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Original Research Article

The role of stress management and interpersonal communication in preventing violence against family physicians

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ABSTRACT

Background: Family physicians are the first line of contact with patients seeking primary care services. Therefore, they are vulnerable to violence from patients and family members. Therefore, aim of this study was to determine of stress management and interpersonal communication of the family physicians and examine the role of stress management and interpersonal communication to prevent violence.
Methods: 736 family physicians were participated from 37 different provinces of Turkey. The scores of stress management and interpersonal communication were compared according to violence situations.
Results: A 20.65% (n = 152) of the physicians participating in the study were subjected to physical violence; their interpersonal communication scores were significantly lower than those of physicians who had not been subjected to physical violence (p = 0.022). Among the participants, 90.77% (n = 668) were subjected to verbal violence; their interpersonal communication scores were significantly lower than those of participants who had not been subjected to verbal violence (p = 0.012). Although the interpersonal communication scores were low and statistically related at the participants who had been subjected to violence.
Conclusions: This study revealed that the interpersonal communication and stress management scores were low at the participants who had been subjected to violence; only interpersonal communication was statically related. Therefore, stress management and interpersonal communication is very important to protect from violence, we suggested that this should be part of the curriculum of medical schools and postgraduate education.

Keywords: Communication, Physicians, Transverse sinus, Violence

INTRODUCTION

Violence is a widespread public health problem and occupational hazard in society and the workplace, and workplace violence and aggression have gained increasing importance nowadays.[1]

Despite all precautions and recommendations, researchers have emphasized that violence against healthcare workers has been increasing for years and that health personnel are at risk for violence.[2,3]

According to the World Health Organization, healthcare workers are at high risk for violence all over the world. Between 8% and 38% of healthcare workers suffer physical violence at some point in their careers. Violence at work is defined as "events that an individual or a person has been abused or attacked during a working-related situation".[4] Violence in health institutions has been described as "threatening behavior, verbal threat, economic abuse, physical assault, and sexual assault" coming from patients, relatives, or any other individuals and posing a risk to healthcare workers.[5] Violence against

healthcare workers has increased in recent years. Working in health institutions[6] is reported to be 16 times more risky than working in other workplaces because of the danger of violence. As a result of growing work pressure and stress, social instability, and the deterioration of personal interrelationships, workplace violence is rapidly spreading in the health sector. Many factors, such as long wait times, dissatisfaction with treatment, and mental illness, contribute to the occurrence of violence.[7,8] Stress is an important risk factor that can be managed by improving health and the ability to control quality of life. Stressful situations show individual differences.[9] Insufficiency of interpersonal relationships maybe more stressful than any other factor. Such inadequacy manifests in the form of shyness or aggression. Inability to cope with stress and deterioration of personal interrelationships may result in violence against healthcare workers. Coping with stress means learning to keep stress at a positive level, not just to remove stress. Managing stress well can have a positive impact on more efficient operation. Poorly managed or neglected stress can lead to a number of important problems and conflicts. In the interpersonal relationships of healthcare workers, verbal and nonverbal skills training reduces negative emotional effects.[10] Good observations of the stimulators are the most effective measure in the pre-violence prodromal period. The most effective method of performing these observations is through training in interpersonal communication.[11]

Contrary to what is sometimes believed, violence in healthcare is encountered not only in emergencies but also in non-emergencies. Therefore, in primary healthcare, preventive techniques for coping with stress occupy an important place. Inability to cope with stress and the deterioration of personal interrelationships can be overcome by the acquisition of "safe behavior" skills.[12]

In safe behavior education, people can learn how to protect their individual rights, how to say "no," how to explain the personal appearance in a difficult situation, how to express anger, and how to recognize and solve individual problems. In short, safe behavior education is learning relationship techniques that will enable people to relate more effectively to other people. Learning these techniques will decrease stress arising from interpersonal relationships.[13]

Therefore, aim of this study was to determine stress management and interpersonal communication of the family physicians and examine the role to prevent violence.

METHODS

Study population

The participants were 736 members of a mail group of 3896 family physician from 37 cities in Turkey who joined the study between May and July 2017. The inclusion criteria were having worked for more than 2 years as a family physician in primary healthcare.

Procedures

The study was approved by the ethics committee of Recep Tayyip Erdoğan University. Written informed consent was obtained from all participants.

Measures

We administered a questionnaire with questions about socio-demographic features and 15 questions about work experiences. Seventeen questions, which were the subscale of the Healthy Lifestyle Behaviors Scale (HLBS), were used to measure interpersonal support and stress management.

After the questions about socio-demographic characteristics, there were open-ended questions asking about the type of violence in the workplace and who, where, when, and how. Two questions asked whether physicians who were subjected to violence had initiated legal action. Than the scores of stress management and interpersonal communication were compared according to violence situations to examine the role to prevent violence.

Healthy lifestyle behaviors scale

The HLBS was developed by Walker et al in 1987, based on the health improvement model of Pender.[14] It measures health-improving behaviors associated with health lifestyle of the individual. The scale was revised in 1996 and named HLBS-II.[15]

A validity and safety study of the scale In thiscountry was performed by Bahar, Beşer, Gördes, Ersin, and Kıssal.[16] The HLBS-II consists of 52 items scored by a 4-point Likert system as "never" (1 point), "sometimes" (2 points), "frequently" (3 points), and "regularly" (4 points). The lowest possible score is 52 and the highest possible score is 208.Higher scores indicate that the individual highly implements the specified health behaviors.

The scale is completed in 10-12min and has six subtitles: nutrition, self-realization, physical activity, health responsibility, interpersonal support, and stress management. Total score of the scale gives the score of healthy lifestyle behaviors. Scores obtained measure individual's health-promoting behaviors related to his or her healthy lifestyle. Higher scores obtained on the scale indicate that the individual applies healthy lifestyle behaviors at a high level.

We used the interpersonal support and stress management questions. Interpersonal support indicates the communication and sustainability level of the individual with the immediate environment. Stress management

indicates the level of recognition of stress resources and stress control mechanisms of the individual.

Statistical analysis

Descriptive data are expressed as numbers, percentages, and averages. Data were analyzed by the SPSS 20.0 program. Descriptive statistics, the t-test, analysis of variance, and the Mann-Whitney U test, as well as correlation analysis, were used for data evaluation. p values less than 0.05 were considered to indicate a statistically significant difference.

RESULTS

Among the participants, 51.90% (n = 382) were women. The mean age was 33.26±6.23 (range, 29-61) years; 19.02% (n = 140) were aged <30 years; 61.96% (n = 456) were married, and 48.91% (n = 360) had one or more children.

The distribution of socio-demographic features and their relation to interpersonal support and stress management scores are shown in Table 1.

Table 1: Relationship between socio-demographic characteristics and mean stress management and interpersonal communication scores.

Characteristic	N (%)	Stress Management Score	Interpersonal Communication Score
Sex			
Female	382 (51.90%)	17.32 ± 4.32	20.26 ± 4.36
Male	354 (48.10%)	18.96 ± 4.15	21.23 ± 4.12
p		0.045	0.321
Age (yr)			
≤30	140 (19.02%)	18.23 ± 3.89	19.23 ± 4.12
30–45	368 (50.00%)	22.36 ± 4.76	21.23 ± 4.25
>45	228 (30.98%)	22.54 ± 4.52	22.36 ± 4.66
p		0.021	0.036
Marital status			
Married	456 (61.96%)	19.56 ± 3.98	20.23 ± 4.12
Single	280 (38.04%)	18.65 ± 4.05	19.65 ± 4.22
p		0.235	0.123
Children			
No	376 (51.09%)	19.02 ± 3.88	20.65 ± 4.27
Yes	360 (48.91%)	19.98 ± 4.09	20.68 ± 4.28
p		0.785	0.874
Smoking			
Yes	158 (21.47%)	18.98 ± 3.95	19.87 ± 4.09
No	578 (78.53%)	18.69 ± 3.86	20.09 ± 4.21
p		0.636	0.596
Alcohol			
Yes	96 (13.04%)	18.77 ± 3.85	20.36 ± 4.22
No	640 (86.96%)	18.89 ± 4.06	20.11 ± 4.09
p		0.425	0.369
Chronic disease			
Yes	207 (28.13%)	19.03 ± 4.33	19.65 ± 4.05
No	529 (71.87%)	18.98 ± 3.99	19.78 ± 4.21
p		0.878	0.741

Stress management scores were related to age and sex. Stress management scores were higher in men (p = 0.045) and in individuals aged >30 years (p = 0.021). Only interpersonal support scores were higher in individuals aged 30 years (p = 0.036).

The relation between questions about work experiences and interpersonal support and stress management scores is shown in Table 2.

Table 2: Relationship between violence situation by the mean stress management and interpersonal communication scores.

Question	N (%)	Stress Management Score	Interpersonal Communication Score
No. of working years			
<5	128 (17.39%)	18.69 ± 3.95	19.78 ± 4.11
≥5	608 (82.61%)	20.36 ± 4.07	21.03 ± 4.21
p		0.041	0.025
Being subjected to physical violence at least once during their professional life			
Yes	152 (20.65%)	18.89 ± 3.89	19.56 ± 4.11
No	584 (79.35%)	19.87 ± 3.88	21.35 ± 4.15
p		0.068	0.022
How many times have you been subjected to physical violence in last year?			
0	625 (84.92%)	19.98 ± 4.28	21.02 ± 4.23
1	86 (11.68%)	18.79 ± 3.65	19.23 ± 4.02
2	16 (2.17%)	18.25 ± 3.87	16.41 ± 3.78
≥3	9 (1.22%)	18.33 ± 3.99	17.23 ± 3.98
p		0.074	0.013
Being subjected to verbal violence at least once during their professional life			
Yes	668 (90.77%)	19.35 ± 4.12	20.03 ± 4.32
No	68 (9.23%)	20.98 ± 4.22	22.65 ± 4.25
p		0.054	0.012
How many times have you been subjected to physical violence in the past year?			
0	325 (44.16%)	21.03 ± 4.18	22.36 ± 4.09
1	299 (40.63%)	19.65 ± 3.95	20.35 ± 4.08
2	80 (10.87%)	19.56 ± 3.69	20.39 ± 4.11
≥3	32 (4.35%)	18.39 ± 4.06	19.98 ± 4.15
p		0.065	0.014

Table 3: Situations and reasons for initiating legal intervention after violence.

Question	N (%)
Did you initiate legal intervention after violence?	
Yes	182 (27.25%)
No	486 (72.75%)
Why not?	
Bureaucracy and slowness in the justice system	289 (59.47%)
Apologizes and steps back of subject	89 (18.31%)
Threatened by person and fear	68 (13.99%)
The social phobia	24 (4.94%)
Other	16 (3.29%)

A total of 608 participants (82.61%) had worked for >5 years. Interpersonal support (p = 0.025) and stress management scores (p = 0.041) were lower for participants who had worked for <5 years.

A total of 152 participants (20.65%) were subjected to physical violence at least once during their professional life. Their interpersonal communication scores were significantly lower than those of participants who had not been subjected to physical violence (p = 0.022). Sixteen participants (2.17%) were subjected to physical violence two or more times in the previous year. Their interpersonal support scores were significant lower than those of participants who were not (p = 0.013).

Among the participants, 90.77% (n = 668) were subjected to verbal violence; their interpersonal communication scores were significantly lower than those of participants who had not been subjected to verbal violence (p = 0.012). Among the participants, 15.22% (n = 112) were subjected to verbal violence two or more times in the previous year. Their interpersonal support scores were significantly lower than those of participants who had not (p = 0.014). When asked if they had taken any legal action, 486 participants (72.75%) said they had not, mostly because of slowness in the justice system and bureaucratic obstacles (n = 289; 59.47%) (Table 3).

When asked for details of the recent violence, 37.86% (n = 312) of the participants said that the violence was performed by the patient and 34.34% (n = 283) that it was performed by the patient's relatives; 31.55% (n = 260) said that the violence occurred during the examination;

37.26% (n = 25) thought that the cause of the violence was a violent personality, and 30.58% (n = 252) thought that it was bad communication; 36.41% (n = 300) said that they would maintain a calm attitude if they encountered the same situation again. Other details are shown in Table 4.

Table 4: Details of recent violence.

QUESTION	Physical violence		Verbal violence		Total	
	N	%	N	%	N	%
Who performed the violence?						
Patient	49	31.41	263	39.37	312	37.86
Patient's relatives	58	37.18	225	33.68	283	34.34
Healthcare worker	8	5.13	95	14.22	103	12.50
Third person	21	13.46	67	10.03	88	10.68
Others	20	12.82	18	2.70	38	4.61
What were you doing at the time?						
I was informed the patient	61	39.10	168	25.15	229	27.79
I was examining the patient	36	23.08	224	33.53	260	31.55
I was interested in another patient	31	19.87	156	23.35	187	22.69
I was on my free time	18	11.54	89	13.32	107	12.99
Other	6	3.85	31	4.64	37	4.49
What was the reason you suffered from violence?						
Violent character	71	45.51	236	35.33	307	37.26
The patient's long waiting period	22	14.10	112	16.77	134	16.26
No mutual communication	26	16.67	226	33.83	252	30.58
Worsening of the patient's condition	19	12.18	68	10.18	87	10.56
Other	18	11.54	26	3.89	44	5.34
How would you react if you encountered the same situation again?						
I would show a calm attitude when making statements	44	28.21	256	38.32	300	36.41
I would act the same way	41	26.28	92	13.77	133	16.14
I would move away from the scene	40	25.64	189	28.29	229	27.79
I would have a harder attitude	19	12.18	53	7.93	72	8.74
Other	12	7.69	78	11.68	90	10.92

DISCUSSION

Many researchers in Taiwan have studied job stress, coping strategies, and health-promoting behavior among hospital staff. A study of healthcare workers (doctors, nurses, and others) performed in 2012 showed that stress management scores and interpersonal support were not correlated with sex.[17] In this study, age was related to both interpersonal support and stress management, but sex was related only to stress management scores. We suggest that interpersonal support and stress management scores increase with age because older family physicians have more experience with work and life than young family physicians. The difference about the relation between sex and stress management scores would be about personal the difference or properties of study group.

According to a hospital study in Saudi Arabia, 68% of participants were subjected to verbal violence.[18] In another study performed at an emergency service in the United States, the percentage was 74.9%.[19] In another Saudi Arabia study, 89.3% of workers were subjected to emotional violence, and 5% were subjected to physical violence.[20] A study from Turkey found rates of 98.5% for verbal violence and 19.7% for physical violence.[21] Another study from Turkey found that 82.2 % of healthcare workers were the object of any type of violence, most of it verbal.[22] In this study, 90.77% (n = 668) of workers were subjected to verbal violence and 152 participants (20.65%) were subjected to physical violence.

Patients who are prone to violence are usually under the age of 30, are men with low socioeconomic status, can carry weapons legally or illegally, are in trouble with the authorities. The majority of these people have a history of alcohol or substance abuse.[23] The most effective way to calm an aggressive person is to speak and communicate in a calm tone.[24] It is often not possible to avoid stressful events. For this reason, it is of great benefit to learn ways of coping with stress in daily life.[25] The purpose of stress-coping programs is to teach and improve methods to administrate self-stressing items and reactions to them, to correctly diagnosis problems, to direct stressors, and to

protect oneself from psychological and physiological harm.[26] In this study, stress management scores were low but not related according to been a subjected to violence. We think that it will be about the group properties because stress management was related with personality and learned with experiences.

Fernandes et al, argued that the use of violence prevention strategies is the most effective method of violence prevention.[27] At the forefront of these strategies is stress management and communication. In this study, although the interpersonal communication and stress management scores were low at the participants who had been subjected to violence; only interpersonal communication was statically related. It will be a sign that show the importance of the interpersonal communication than stress management. Because of, if there was no communication, there could not be stress management.

For both physicians and patients in the current economic and social conditions, mutual intolerance causes loss of empathy. In such an environment, it is inevitable that healthcare professionals and patients will engage in negative interactions with each other and that the negative interactions will lead to violence after a while. The most effective way of normalizing these interactions is communication and stress management.[28]

Winstanley and Whittington observed that most violence is not recorded.[18] A study in Israel found that 68.9% of cases of violence against healthcare workers did not move to the judiciary. In this study, 72.75% of the participants did not move to the judiciary. In the literature, among the most common reasons for not resorting to the judiciary, believing that resorting to the judiciary resulted in time loss, with violence appearing to be a part of the work.[29] In this study, the most common reason for not resorting to the judiciary was slowness and bureaucratic obstacles in the justice system.

Carmi-Iluz et al, found that long waiting times were the main cause of violence by patients (46.2% of incidents), while communication problems (10.3%).[30] In this study, the participants thought that violent character (37.26%) and communication problems (30.58%) were the main causes of violence. Solving communication problem was an important goal for preventing violence.

CONCLUSION

Physicians and other healthcare professionals have a right to work under safe conditions without the risk of violence. To ensure a safe environment, legal regulations are necessary, as well as other measures, such as training of employees and protection of employees' rights. In thisstudy revealed that the interpersonal communication and stress management scores were low at the participants who had been subjected to violence; only interpersonal communication was statically related. Therefore, stress management and interpersonal communication is very important to protect from violence, we suggested that this should be part of the curriculum of medical schools and postgraduate education.

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