

HOSTED BY



ELSEVIER

Contents lists available at ScienceDirect

Turkish Journal of Emergency Medicine

journal homepage: <http://www.elsevier.com/locate/TJEM>

The approach of prehospital health care personnel working at emergency stations towards forensic cases



Ozlem Ascı*, Guleser Hazar, Isa Sercan

Artvin Coruh University, Nursing Department of Artvin Health High School, Artvin, Turkey

ARTICLE INFO

Article history:

Received 11 September 2014

Received in revised form

6 January 2015

Accepted 13 April 2015

Available online 17 November 2015

Keywords:

Forensic nursing

Forensic sciences

Prehospital emergency care

ABSTRACT

Objectives: The objective of this study is to determine the states of health care personnel, working at 112 emergency stations in the province of Artvin, to encounter with regarding forensic cases and determine their practices aimed at recognizing, protecting, and reporting the evidences that may affect the forensic process. **Materials and methods:** This descriptive study was conducted with nurses and emergency medicine technicians working at 112 emergency stations in Artvin between January 2013 and February 2014.

Results: Of 141 health personnel that constituted sample of the study, 48.9% were nurses, 9.9% emergency medicine technicians, and 41.1% ambulance and emergency care technicians. The rate of feeling sufficient in coping with forensic cases and incidents was 20.6%. There was a lower rate of receiving education about the approach towards forensic cases (15.6%). In the study, the frequency of encountering with at least one forensic case was 88.7%. Traffic accidents (72.5%), suicides (41.5%) and assaults (41.5%) were among the most frequent reasons of forensic cases. The practices of nurses were more successful in woundings by firearms compared to other health personnel ($p < 0.05$). The rate of recognizing the evidences was 81.6–96.5%. Almost one fourth of the personnel had no sufficient information about storing and protecting the evidences.

Conclusions: The personnel working at 112 emergency stations in the province of Artvin frequently encounter with forensic cases. The personnel with higher educational level and nurses have more successful practices in forensic cases. Health personnel have approaches that may negatively affect the solution of forensic cases.

Copyright © 2015 The Emergency Medicine Association of Turkey. Production and hosting by Elsevier B.V. on behalf of the Owner. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

1. Introduction

Many trauma types caused by violence, accidents, sexual assaults, and domestic violence threatening the life and health level of individuals are commonly observed in societies.¹ If a person plays a role in the health impairment of another person either on purpose or as a result of incautiousness or inattentiveness, and if such a condition is claimed or suspected, this condition is defined as a “forensic event/incident” and the wounded person a “forensic case”.^{2–4} An important part of forensic cases is involved within the scope of emergency cases. Thus, the first care and treatment of forensic cases are frequently conducted in 112 emergency

ambulances and emergency services. Forensic incidents usually constitute the first rank among the reasons for applying to 112 emergency ambulance services.^{5,6} Woundings by firearms, explosive materials, as well as sharp object injuries, traffic accidents, falls, assault cases, occupational accidents, poisonings, burns, asphyxia, all kinds of suicide attempts, all deaths that are suspected to be originated from murders, suicides, and accidents, domestic violences, sexual assaults, abuses are examples of emergency forensic incidents.^{3,7,8}

Health personnel providing emergency health care services are the people who will provide the first care and treatment to the case and see the evidences that will contribute to the enlightenment of forensic cases for the first time.² Everything being used, left, taken away, changed or contaminated by the accused or the victim while committing the crime is considered within the scope of an evidence in forensic cases.^{2,9,10} Physical evidences include bullets, clothes, hair, thread, debris, saliva, semen, and bite marks. On the other hand, non-physical evidences include the evaluation of trauma

* Corresponding author.

E-mail address: asci.s.ozlem@gmail.com (O. Ascı).

Peer review under responsibility of The Emergency Medicine Association of Turkey.

tendencies during the process of taking the psycho-social history such as the suicide attempt, violence, abuse, and self-destruction. All kinds of materials being carried by and/or found on patients should be protected and kept as an evidence and delivered to security officers. The biggest problem in protecting and storing the evidences in the clinical area is frequently caused by the failure of properly storing the evidences.^{8,11,12} For instance, if a short-term storage is required (72 h and below), it is suggested to store the urine in a freezer at -10°C , blood plasma in a refrigerator between $+2^{\circ}\text{C}$ and $+8^{\circ}\text{C}$, dry biological stains in a controlled environment between 15.5°C and 24°C and wet materials in a freezer unless they could be dried.¹¹

While realizing the care and treatment of the case, the health care personnel may fail to identify the forensic case or evidences due to the lack of information or damage the evidences due to their noncompliance with the procedure of storing and collecting. This condition may complicate the judicial review and lead to the inconclusiveness or wrong decision of courts.¹³ Thus, the health care of an emergency forensic patient should involve the storage of all kinds of evidences, which may contribute to the emotional support for patients and their families, preservation of their information, creating awareness regarding legal liabilities and solution of forensic events, in order to identify, collect and deliver them to authorities under suitable conditions.¹ Additionally, in the present legal system, in case that health profession members encounter with an indication of crime while carrying out their duty, they should inform the authorities about the situation and avoid any delays.¹⁴

Apart from physicians, the health care personnel working at emergency services in Turkey have an ambiguous approach towards forensic cases and there is a limited number of relevant studies. İlçe et al, stated that a great majority of health care personnel working at emergency services of hospitals did not have sufficient information about the storage and protection of evidences.³

The objective of this study is to determine the states of health care personnel, working at 112 emergency stations in the province of Artvin, to encounter with regarding forensic cases and determine their practices aimed at recognizing, protecting and reporting the evidences that may affect the judicial process.

2. Materials and methods

This descriptive study was conducted with health care personnel (nurses and emergency medicine technicians) working at 112 emergency stations (three in the city center and nine in the districts) of the Provincial Directorate of Health of Artvin. The inclusion criteria of the study involved working at any of 112 emergency stations in the province of Artvin on the date when the study was conducted and accepting to participate in the study. The only exclusion criteria of the study was to leave more than half of the questionnaire, applied in the study, incomplete. In the study, the entire population was reached without using the sample selection methods ($n = 146$). We excluded 3 individuals from the study as they rejected to participate and 2 others as they left more than half of questions incomplete, and the study was completed with 141 individuals. In order to conduct this study; permission from the Provincial Directorate of Health of Artvin and an approval from the Ethics Committee of Artvin Çoruh University Rectorship were received.

The data were collected by researchers via a questionnaire, which was formed in accordance with literature, between January 2013 and February 2014. Having twenty four questions, the questionnaire involves eight questions about descriptive characteristics (age, gender, place where a large part of life is spent,

marital status, occupation, working duration), six questions about determining the frequency of encountering with forensic events, reasons of forensic cases and the level of obtaining relevant information, seven questions about determining the practices performed in cases wounded by firearms, and three questions about determining the practices aimed at protecting, storing, and delivering the forensic evidences. The statistical analysis of the data was conducted using the package software of Statistical Package for Social Sciences 16.0 (SPSS) on computer. The data were presented as mean \pm standard error and frequency ($n, \%$). While the Kolmogrov Smirnov test was used to evaluate whether the data of the study showed a normal distribution or not, the Levene's test was used to assess the equation of variances and by this way, the appropriate analysis technique was determined. Since the data showed a normal distribution and the variances were homogeneous, parametric tests were selected in comparisons. In the study, the answers given by participants regarding the practices made/to be made in cases wounded by firearms were transformed into scores. While 1 point was given for each correct answer, 0 was given for each unanswered and wrong question. The mean scores obtained by participants from this evaluation and the descriptive characteristics were compared using the ANOVA test where the post-hoc tukey analysis was selected. The data were assessed at the confidence interval of 95% and the significance level of $p < 0.05$.

3. Results

Majority of health care personnel that participated in the study were women (58.1%, $n = 82$), in the age group of 20–29 years (50.4%, $n = 71$) and married (53.2%, $n = 75$). 48.9% ($n = 69$) of participants were nurses/health officers, 9.9% ($n = 14$) were emergency medicine technicians and 41.1% ($n = 58$) were ambulance and emergency care technicians. A great majority of participants who spent most of their life in the provinces (35.5%, $n = 50$) and districts (54.6%, $n = 77$) were high school graduates (Table 1). While the average working duration of participants was 112.8 (9.4

Table 1
Descriptive characteristics of health care personnel working at emergency services.

Characteristics	n	%
Age group		
20–29 years	71	50.4
30–39 years	62	44.0
40 years and older	8	5.6
Gender		
Female	82	58.1
Male	59	41.9
Marital status		
Married	75	53.2
Single	66	48.8
Place where a large part of life is spent		
Province	50	35.5
District	77	54.6
Village	13	9.2
Unanswered	1	0.7
Educational background		
High school	91	64.5
Associate degree	33	23.4
Undergraduate	12	8.5
Unanswered	5	3.6
Occupational Group		
Nurse/Health Officer	69	48.9
Ambulance and Emergency Care Technician	58	41.1
Emergency Medicine Technician	14	9.9
Total	141	100

Download English Version:

<https://daneshyari.com/en/article/2604131>

Download Persian Version:

<https://daneshyari.com/article/2604131>

[Daneshyari.com](https://daneshyari.com)