

KAHRAMANMARAŞ'TA MEYDANA GELEN ATEŞLİ SİLAH YARALANMASINA BAĞLI ÖLÜMLER

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ÖZET Amaç

Türkiye'de her yıl yaklaşık 3000 kişi ateşli silah yaralanması sonucunda yaşamını yitirmektedir. Bu çalışmada Kahramanmaraş ilinde 1992-2002 yılları arasında meydana gelen ateşli silah yaralanmasına bağlı ölüm olgularındaki bölgesel niteliklerin değerlendirilmesi amaçlanmıştır.

Materyal ve Metod

Kahramanmaraş'ta bu dönemde meydana gelen toplam 249 ateşli silah yaralanmasına bağlı ölüm olgusunun ölü muayene ve otopsi tutanakları retrospektif olarak incelendi. Olgular; cinsiyet, yaş, olayın orijini, kullanılan silahın cinsi, giriş deliği lokalizasyonu, atış

mesafesi ve terörist aktiviteler yönünden değerlendirildi. İstatistiksel analiz SPSS (Statistical Package for Social Sciences) 10.0 programı kullanılarak yapıldı.

Bulgular

Ateşli silah yaralanmasına bağlı ölüm oranı 4.58/100,000 bulundu. Bu ölüm oranının terörizmin arttığı dönemde yükseldiği saptandı. Olguların %67.5'i cinayet, %18.9'u intihar, %13.6'sı kaza şeklinde gerçekleşmişti. İntihar olgularının %46.9 oranında kadınlarda ve en çok 11-20 yaş grubunda (%53.2) görüldüğü saptandı. Kaza orijinli olguların en sık 0-10 yaş grubunda (%52.9) ve en çok tüfek (%47) ile gerçekleştiği görüldü.

Sonuç

Terörizmin ve bölgesel farklılıkların ateşli silah yaralanmasına bağlı ölüm olgularında artışa ve olguların yaş grubu, olayın orijini ve kullanılan silahlar arasında da farklılıklara yol açabildiği görülmektedir. Ateşli silah kullanımına karşı caydırıcı yasaların yürürlüğe konulması ile ateşli silahların neden olduğu hasarlar konusunda halka yönelik etkili eğitim programlarının uygulanması, ateşli silahların neden olduğu ölüm olgularının azaltılması için alınması gerekli önlemlerdir.

Anahtar Kelimeler: Ateşli silahlara bağlı ölümler, İntihar, Cinayet, Kaza.

Ateşli silah kullanımına karşı caydırıcı yasaların yürürlüğe konulması ile ateşli silahların neden olduğu hasarlar konusunda halka yönelik etkili eğitim programlarının uygulanması, ateşli silahların neden olduğu ölüm olgularının azaltılması için alınması gerekli önlemlerdir.

FIREARM FATALITIES IN KAHRAMANMARAŞ

ABSTRACT

Objective

Approximately three thousand people lose their lives every year due to firearms in Turkey. This study aims to evaluate the regional properties of the death cases due to firearm injuries that took place in Kahramanmaraş between 1992 and 2002.

Material and

Methods

Total 249 death cases' due to firearm injuries that took place in Kahramanmaraş in this period, corpse examination and autopsy records were investigated retrospectively. Cases were evaluated according to the sex, age, manner of death, type of firearm, entrance wound location, range of fire terrorism acts. Statistical analysis was carried out by SPSS (Statistical Package for Social Sciences) version 10.0.

Results

The firearm-mortality rate is calculated to be 4.58/100,000. The mortality rate showed an increase when terrorism was at peak. It was identified that 67.5% and 18.9% of the deaths were caused by homicide and suicide, respectively. Of all cases, the rate of woman suicide is 46.9%

and primarily seen at ages 11-20 years (53.2%). The majority of accidents (52.9%) took place at ages 0-10 years and mainly used rifles (47%).

Conclusion

It was determined that terrorism and regional differences caused an increase in firearm fatalities and that the age group and manner of the deaths as well as the weapons used varied. Deterrent laws against the use of firearm must be put into effect and education increasing awareness of the damage caused by weapons must be provided.

Key Words: Firearm fatalities, Suicide, Homicide, Accident.

INTRODUCTION

The firearm-related death is a major public health issue in many other countries (1-3), as it is the case in Turkey (4,5). While approximately ten-thousand people get injured due to firearm, three-thousand people lose their lives (6). Among non-natural deaths, firearm fatalities rank second in some studies and third in others after traffic-related deaths (4,5,7,8).

Turkey is a country of 300 000 square miles, with a population of approximately 70 million.

Kahramanmaraş is a province located in Eastern Mediterranean Region of Turkey. Kahramanmaraş has been affected from the terrorism in the region that has persisted for many years. People living in this region have lower socioeconomic and education status than the western parts of Turkey. Along with cultural factors, socio-economic conditions and deficiencies in the laws, it is known that the migration, mafia and terrorism have been significant factors in the increase of firearm fatalities (4,5,9,10).

This study aims to analyse of the regional properties of the firearm fatalities in Kahramanmaraş, between 1992 and 2002.

METHODS

Between 1992 and 2002, a total of 2,027 medicolegal deaths took place in Kahramanmaraş. 249 (12.3 %) firearm fatalities that occurred during this period are included in this study. The post-mortem external examination reports, autopsy reports and court files pertaining to these cases were examined retrospectively. Deaths due to explosives were not included in this study but the rocket launchers have been included under the scope of firearm.

All of the cases have been examined with respect to their distribution according to sex, age, manner of death, type of weapon, entrance wound location, shooting range, years of events and terrorism acts.

The mortality rate has been calculated according to a population of 100,000 people. The population data used for the calculation of the mortality rate is provided by the State Institute of Statistics. Statistical analysis was carried out by SPSS (Statistical Package for Social Sciences) version 10.0, Graphics were prepared by Microsoft Excel 2002.

RESULTS AND

DISCUSSION

The legal arrangements for the prevention of illegal provision of firearms in Turkey are not sufficiently deterrent. All types of weapons are subject to authorisation with the exception of airguns according to the legal rules. However, in order to be able to obtain a license, the applicant must be over 21 years old, have no record of certain crimes and possess no physical or mental handicaps. Whereas, in order to be able to obtain a license for a shotgun, the applicant must be over 18 years old and have no criminal record. It is estimated that there are two million licensed and

five million unlicensed, totalling to 7 million guns in Turkey (6).

Licensed guns accounted for 1/3 of the crimes in Turkey, whereas the unlicensed guns 2/3 of the crimes (6). The civilian population in Kahramanmaraş had 2,450 handguns and 23,144 shotguns in June 2003 (11). The number of unlicensed guns possessed by the civilian population is not established precisely.

It is known that the increase in the mortality rate is directly related to the increase in the number of people who possess a gun (3). This situation, to a certain extent, explains the significance of firearm fatalities in Turkey.

Age Group	HOMICIDE		SUICIDE		ACCIDENT	
	Female n %	Male n %	Female n %	Male n %	Female n %	Male n %
0-10	0 0,0	0 0,0	0 0,0	0 0,0	5 71,4	13 48,1
20-Nov	6 37,5	22 4,5	7 46,7	18 56,3	1 14,3	8 29,6
21-30	3 18,7	43 28,3	3 20,0	80 25,0	0 0,0	2 7,4
31-40	3 18,7	50 32,9	2 13,3	2 6,3	0 0,0	1 3,7
41-50	1 6,3	23 15,1	1 6,7	2 6,3	0 0,0	1 3,7
51-60	1 6,3	8 5,3	1 6,7	1 3,1	1 14,3	1 3,7
60 ←	2 12,5	6 3,9	1 6,7	1 3,1	0 0,0	1 3,7
Total	16 100,0	152 100,0	15 100,0	32 100,0	7 100,0	27 100,0

Tablo-1. Age and sex distribution according to the manner of death

LOCATION	HOMICIDE		SUICIDE		ACCIDENT		TOTAL	
	n	%	n	%	n	%	n	%
Head + Neck	39	23,2	31	66,0	20	58,8	90	36,1
Chest	21	12,5	10	21,3	5	14,7	36	14,5
Abdomen	7	4,2	6	12,7	4	11,8	17	6,8
Head + Chest	25	14,9	0	0,0	1	2,9	26	10,5
Head+Chest+ Ext.	17	10,1	0	0,0	0	0,0	17	6,8
Head + Ext.	15	8,9	0	0,0	0	0,0	15	6,0
Chest + Abdomen	13	7,7	0	0,0	1	2,9	14	5,6
Chest + Ext.	11	6,5	0	0,0	0	0,0	11	4,4
Head+Chest+Abd.	8	4,8	0	0,0	0	0,0	8	3,2
Extremities	4	2,4	0	0,0	2	5,9	6	2,4
Abdomen + Ext.	4	2,4	0	0,0	1	2,9	5	2,0
Back	2	1,2	0	0,0	0	0,0	2	0,8
Chest + Back	2	1,2	0	0,0	0	0,0	2	0,8
Total	168	100,0	47	100,0	34	100,0	249	100,0

Table 2. Entrance wound location according to the manner of death

The civilian population in Kahramanmaraş had 2,450 handguns and 23,144 shotguns in June 2003. The number of unlicensed guns possessed by the civilian population is not established precisely.

RANGE OF FIRE	HOMICIDE		SUICIDE		ACCIDENT		TOTAL	
	n	%	n	%	n	%	n	%
Contact/near contact	4	2,4	43	91,5	6	17,6	53	21,3
Close	18	10,7	4	8,5	10	29,4	32	12,9
Distant	139	82,7	0	0,0	16	47,1	155	62,2
Undetermined	7	4,2	0	0,0	2	5,9	9	3,6
Total	168	100,0	47	100,0	34	100,0	249	100,0

Table 3. Range of fire according to the manner of death

SEX AND AGE DISTRIBUTION

Of all the cases 84.7% (n=211) were male and 15.3% (n=38) were female. This ratio was similar with the studies conducted both from Turkey and other countries (3-5,7,8,12-16).

The youngest case was a 10-month old baby and the oldest was a 90 year-old male. Of all the cases, 71.9% were aged 11-40 years. The majority of the cases were aged between 11-20 years, which is compatible with findings from studies conducted in Diyarbakır bearing a similar social structure (5). In contrast, other studies conducted in Turkey and other countries show an intensity at ages 20-29 years and 30-39 years (4,8,10,13-16). It is determined that 36.8% (n=14) of deaths in women occur at ages 11-20 years. In general, the data shows that firearms pose a threat for everyone, regardless of age or sex.

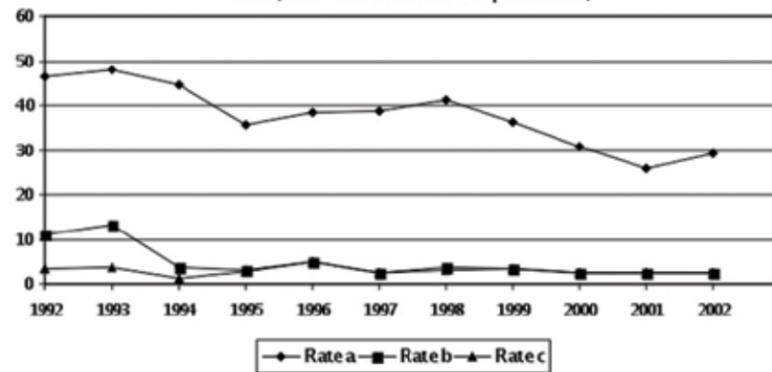
DISTRIBUTION ACCORDING TO YEARS AND GENERAL ASPECTS

The annual firearm mortality rate for Kahramanmaraş was calculated to be approximately 4.58%. This rate was found to be higher than the average rates of European and Asian countries (3) although there is no study covering the whole Turkey. It is worthy of note that Kahramanmaraş ranks higher than Turkey's other provinces (5.6%-11.1%) when considered the 12.3% rate of firearm fatalities (n=249) among the total number of medicolegal deaths (n=2027) in Kahramanmaraş, (5,7,8,12,17).

This rate reduces to 2.90, when excluded the cases related to terrorism. Even this rate, which is still high, implies that firearm fatalities caused by terrorism as

well as individual armament are a frequent incident. While the firearm fatalities between 1992 and 1993, account for 1/4 of all the medicolegal deaths, it was identified that when the deaths occurring from terrorism were excluded, the deaths followed a fixed pattern (Figure 1). It was determined that no firearm fatality resulting from terrorism had taken place after 1998. The mortality rate was above average (10.93-13.13) between 1992 and 1993 being due to the fact that terrorism was at peak during this period. Approximately 6,000 acts of terrorism were recorded annually (18) between these years in Turkey as well as it is high for Kahramanmaraş. Terrorism caused to almost two-fold increase in the mortality rate for firearm fatalities. It can be concluded that terrorism not only increase the mortality rate of firearm fatalities but also increase its portion among all medicolegal deaths.

Figure 1. Mortality rates of firearm fatalities by th
(Rate a, all medicolegal death Rate b, all firearm fatalities
Rate c, the firearm fatalities except terrorism)



MANNER OF DEATH

The manner of the death was accurately identifiable in this study, as all of the court files pertaining to each specific case were examined. While 67.5% of the deaths were homicides (n=168), 18.9% were suicides (n=47) and, 13.6% were accidents (n=34) (Table 3). This study which concludes that suicides rank secondly after homicides is compatible with the other studies made in Turkey (4,5,8,12-14).

The mortality rate for all homicides in Turkey for the year 2000 was reported to be 0.63 (19).

cases according to the manner of the death were shown in Table 1. It was seen that the homicides were most frequently (58.9%) observed in ages 21-40 years and most of the victims of homicide were men as similar studies (4,5,8,14-16,20). It has been established that the major cause of deaths in women was homicide (n=16, 42.1%). It was established that female victims of homicide were frequently observed in a lower age group, especially in ages 11-20 years (37.5%). Young women are frequently exposed to intra-family violence in the South-eastern region of Turkey, encompassing Kahramanmaraş (21) and homicides based on

0.54). The proportional difference between these two methods has decreased in the past few years (23). The mortality rate for suicide by firearm is 0.88 in this study and is higher than the Turkey's general mortality rate. The poverty in the region as well as the increase in unemployment due to terrorism is the reasons for that result.

The findings of this study whereby suicides were observed most frequently at ages 11-20 years (n=25, 53.2%) (Table 1) are similar to the data from Diyarbakır (5) and Batman (24), both affected from terrorism, as well as Gaziantep (1) which has had an influx of

The mortality rate for all homicides in Turkey for the year 2000 was reported to be 0.63. The mortality rate for homicides is calculated to be 3.09 for Kahramanmaraş. This rate was found to be considerably higher than that of the mortality rate covering all of the homicides within Turkey. It was suggested that terrorism and regional differences were the causes of this different high mortality rate.

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The age and sex distribution of the

sexual reasons and on the grounds of honour (namus) is widespread in Turkey (22). Therefore, young females might have been the victims of homicide from this reason in our study.

According to the statistics covering all of Turkey (between 1992 and 2000), firearm fatalities rank secondly after hanging among suicidal attempts (mortality rate

immigrants due to terrorism. However, in the cities far from terrorism and feudalism and in which have better economic and socio-cultural situation such as Istanbul (25) and Antalya (26), suicides are most frequently observed at ages 20-30 years.

The higher woman suicide rate (n=15, 39.5%) is another interesting result of this study.

While the mortality rate for suicides by firearm in Turkey is 0.16, this rate is calculated to be 0.28 for Kahramanmaraş. The statistics covering all of the suicides show that the 53.9% of the suicides in Kahramanmaraş have been committed by women (23). In Diyarbakır, which bears similar regional characteristics, it is reported that 58% of the suicides are committed by women (28). Compared to other provinces, the high rate of suicides committed by women in provinces such as Kahramanmaraş and Diyarbakır

accidents reported recently are generally observed at ages 15-24 years (29-31) and the major cause is playing with firearms (32). When children play with toy guns, they may not really comprehend the painful reality behind the idea of death (30). However, this study has found intensity in a lower age group. It can be concluded that persisting terrorism within a region increases the accident-related mortality rate and significantly affects children. This is important in terms of showing how a great harm may be inflicted

The handgun is the most frequently (n=19, 40.4%) used weapon in suicides. The rate of rifle used in suicides (n=16, 30.4%) is significantly higher than the rate reported for Turkey or for any other country (4,13-16).

Eighteen of the all cases had occurred as a result of rocket launchers. The proportional differences among the types of firearms as well as its variety within Turkey are due to terrorism. The frequency of shotgun use is due to the locals possessing such

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is due to the feudal composition as well as the conservative family structure. It is known that one of the asserted reasons for the high rate is due to the fact that especially young women are convinced into committing suicide for the sake of saving the family's honour in Eastern and South-eastern part of Turkey. Being forced into marriage at young ages, even at childhood is another effective factor for this increase (21,24).

The accidental firearm mortality rate in Kahramanmaraş is also high (0.62). It is worthy of note that, 52.9% of the accidents were at ages between 0-10 years. However, the

when lethal weapons are used by inexperienced and uneducated individuals.

TYPE OF FIREARMS

Although the recent studies generally gives that handgun is the most frequently type of firearm causing death (4,8,10,12-14), the shotgun (45.4%) takes first rank in this study surprisingly. The frequency of rifle use (18.9%) is also noteworthy and is significantly higher than the rates established in other studies in Turkey (0%-7.1%) [4,12-14]. It can be suggested that, this is the result of the civilians' rifle possession related to terrorism.

firearms because of terrorism as well as blood feuds. Shotguns are more frequently possessed due to being cheaper and easier to obtain compared to other types of firearms. It is reported that the type of firearms may affect the mortality rate (3).

ENTRANCE WOUND LOCATION AND RANGE OF FIRE

Table 2 shows that firearm fatalities occur primarily due to wounds where are located in the head-neck region similar with the

other studies (4,8,13,16). In this study and other studies (4,8,12), it has been determined that the deaths occurred as a result of distant range fire.

In 56% of the homicide cases it has been identified that there were two or more entrance wounds. In 44% of the cases, a single entrance wound was found (Table 2). In contrast to this study, it has been primarily reported that a single entrance wound has been found (13,16,20). In line with literature, it has been determined that in cases

the abdomen (n=6, 12.7%) (Table 2) as the recent literature (8,13-16,25,26,30).

The results of this study as the range of fire in 91.5% of suicide cases being from contact/near-contact range fire and only 8.5% (n=4) of the cases being from close range fire are also similar with the other studies (Table 3) (11,13,24,32).

Almost half of the injuries are reported to be in the head-neck regions (58.8%) and are most

prevalence of rifles is considerably high. The persisting terrorism in the region as well as regional features causes variations in the region according to the nature of firearm fatalities other than in the parts of the Turkey.

When considered that crimes committed using licensed guns have a significant share among all firearm-related crimes, special care should be shown in the granting of firearm authorisation to civilians. Getting the provision of licenses must become more

In suicide cases, the deaths predominantly occur as a result of a single shot (96.4%). In this study, it has been determined that all of the suicide cases have occurred as a result of a single shot.

of firearm-related homicide, the entrance wound location is most frequently the head region (8,13,14,20). As expected, the range of fire in homicide cases is most frequently distant range fire (n=139, 82.7%) (Table 3) (13,14). But, there are a few studies in which the chest region is shown to be the primary region (10,16).

In suicide cases, the deaths predominantly occur as a result of a single shot (96.4%) (16). In this study, it has been determined that all of the suicide cases have occurred as a result of a single shot. While most of the injuries occurred in the head-neck region (n=31, 66.0%), this was followed by the chest (n=10, 21.3%) and

frequently (47.1%) from distant range fire (Table 2 and 3). These results are compatible with literature (13,14,30).

CONCLUSION

In this study, it has been observed that terrorism and the socio-economic conditions have the significant roles for the characteristics and the magnitude of the firearm fatalities. These were seen most frequently among men and younger ages. In suicidal cases, the death rate of females is close to that of males. Firearm fatalities are principally homicidal in manner. While shotguns are the most widely used weapon, the

difficult and applicants must be educated on using firearms as well as legal sanctions before granting the authorisation. Additionally, deterrent laws for the prevention of illegal provision of firearms must be put in place.

Being aware of and taking into consideration the aetiology of firearm-related crimes as well as the characteristics of the crime scenes will facilitate the development and implementation of the methods to be employed for the prevention of firearm-related crimes. In order to be able to reduce terrorism and firearm-related crimes, international cooperation is required.

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