

ISSN 1512-8245



AKADEMIJA NAUKA I UMJETNOSTI
BOSNE I HERCEGOVINE

RADOVI

KNJIGA XCI

Odjeljenje medicinskih nauka

Knjiga 30

Centar za medicinska istraživanja

Knjiga 1

Redakcioni odbor

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Bosne i Hercegovine

SARAJEVO 2002

SUICIDE DURING THE WAR IN SARAJEVO

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Abstract. The goal of this research is to map out of specific rates of suicides during the 1992-1995 war in Sarajevo, in comparison to the situation before and after the war. Data used in this research were taken from the Ministry of internal affairs in Sarajevo during the war and from the statistical institutions in former Yugoslavia and Bosnia and Herzegovina. Suicide rate in Bosnia and Herzegovina was under average in former Yugoslavia, with some tendencies to increase. During the war, Sarajevo has been in very difficult position. So, habitants reacted with increased of psychological disorders. Besides all, it has been observed that the suicide rate increased. To compare of the risk factors in Sarajevo during the war and in peaceful time was done. It is hardly to find same comparison in any literature on the world till today.

Key words: Suicide. War. Rate of suicide. Risk factor.

Introduction

Suicide can be defined in various ways, but more employable definition is: it is deliberately initiated a conscious act, and violent way for subtraction of own life, with fatal outcome.

Suicidology is a special scientific discipline that covers researches on suicide. An Antic period and earlier, suicide was not punishable, but later, it was considered as a criminal act. Attempted suicide was punishable with death penalty.

Today, suicide is not considered as a criminal act, but its alleging and helping in suicidal act is punishable.

The researches of suicide have a great importance in each environment, because it gives an impact on difficulties that each individual is facing with in the community.

Suicide belongs partly in social-pathological appearances, so it involves multidisciplinary or specially different people: pedagogues, philosophers, sociologists, layers, criminologists, medical doctors and other experts. Special attentions at this opportunity are devoted to epidemiological aspects of suicide.

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Compared to suicide, attempted suicide is more difficult to define. The most acceptable definition is: nonfatal suicidal behavior. It means, that individuals who deliberately harm themselves, but did not kill themselves. Sometimes, it is very hard to make diagnosis, because individual often calculates with his/hers detailed plans. It is considered that individuals who commit suicide and subjects that attempted are not from the same population.

Most statistics on suicide are not correct, because all suicides were not liable to the court for post mortem examination, what is only arbitrarily to claim suicide diagnosis.

According to the results from investigation that has been made in Sarajevo, women rarely commit suicide. The risk is among younger people, as pupils or students. Maximum of suicide attempts are appearing from February until May, and minimum from July to September. Suicide tendencies are very often during the working days, with its maximum on Mondays. The most rare attempts are during weekends - Sunday (1).

Rates on suicide are increasing with age of both, female and men. Rates are decreased within individuals in marriage, then within those who are divorce or widows/widowers.

In USA, suicide rate is 12,5 on 100.000 habitants. Suicides among psychiatric patients are 10 times higher than among general population. It is on ninth place of the scale on leading causes of the death (2).

Suicide rates variations are in accordance of age, sex, social-economic status, religion and marital status. According to total number, 80% covers male population.

Statistics in USA, dated in 1994, tell us that suicidal rate among children between 5 and 14 years is 0,9 on 100.000 habitants. In this population group, suicide belongs to sixth place in leading causes of death. Suicide among individuals from 15 to 24 years is much higher, 13,8 on 100.000 habitants. It presents one of the leading causes of death. There are 53% of suicide among young population is connected with abuse of pharmacological products. Also, 35% of lethal results are connected with I.V. application of these products (3).

Objective

The goal of this research is to map out of specific rates of suicides during the 1992-1995 war in Sarajevo, in comparison to the situation before and after the war. The four years of war in Bosnia-Herzegovina, Sarajevo in particular, were exceptionally severe position (constant shelling, snipers, starvation, thirst, cold, total siege, complete restriction of movement, as well as many other problems), and the war has created a rather large number of the psycho-traumatized, also with consequences for the general psychiatric morbidity in

this region. It could be hypothesized that rate of suicide during the war is higher than in pre-war and post-war periods.

Method

Data used in this research were taken from the Ministry of internal affairs in Sarajevo during the war and from the statistical institutions in former Yugoslavia and Bosnia and Hercegovina.

The research encompasses data analysis of the four year war period, with each year of war being analyzed, as well as before and after the war. Also, it was elaborated risk factors during the war and compare with same in peacetime..

Results and discussion

Statistics data for the regions of former Yugoslavia is given out in peacetime and stabile period.

In former Yugoslavia the highest suicide rate was in Slovenia, and the lowest one in Kosovo (table 1). Suicide rate in Bosnia and Herzegovina was under average in former Yugoslavia, with some tendencies to increase (4).

Table 1. *Rate of suicide in former Yugoslavia 1960 -1980.*

	1960.	1965.	1970.	1975.	1979.	1980.
YU	12	12,4	13,5	13,5	14,1	14,7
BH	7,3	6,5	7,1	8,6	9,6	9,4
Monte Negro	13,7	13,3	8,2	11,3	11,0	12,6
Croatia	13,7	15,1	16,8	18,4	19,6	21,2
Macedonia	3,6	4	5,3	3,9	5,6	4,9
Slovenia	25,6	25,7	30,8	29,3	31,3	32,5
Serbia	11,6	12,4	12,9	12	12	12,3
Vojvodina	20,8	24,1	25,2	25,4	25,4	23,2
Kosovo	2,5	4,2	2,9	1,6	2	1,3

During the war, Sarajevo has been in very difficult position, as it mentioned before. So, habitants reacted with increased of psychological disorders. Besides all, it has been observed that the suicide rate increased, what was not typical for this region before the war.

As it showed on table 2, suicide rate in Sarajevo was steady from 1983 till 1992 (beginning of war), and it increased significantly, especially in 1993 (the most difficult period in war for Sarajevo).

The end of the war and beginning of peaceful period, show us tendency of decrease for rate of suicide.

Table 2. Rate of suicide in Sarajevo 1982 - 1997.

Year	1982.	1983.	1984.	1985.	1986.	1992.	1993.	1994.	1995.	1996.	1997.
Rate	2,83	16,17	16,04	16,12	17,00	16,00	22,67	18,33	21,33	7,16	15,17

The committed suicide of male habitants were very significant higher. The ratio between men and women that committed suicide is almost 2,5:1 (table 3). Lowest ratio between man and women was 1993 (1.8 :1), but highest was one year after the war - 1996 (5:1).

Table 3. Sarajevo: suicide and gender 1992-1997 (%)

Year/Gender	1992.	1993.	1994.	1995.	1996.	1997.	Total
M	72,92	64,71	72,73	71,88	83,33	68,52	70,93
F	27,08	35,29	27,27	28,12	16,67	31,48	29,07
Total	100,00	100,00	100,00	100,00	100,00	100,00	100,00
Ratio M:F	2.7:1	1.8 : 1	2.7 : 1	2.6 : 1	5: 1	2.2 : 1	2.4 ; 1

The table 4. shows the relation between percent of committed suicide and age. It is evident that in the war and post war period, under the highest risk to commit suicide was elderly population. The lowest risk had adolescents between 14 and 18 years.

Table 4. Sarajevo: suicide and age 1992 - 1997. (%)

Year/Age	1992.	1993.	1994.	1995.	1996.	1997.	Total
do 14	0,00	1,47	0,00	1,56	0,00	0,00	0,64
15-16	0,00	1,47	1,82	1,56	4,17	1,85	1,60
17-18	0,00	1,47	0,00	0,00	0,00	0,00	0,32
19-20	0,00	5,88	3,64	3,13	4,17	7,41	4,15
21-25	2,08	7,35	9,09	9,38	0,00	1,85	5,75
26-30	6,25	1,47	3,64	6,25	8,33	11,11	5,75
31-35	2,08	5,88	5,45	6,25	4,17	11,11	6,07
36-40	0,00	8,82	7,27	6,25	37,5	5,56	8,31
41-45	0,00	7,35	10,91	6,25	16,67	9,26	7,67
46-50	4,17	8,82	7,27	18,75	0,00	9,26	9,27
51-55	8,33	11,76	7,27	7,81	4,17	0,00	7,03
56-60	6,25	10,29	14,55	6,25	8,33	12,96	9,90
61-65	8,33	5,88	12,73	4,69	0,00	12,96	7,99
66 and more	25,00	14,71	16,36	20,31	12,5	14,81	17,57
No regist.	37,50	7,35	0,00	1,56	0,00	1,85	7,99
Total	100,00	100,00	100,00	100,00	100,00	100,00	100,00

It is very interesting compare the risk factors in Sarajevo during the war and in peace-time. It is hardly to find same comparison in any literature on the world till today. Risk factors of suicide are numerous, and they are present on table 5.

They can be divided into general and medical ones. In general ones are male population, marital status, living alone, removal, recently lost of partner, unemployment, multiple attempted suicide, suicide in family (parents), suddenly changes in life and non-existing alternative solutions in life.

Medical factors are most often: symptoms of depression (feelings of helplessness, guiltiness, etc.), depression resistant to therapy, insomnia, somatic problems, non-organic cause, lost of body weight, chronic somatic diseases, expression tendencies to suicide, mental illness and disorders, alcoholism/drug abuse, chronic illness with permanent pain, first five days after the release from hospital, multiple hospitalizations, dysfunction of serotonin and nor-adrenergic system in CNS less level of cholesterol in serum.

Table 5. *Risk factors in peace and war-time*

Risk factors	in peace time	in war time
male	++	+++
old age	++	+++
living alone	+	+++
unemployment	++	
multiple attempted suicide	++	+
suicide in family (parents)	+	+
suddenly changes in life		+++
depression resistant to therapy	++	
non-existing alternative solutions	+	+++
somatic illness	+	++
mental illness and disorders	+	+++
alcoholism/drug abuse	++	
chronic illness with permanent pain	+	++
first five days after the release from hospital	+	
multiple hospitalizations	+	
dysfunction of serotonin and nor-adrenergic system in CNS	+	?
less level of cholesterol in serum.	+	??

According to this findings risk factors are potentiate during the war especially in male and old population who living alone, with had suddenly changes in life, with non-existing alternative solutions in life. Also, medical factors were very important in war-time, and the highest risk factors were:

mental illness and disorders (stress related disorders and transient psychoses), chronic illness with permanent pain, chronic somatic diseases.

In the piece-time, serious risk factors were: unemployment, depression resistant to therapy, multiple attempted suicide and alcoholism/drug abuse, first five days after the release from hospital and multiple hospitalizations.

Dysfunction of serotonin and nor-adrenergic system in CNS, and level of cholesterol in serum were not possible measured during the war in Sarajevo.

REZIME

Istraživanje obuhvata izračunavanje stope suicida u Sarajevu u toku, neposredno prije i nakon rata. Podaci su prikupljeni iz Ministarstva unutrašnjih poslova, kao i iz statističkih izvještaja u bivšoj Jugoslaviji. Prije izbijanja ratnih sukoba, Bosna i Hercegovina je imala niže stope suicida od prosjeka u bivšoj državi. Sarajevo je bilo u izuzetno teškoj poziciji u toku rata (1992 - 1995) i stanovništvo je reagovalo pojavom većeg broja psihičkih poremećaja. Zbog toga je povećan i broj suicida u Sarajevu. Samoubistvo su izvršili pretežno stariji muškarci. Izvršeno je upoređivanje rizičnih faktora suicida u ratu i miru. Koliko je poznato to je jedino do sada izvršeno istraživanje u tom pravcu, koje je zabilježeno u literaturi.

Ključne riječi: Suicid, Rat. Stope suicida. Rizični faktori.

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