE. Frequency of violence among healthcare workers in Sivas city center. *Ankara Med J* 2017;4:216–25. 1017098/amj.364161.
- [47] İlhan MN, Çakır M, Tunca MZ, Avcı E, Çetin E, Aydemir Ö, et al. From society point of view violence against healthcare workers: causes, attitudes, behaviours. *Gazi Med J* 2013;24:5–10. <https://doi.org/10.12996/gmj.2013.02>.
- [48] Turkish law book 5237. Offenses Against Credibility and Functioning of Public Administration (265/1); 2020 [cited 2020 November 27] Available from, <https://www.mevzuat.gov.tr/MevzuatMetin/1.5.5237.pdf>.
- [49] Arnetz JE, Sudan S, Fitzpatrick L, Cotten SR, Jodoin C, Chang CH, Arnetz BB. Organizational determinants of bullying and work disengagement among hospital nurses. *J Adv Nurs* 2019;75:1229–38. <https://doi.org/10.1111/jan.13915>.
- [50] Shafran-Tikva S, Chinitz D, Stern Z, Feder-Bubis P. Violence against physicians and nurses in a hospital: how does it happen? A mixed-methods study. *Israel J Health Policy Res* 2017;6:1–12. <https://doi.org/10.1186/s13584-017-0183-y>.