

# Violence in the Health Sector and Its Properties: A Questionnaire toward Physician Working in the Emergency Departments

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## Abstract

**Objective:** In our country, violence has been spreading to every part of society, especially in the health sector in recent years. In this study, we aimed to determine the properties of violence that physicians working in the emergency departments are exposed to and witness and also to present the process after the violence.

**Material and Methods:** This study was held with participants of the 4th Emergency Medicine School Meeting organized by the Emergency Medicine Physicians Association of Turkey on January 11-12, 2013 in Istanbul. Answers given to the questionnaire titled "Violence in the health sector and its properties" by volunteer participants were evaluated with a statistical program.

**Results:** Of the 73 physicians, 60.3% was male and 39.7% was female. The mean age was  $31.9 \pm 5.8$  years; 91.8% stated that they were exposed to violence at least once in their professional lives. The most common type of violence exposed and witnessed was verbal violence.

**Conclusion:** Emergency departments are places where violence is experienced extremely often. Doing legal arrangements, taking security precautions, and solving patient-healthcare communication problems are important steps for preventing violence. But, it is thought that the main step is to provide social synergy in the perception of violence. (*JAEM 2014; 13: 124-30*)

**Key words:** Violence, emergency department, physician

## Introduction

Violence, which is defined by the World Health Organization as "the intentional use of physical force or power, threatened or actual, against oneself, another person, or against a group or community, that either results in or has a high likelihood of resulting in injury, death, psychological harm, maldevelopment, or deprivation," grows day by day, reaching threatening scales in our daily lives (1, 2). Every year, more than 1 million people lose their lives in the world due to violence (3).

Violence has become rampant in Turkey in all parts of society, and it has become especially prominent in the healthcare sector in recent years. Therefore, the General Assembly of the Turkish Parliament took the decision to establish a research commission in order to investigate the increasing acts of violence against healthcare professionals and to identify the precautions that must be taken on April 25, 2012 (4). The commission started its efforts on February 19, 2012 and purported to bring about solution proposals for the entire nation. As a result of the work performed by the commission and

in several studies conducted on this subject, it was identified that healthcare personnel, with emergency department employees ranking first, were subjected to violence (5-8).

This study aims to identify the characteristics of the violence that physicians working in emergency departments, the place with the highest incidence of violence, suffer from and witness and to demonstrate the process following the acts of violence that have occurred.

## Materials and Methods

This study was conducted with the participants of the 4<sup>th</sup> Emergency Medicine School, organized in Istanbul on January 11-12, 2013 by the Society of Emergency Medicine Professionals. The participants of the meeting were given questionnaire forms titled "Violence in the field of healthcare and its characteristics," and they were informed of the plan to assess and publish the survey data. The questionnaires of the participants who volunteered to fill in the questionnaire forms providing their feedback were included in the study. The questionnaire forms were filled in by 92 persons who volunteered to take part



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in the study. Nineteen of the questionnaire forms were filled in by physicians working elsewhere than the emergency department and other healthcare professionals; therefore, they were excluded from the study. The first 4 questions on the questionnaire forms were about age, sex, profession, and years of practice, and the next 5 questions were about the place of work, institution, and working conditions. No identifying information other than the information on the age and sex of the participants was collected. Questions 10-24 were targeted at identifying the characteristics of violence they were subjected to, and the last 4 questions were targeted at identifying the characteristics of violence that they witnessed.

**Statistical Analysis**

The information obtained from the answers provided by 73 physicians working in the emergency department was entered into digital media, and they were analyzed by using Statistical Package for Social Sciences 17.0 (SPSS Inc., Chicago, IL, USA) software. During the complementary statistical analysis, the average, standard deviation, minimum-maximum values, and frequency charts were used.

**Results**

The questionnaire "Violence in the field of healthcare and its characteristics" was filled in by 73 physicians working in emergency departments; 44 of 73 physicians completing the questionnaire (60.3%) were male, and 29 (39.7%) were female. The average age was 31.9±5.8; the minimum age was 25, and the maximum age was 44. One person completing the questionnaire did not fill in the age field.

The average years in practice as physicians of the evaluators of the questionnaire as part of the study were 6.4±5.6 years, and it was identified that they had been practicing this profession for a minimum of 4 months and a maximum of 21 years. The distribution of participants according to their years in practice is shown in Figure 1.

It was identified that 80.8% (n=59) of those who joined the survey were working in Istanbul. It was detected that the questionnaire was filled in by physicians working in the following cities other than Istanbul, respectively: Sakarya (6.9%; n=5), İzmir (2.7%; n=2), Ankara (2.7%; n=2), Diyarbakır (2.7%; n=2), Kırıkkale (1.4%; n=1), Konya (1.4%; n=1), and Bursa (1.4%; n=1).

The distribution of participants according to the institutions they were employed at is provided in Table 1, and it was identified that 61.6% of them (n=45) were working in training-research hospitals.

The physicians participating in the study were asked to provide "the number of patients they evaluated per day on average." This question was left unanswered by 4 physicians. One physician, who

stated that he previously worked in the emergency department yet is not currently working, mentioned that he saw 1500 patients per day. Two of 3 physicians responding to this question stated that they worked for 112 (emergency service line for Turkey); one of them mentioned seeing 15 patients a day, and the other saw 25. It was determined that the other 65 physicians working in the emergency department and answering this question saw a minimum of 5 and a maximum of 1500 patients per day. The distribution of patients seen by emergency department physicians per day is specified in Figure 2.

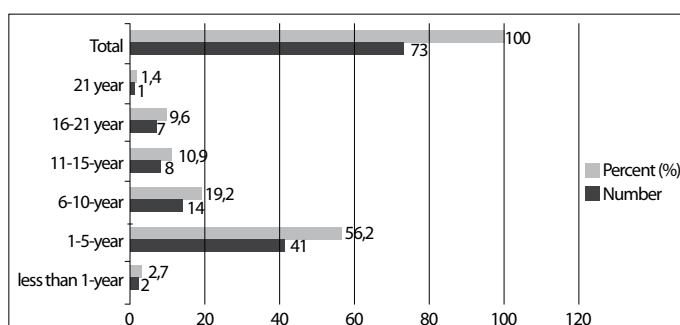
Further, 42.5% (n=31) of the participants stated that they were subjected to violence within the last month. As for the question "Have you ever been subject to violence during your professional life?", 91.8% (n=67) of the respondents answered "Yes." The answers given to these two questions are indicated in Table 2.

The respondents were asked about the types of violence they were subjected to, and it was mentioned that they could tick more than one option. It was determined that they were subjected most often to verbal, physical, and sexual violence, respectively (Table 3); 68.5% of the respondents stated that they were subjected to multiple types of violence.

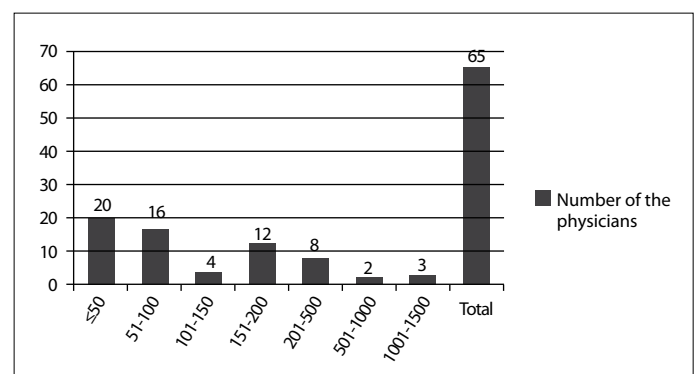
One day was divided into three equal time slots, being 08:00-16:00, 16:00-24:00, and 24:00-08:00, and the respondents were asked about the time slot in which they were subjected to violence during the day. A total of 24 of the respondents (32.9%) stated that they were subjected to violence most often between the hours of 16:00-24:00. Seven (9.6%) respondents left this question unanswered. Since there was a respondent who ticked more than one time slot on this question, the time windows ticked by every respondent are shown separately (Figure 3).

**Table 1.** The distribution of participations according to the institutions they are employed at

Institution	(n)	(%)
Training and Research Hospital	45	61.6
University Hospital	21	28.7
112 Emergency Ambulance Services	4	5.5
Private Hospital	1	1.4
State Hospital	1	1.4
Currently not working	1	1.4
Total	73	100.0



**Figure 1.** Respondents' years in practice as physicians



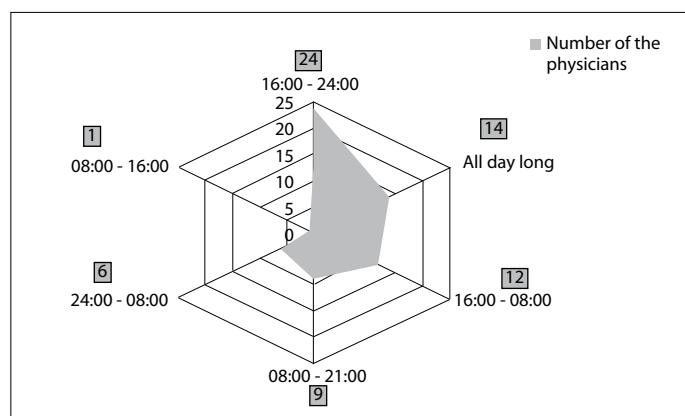
**Figure 2.** Distribution of the number of patients seen by the emergency department physicians per day

**Table 2.** Exposure to violence of participants throughout their professional lives and within the past month

Exposure to violence	In the past month		Throughout professional life	
	n	%	n	%
I haven't been subject to violence.	38	52.1	5	6.8
Only once	6	8.2	3	4.1
2-4 times	18	24.7	20	27.4
5-10 times	5	6.8	13	17.8
More than 10 times	2	2.7	31	42.5
Unanswered	4	5.5	1	1.4
Total	73	100.0	73	100.0

**Table 3.** Types of violence the respondents were exposed to

Types of violence being exposed to	(n)	(%)
Both verbal and physical violence	36	49.3
Only verbal violence	17	23.3
Verbal, physical, and sexual violence	13	17.8
I have never been exposed to violence.	5	6.8
Both verbal and sexual violence	1	1.4
Only physical violence	1	1.4
Total	73	100.0

**Figure 3.** Distribution of time slots in which the participants indicated they were exposed to violence during the day

A total of 48 (74.4%) of the respondents stated that they raised a complaint in relation to the act of violence they experienced, and 29 raised a written complaint: 14 oral and 5 both written and oral complaints. The highest number of complaints was raised with the police (n=33) and administration (n=33), and 11 people raised a complaint with the Ministry of Health. The institutions or organizations with which a complaint was raised are given in Table 4, and the answers provided by the authorities are given in Table 5.

Fifteen (20.5%) respondents said that they had an ongoing legal case about the act(s) of violence they experienced, and 3 (4.1%) respondents mentioned that the court ruling was announced, with the other party being penalized.

**Table 4.** Places with which the physicians raised a complaint in relation to the act of violence they underwent

Institutions/organizations where a complaint was raised	(n)	(%)
I have not raised any complaints.	21	28.8
Both the police and the administration	15	20.6
Only the police	12	16.4
Only the administration	10	13.7
Ministry of Health, police and administration	5	6.8
Both the Ministry of Health and the administration	3	4.1
Only the Ministry of Health	2	2.7
Both the Ministry of Health and the police	1	1.4
Unanswered	4	5.5
Total	73	100.0

**Table 5.** Procedure followed in the case of a complaint

Procedure Followed*	(n)	(%)
The aggressor was warded off by the police/security.	23	30.3
A legal process was initiated in relation to the incident.	22	29.0
We were said that "Such things happen, there's no reason to exaggerate it." and the matter was closed.	15	19.7
A record was kept and an administrative inquiry was started.	14	18.4
The precautions present in the healthcare institution were reviewed.	2	2.6
Total	76	100.0

\* Since multiple responses were given to this question, the number is more than the number of people who raised a complaint (n=48)

Two (2.7%) respondents stated that they had an injury requiring medical intervention as a result of the act of violence they were subject to, and 3 (4.1%) respondents stated that they received psychological support due to the act of violence they experienced.

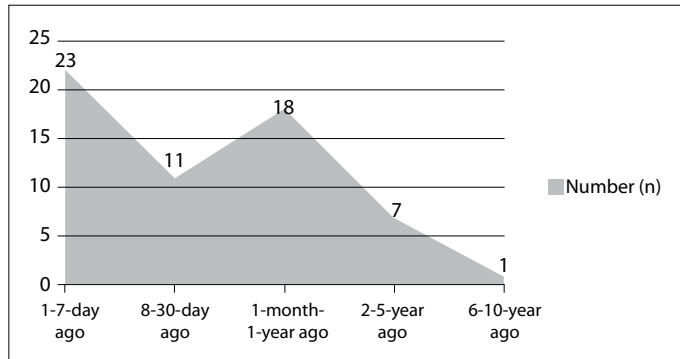
Based on an assessment of the characteristics of the latest act of violence, it was seen that 7 (9.6%) people said it was "yesterday," whereas 1 person (1.4%) mentioned that the latest act of violence was 10 years ago (Figure 4); 13 (17.8%) respondents left this question unanswered.

It was asked who the aggressor in the latest act of violence was. It was observed that the patient's relations were the aggressors in 84.9% of the cases with acts of violence (Table 6). Some respondents stated that they were attacked by multiple people; therefore, the total number of aggressors was more than the number of respondents of the questionnaire.

The question "What was the reason for the aggressor to attack you in the latest act of violence you experienced?" was answered by 63 (86.3%) respondents; some respondents presented multiple reasons; therefore, the total number of reasons was higher than the number of respondents. It was observed that the most frequently stated reason was the allegation that not enough care was given, which had a rate of 41.2% (Table 7).

When the respondents were asked about the type of violence they witnessed, 63% (n=46) said they witnessed both verbal and physical violence; 19.2% (n=14) witnessed only verbal violence; 9.6% (n=7) witnessed verbal, physical, and sexual violence; and 8.2% (n=6) witnessed only physical violence.

One respondent did not answer the question on the frequency of the violence they witnessed within the last month, and it was seen that the answer with the highest number of acts referred to more than 10 acts (Table 8).



**Figure 4.** The time of the latest act of violence

**Table 6.** The characteristic of the aggressor in the latest act of violence

Procedure Followed*	(n)	(%)
Patient's relation	47	64.4
Patient and patient's relation	12	16.4
Patient	4	5.5
Patient, patient's relation and another healthcare professional	2	2.7
Patient's relation and administration	1	1.4
Hospital security	1	1.4
Unanswered	6	8.2
Total	73	100.0

**Table 7.** The reasons stated by the physician as the motive of the aggressor in the latest act of violence

Procedure Followed*	(n)	(%)
Allegation that not enough care was provided	28	41.2
Allegation that the intervention was delayed (delayed implementation of studies, late arrival of the consulting physician, late arrival of the ambulance)	21	30.9
Dissatisfaction (Not receiving the desired studies/treatment, referral to the outpatient clinic, allegation that no treatment was given whereas it was)	9	13.2
Emergency department conditions and practices (patient's relation taking the blood samples collected to the laboratory, emergency department being cold or busy)	4	5.9
Wish to receive priority treatment/intervention (wish to have the patient seen immediately, allegation that a later-arriving patient was seen before the patient)	3	4.4
Person being under the influence of alcohol	2	2.9
Reason not understood	1	1.5
Total	68	100.0

## Discussion

Violence in healthcare, especially in emergency departments, is extremely common (6, 8, 9, 10); 91.8% of emergency department physicians mentioned that they were subject to violence during their professional life, and 42.4% of them mentioned that they were subject to violence at least once in the last month—this information supports this fact. The studies conducted in Turkey also demonstrate this situation. A study conducted among emergency department employees in the year 2002 identified that 72.3% of all employees and 78% of physicians were subjected to violence within the last year (11). A study conducted in Kocaeli including 12 healthcare institutions found that 72.6% of healthcare professionals were subject to violence during their professional life (12). Another study conducted among physicians and nurses working at Samsun Mental and Neurological Diseases Hospital identified the rate of exposure to violence within the past year as 85.9% (13). The studies report that psychiatry clinics rank second in terms of the incidence of violence in healthcare (8, 14, 15). The similarity between the violence rate in the study performed in Samsun and the rate in our study is associated with this situation.

Looking at examples in the world, it is seen that the incidence of violence in the field of healthcare is not really different from the one in Turkey. It was determined that 63% of general practitioners in the UK were subject to violence within the last year, and 20% were subject to violence at least once per month (16). A study conducted with emergency department physicians in the state of Michigan, USA, found that 76% of participants stated that they were subject to violence at least once during the past year (17). Another study of a similar nature conducted in the USA found this ratio to be 78% (18). The higher rate of exposure to violence identified in our study as compared to the literature reports has been associated with higher rates of exposure to violence in society, the use of data received only from emergency department physicians, and the indication of exposure to violence not only during the past year but throughout professional life. Furthermore, the low rate of physicians indicating they were never subject to violence (6.8%) is considered a remarkable finding.

Studies conducted on the nature of violence in the field of healthcare both in Turkey and elsewhere have shown that verbal violence has been at the forefront (7, 8, 11, 13, 18). In our study, 91.8% of the

**Table 8.** Frequency of violence witnessed by the respondents within the past 1 month

Frequency of violence witnessed in the past 1 month	(n)	(%)
I have not witnessed any in the past month.	7	9.6
Only once	2	2.7
2 - 4 times	23	31.5
5 - 10 times	15	20.6
More than 10 times	25	34.2
Unanswered	1	1.4
Total	73	100

participants were subject to verbal violence. While the rate of exposure to only verbal violence was 23.3%, 68.5% of the respondents saw that verbal violence accompanied other forms of violence (physical and sexual violence). The fact that the attack was not only verbal but also contained physical and sexual elements was assessed to be an important finding. According to a literature review, a study conducted by the Gaziantep-Kilis Chamber of Medical Doctors found that the rate of exposure to only verbal violence was 39.9%, whereas the rate of exposure to both physical and verbal violence was around 60%. The same study did not contain any findings about exposure to sexual violence (7). Among healthcare professionals exposed to violence in their professional lives, 15.8% was subject to physical violence, 98.5% was subject to verbal violence, 24% was subject to mobbing/psychological harassment, and 6.1% was subject to sexual violence, according to the findings (12). This study, conducted in Kocaeli, found that all rates except for the one related to verbal violence were lower than the rates found in our study. The relatively more intense types and higher rates of violence found in our study are considered to be probably related to the fact that the respondents in our study were emergency department physicians. A study held among emergency department professionals in Denizli found that 88.6% of the respondents stated that they were subject to or witnessed verbal violence (19). Even though this rate is similar to the one in our study, the difference has been associated with the inclusion of non-physician healthcare professionals in the study in Denizli. Two different studies conducted in the USA showed that emergency department physicians were often subject to verbal violence (respectively 75% and 74.9%) and physical violence (respectively 21% and 28.1%), and multiple types of violence were present at a rate of 21% (17,18). The rate of those stating that they were subject to multiple types of violence in this study was 3 times more than the one found in the US study. This situation was assessed to be a finding indicating that violence in emergency departments constitutes a much bigger problem for Turkey.

The time slot during which the respondents were subject to violence the most was found to be 16:00-24:00, with a rate of 32.9%. The increase in the waiting times of patients due to the closure of units other than emergency departments and the high level of patient concentration may result in increasing reactions of violence. Ayranç et al. (6) determined that the rate of exposure to violence reached the highest level in the time slot 08:00-17:00. The fact that the mentioned study found an increased incidence of violence in the mentioned working hours may be explained by the fact that physicians from many other disciplines and other healthcare professionals were

included in the study. As a matter of fact, outpatient clinics apart from emergency departments do not provide services after 17:00 in Turkey. Therefore, the acts of violence are most often observed in the evening hours, as the concentration of patients is shifted to emergency departments. Similarly, some studies conducted abroad found that the incidence of violence was increased at night and on the weekends (20, 21). On the other hand, there are also studies specifying that there is an increase in the frequency of violence between 08:00 and 17:00 o'clock (7, 11).

The rate of participants who did not raise any complaints after being subject to an act of violence was 28.8%, which was the largest group in that regard. A study conducted with healthcare professionals working at various levels found that the rate of raising a complaint with the police after being subject to violence was 84.3% (6). The study conducted in the year 2008 by Gaziantep-Kilis Chamber of Medical Doctors stated that the rate of those who did not raise a complaint was 62% (7). Another study performed in Kocaeli between the dates of December 2009 to March 2010 among all healthcare professionals found the rate of reporting the violence exposed to be 59.2% (12). It is observed that the rates at which healthcare professionals raised a complaint about the act of violence they underwent increased as years went by. The increase in the rate of healthcare professionals raising a complaint in Turkey can be explained by the increased awareness of healthcare professionals about violence and developments for the protection of healthcare professionals, such as the practice of White Code, which was launched by the Ministry of Health. On the other hand, the fact that the physicians who did not raise a complaint constituted the largest group in our study may be associated with the concern that legal procedures may slow down the circulation of patients in emergency departments. A study published by the British Medical Association in January 2008 stated that 52% of physicians who underwent violence did not take any initiatives after the incident, and this situation was considered to be an indicator of the increased acceptance of violence in healthcare (22).

Our study showed that 81.3% of the complaints raised by the physicians due to violence in the emergency department resulted in the situation being taken into account with administrative, legal, or in-hospital measures being taken. On the other hand, it was identified that 19.7% of the respondents said that "such things happen; there is no need to exaggerate it," and the matter was closed. There is an increasing awareness about violence in healthcare, and precautions have come to be taken; however, nearly one-fifth of complaints are still not taken into account, which shows that this topic is still not handled with the importance and seriousness that it merits. Also, 20.5% of the respondents had an ongoing court case, which was seen as an indication that the physicians now also took this matter seriously, did not underestimate the cases, and wanted to say "stop" to this situation.

It was identified in the study that the involvement rate of patients' relations in the acts of violence was 84.9%. The studies held in Turkey also identified that the patients' relations were the most important actors in the violence experienced in the healthcare field (7, 12). A study performed in the USA demonstrated that 89% of acts of violence against emergency department physicians were committed by patients, 9% were committed by a family member, and 2% were committed by a friend of the patient (17).

In our study, the physicians mentioned that the most frequent reasons of aggressors included the allegations about inadequate

care and late intervention (41.2% and 30.9%, respectively). The number of healthcare professionals is often inadequate, given the number of patients presenting to the emergency department. The daily numbers of patients seen by the physicians participating in our study demonstrate this fact. On the other hand, the heavy workload and difficult working conditions, especially in emergency departments in Turkey, constitute a known fact. Especially, the emergency departments, where people presenting as emergency patients are seen, are the departments where patients and their have high expectations. Therefore, this situation raises the expectations from emergency service physicians, whereas the current healthcare facility conditions do not meet the expectations of patients and their relations. The physicians are undoubtedly expected to emphasize patient intervention rather than their connection with the patient's relations. However, the patients' relations waiting outside are also part of the emergency medical services. The prolongation of intervention for the patient and inadequate information provided for the patient's relations, in their views, may raise the concern levels of the patient's relations, causing them to become agitation-prone persons (23). Naturally, this situation does not render violence to be acceptable. However, the fact that violence is seen as a way of assuring power, control, and solving problems in Turkish society results in a more intense occurrence of violence in emergency departments, where the concern levels of patients and patients' relations are especially high.

### Study Limitations

This study was limited to physicians who participated in the 4<sup>th</sup> Emergency Medicine School meeting organized in Istanbul on January 11-12, 2013 by the Society of Emergency Medicine Professionals. Furthermore, the study was based on voluntary participation; hence, it was limited to the answers of physicians who provided their feedback by filling in the questionnaires.

### Conclusion

Violence in healthcare constitutes one of the most important problems that must be dealt with by all healthcare professionals, with emergency service employees ranking first. Today, it is possible to see all kinds of violence in the healthcare industry. This situation directly influences healthcare professionals in a negative way; however, it also causes negative effects on the other healthcare professionals and patients' relations in the environment where the act of violence takes place.

The precautions that are taken on both the institutional and national levels indicate that violence in the field of healthcare has reached a level necessitating intervention. In that respect, it is naturally important to make the necessary legal arrangements, take security precautions, and solve the problems of communication between patients and healthcare professionals. However, we are of the opinion that the essential point in solving the issue of violence is to prevent violence from being seen as acceptable behavior in the society, taken for granted, and seen as a way of solving problems and to assure a unified perception in society in relation to the issue of violence.

**Ethics Committee Approval:** Due to this questionnaire study based on volunteering policy, ethic committee approval was waived.

**Informed Consent:** Informed consents were taken from participants.

**Peer-review:** Externally peer-reviewed.

**Author Contributions:** Concept - A.K., B.K., G.O.; Design - A.K., B.K., G.O.; Supervision - G.O.; Materials - A.K., B.K., M.Ö.K.; Data Collection and/or Processing - A.K., B.K., M.Ö.K., N.A.A.; Analysis and/or Interpretation - A.K., B.K., N.A.A.; Literature Review - A.K., B.K., M.Ö.K., N.A.A.; Writer - A.K.; Critical Review - A.K., B.K., G.O.

**Conflict of Interest:** The authors declared no conflict of interest.

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