EPIDEMIOLOGICAL INDICATORS OF SUICIDES IN THE REPUBLIC OF CROATIA

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The aim of the study was to investigate possible shifts of the suicide rate during the last 15 years in the Republic of Croatia (1985-2000), the distribution of male and female suicides according to age and some other characteristics according to sex in the 1990-2000 period, and the distribution of male and female suicides during the war and post-war period. Data were collected from the Suicide Register of the Ministry of the Interior. According to the Register, 9987 suicides had been reported in 1990-2000. The suicide rates in the last 15 years did not change as well as during the war and post-war period. The suicide rate was 19.26. The highest suicide rate was in the 15-30 age group and in those older than 65 years. The women were on average five years older than men. Hanging was the most frequent method of suicide (50%). Men used firearms and explosives more often than women. Medical problems were more often present among women than men, as opposed to alcoholism, which was more present among men. Almost 80% of the victims had previously verbally announced suicide. Prevention efforts should be focused on alcoholism, drug abuse, family crisis, reduction of firearms and explosives possession, and improvement of economic status among men, and toward previous suicide attempts, mental disorders and unemployment among women. Among both sex groups prevention must be directed toward the youth and the elderly and verbal suicide announcement must be seriously estimated.

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Suicide rate

Suicide is an act of deliberately initiated self-destruction. It is one of the important causes of death in the world and therefore a significant public health problem. Many researchers believe that the "real" number of suicides in a population is much higher than the official registration. In the USA, the suicides are placed among the top ten leading causes of death and represent about 1.5% of all deaths, and the suicide rate (number of suicides per 100,000 population) is relatively stable ranging them 10 to 13 since 1980, which consistently outnumbers the annual number of homicides. The suicide rate in Canada is very close or slightly higher than the suicide rate in the U.S.A. Countries with the highest suicide rates include Latvia (42.5), Lithuania (42.1), Estonia (38.2), Russia (37.8) and Hungary (35.9). Countries with the lowest suicide rate are Guatemala (0.5), the Philippines (0.5), Albania (1.4), the Dominican Republic (2.1), and Armenia (2.3). The comparison of suicide rates among countries is difficult due to the unreliability of official statistics of suicides, as well as different methods of committing suicide (Berman, 2000).

Age and sex

The suicide rate varies according to age. In Europe among all age groups, the suicide rate is the highest among the elderly, especially above 75 years of age (Etzerdorfer et al., 1996). In the United Kingdom the suicide rate has tripled in the age group 15 to 24 in the period between 50-ties and 90-ties (Pritchard, 1996).

The suicide rate varies among men and women, men commit suicide in about 80% of cases, whereas women attempt suicide three times more often than men (Snowdon, 1997). A certain age represents a risk factor for women, but not for men. Women older than 60 commit suicide more often (17.5%) than younger women (3.6%) (Holley et al., 1998).

Causes of suicide

Suicidal behaviour has numerous and complex causes. The biology of the brain, genetics, psychological traits, and social situation can contribute to suicide. Although people commonly attribute suicide to external circumstances – such as divorce, loss of job, or failure in school – most experts believe these events are triggers rather than causes (Berman, 2000).

Risk factors

Some aspects of human life increase the probability that a person will attempt or commit suicide. Studies reveal that one of the best predictors of suicidal behaviour is hopelessness (Hopes

and Williams, 1999). People who feel hopeless can commit suicide as the only alternative to their painful existence. People with mental illness, alcohol or drug addicts or behaviour disorders also belong to groups at higher suicide risk (Hopes and Williams, 1999; Beautrais et al., 1996; Schaffer et al., 1996). In fact, people who suffer from mental illness commit about 90% of all suicides. Physical disorders can also increase the suicide risk, especially when they are accompanied by depression – therefore about 1/3 of adult suicide victims have suffered from physical disorder at the moment of death. Other risk factors include previous suicide attempts, suicide family history, and social isolation. People who are single or do not have close friends cannot receive emotional support, which would protect them from despair and irrational thinking in times of difficulty (Hopes and Williams, 1999; Beautrais et al., 1996; Schaffer et al., 1996).

The objective of our research was to identify shifts of the suicide rate during the last 15 year period in the Republic of Croatia (1985-2000), the distribution of male and female suicides according to age in the 1990-2000 period, the distribution of male and female suicides during the war and post-war period, and some other characteristics according to sex in the 1990-2000 period.

METHOD

Our investigation was based upon the Suicide Register of the Ministry of the Interior.

The data from the Suicide Register of the Ministry of the Interior of the Republic of Croatia included the pre-war, war (from 1990-June 30, 1996) and the post-war years (from July 1, 1996-2000). For duration of the war and post-war period we used official data (Sabor Republike Hrvatske, 1997).

The Register is based upon the investigations of the reasons and the cause of death, which were made on the spot by the authorised police officers in the cases of sudden death by unknown cause, suspicion of violent death, or suicide. We analysed the data on cases where suicide was committed. Persons who attempted suicide were registered if the police was notified, but there was no follow-up data regarding the period after medical intervention, so that they were not included in the analysis. The data about the persons who died in the medical institution after an attempted suicide, were also not included in this study.

The following data from the Register were used for this study: 1) police department responsible for the area where suicide was committed; 2) general demographic data (sex, age); 3) data on the time of suicide-date and approximate hour; 4) location, means and the method of suicide; 5) previous suicide attempts; 6) events that preceded suicide, such as work and family problems, ongoing conflicts; 7) physical and psy-

chological disturbances and disorders; and 8) suicide notes. The data were collected in a homogenous way.

The suicides for the whole territory of the Republic of Croatia were included. A police department operates on the administrative territory of a county. There are 20 counties in the Republic of Croatia; 13 were directly affected by war, and 7 were not in the war zone.

When this study was performed the data on the number of people in each county existed only for 1991, when the last census was conducted. We used the data by the Croatian Bureau of Statistics, as well as the estimation for the number of inhabitants for every following year for the whole territory of the Republic of Croatia given by the same source.

Sample

According to data from the Register of the Ministry of the Interior, a total of 9987 suicides were committed in the period between 1990 to 2000. In the total number, 74.9% of those who committed suicide were men, and 25.1% were women (χ^2=1458.02, p<0.001). Men who committed suicide were aged on average 51.2±18.5 years, whereas women were on average 5 years older than men (55.6±18.7 years), and the difference was statistically significant (t=8.69; p<0.001).

Statistical analysis

The number of committed suicides in each year was presented as a suicide rate and an absolute number in the year when the suicide was committed. The sex differences were analysed by a χ^2-test for large independent samples and the age was analysed with a t-test for large independent samples. In order to test the normal probability distribution, Kolmogorov-Smirnov test was used.

RESULTS

Average suicide rates as well as the total number of suicides between 1985 and 2000, and between 1990 and 2000, according to the data of the Ministry of the Interior are presented in Table 1. The average number of committed suicides in the period from 1985 to 2000 was 912 and varied between 867 to 925. The average rate of committed suicides was 19.26 per 100,000 people, and has not changed during the pre-war, war, and post-war period.

➲ TABLE 1
The number of suicides and the suicide rate according to the Register of the Ministry of the Interior

Period	Average suicide number for the period	Average suicide rate for the period
Pre-war period, 1985-1989	925	19.32
War period, 1990-June 30, 1996	944	19.27
Post-war period, July 1, 1996-2000	867	19.19

χ^2=5.3423; d.f.=2; p=0.1534

The distribution of persons who have committed suicide according to their age is presented in Figure 1 (presented next to the normal probability) and sex in Figure 2 and 3. There were statistically significant differences between the number of suicides in different age groups (χ^2-test=14.582; $p<0.001$) which were grouped in groups by 5 years of age and in relation to the age and sex variables ($\chi^2=13.421$; $p<0.001$). There was a higher rate of younger (age 15 to 35) and older (65 and upwards) persons who committed suicide in comparison to the normal distribution. The average age was 52.3 +18.6. The normal probability distributions were estimated by the Kolmogorov-Smirnov test. The total number of persons who committed suicide was the highest in the age group between 60 and 75 (22%).

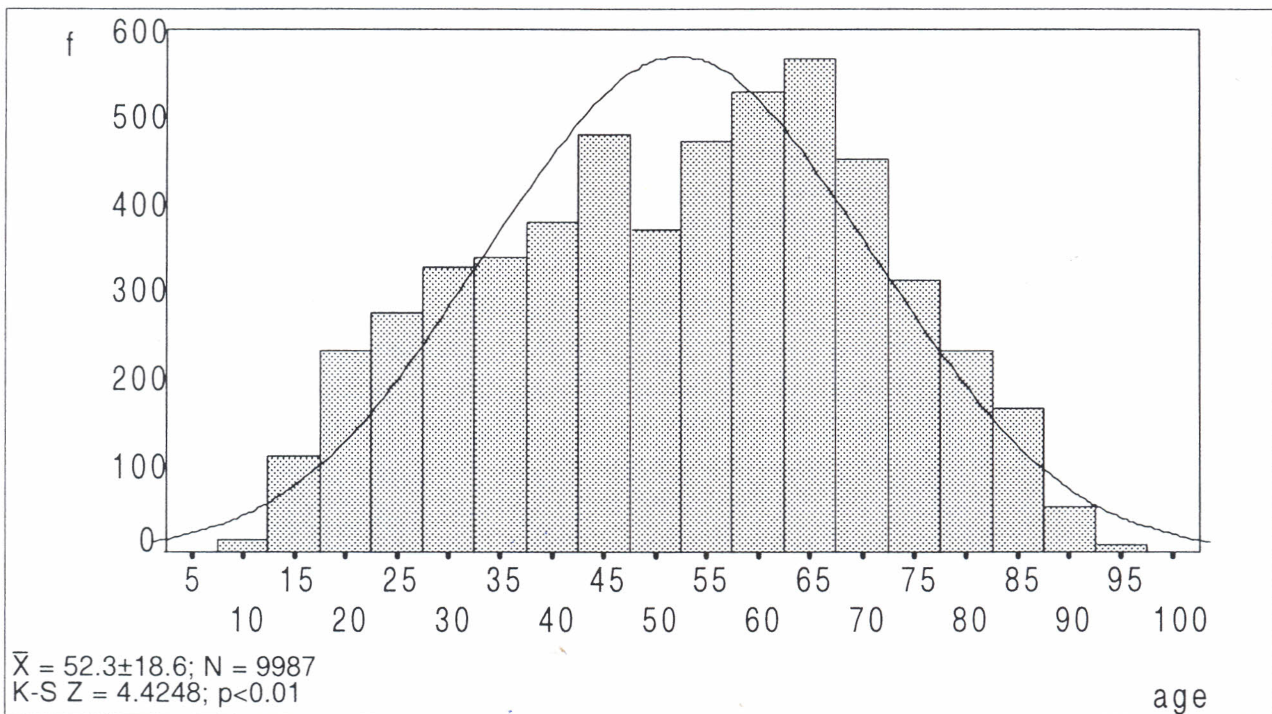


FIGURE 1
Distribution of suicides according to age in the period from 1990 to 2000

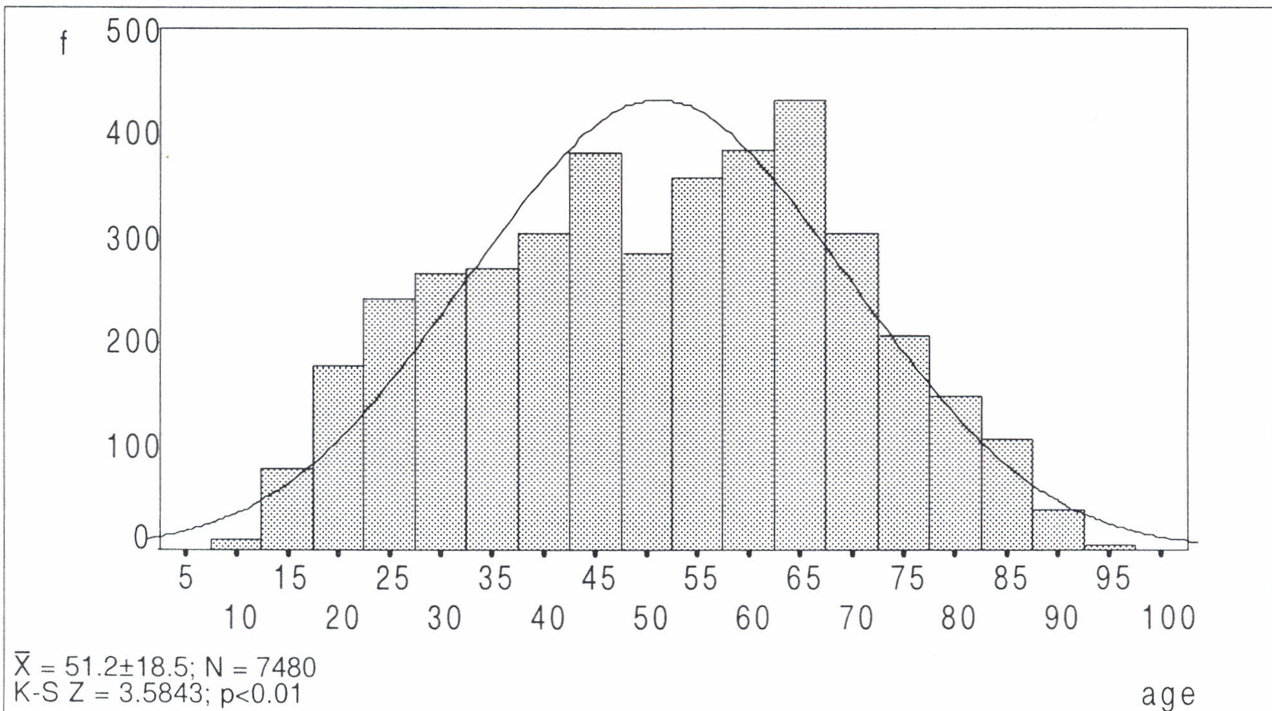


FIGURE 2
Distribution of male suicides according to age in the period from 1990 to 2000

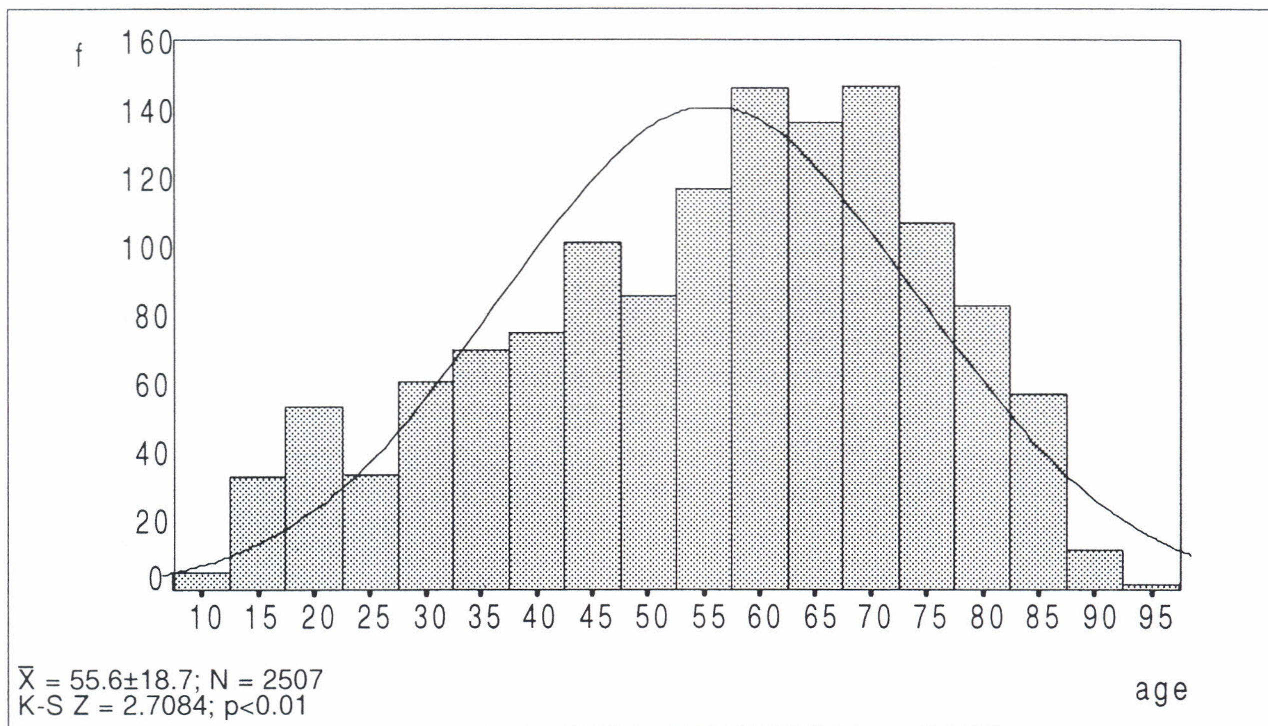


FIGURE 3
Distribution of female suicides according to age in the period from 1990 to 2000

The distribution of suicides in men was more similar to the normal distribution (Figure 2) and the average age was 51.2±18.5. In the age group of 15 to 35 years there was a higher rate than expected in comparison to the normal distribution. The distribution of women (Figure 3) was different because of the higher average age (55.6±18.7).

The highest number of women suicides occurred in those over 60 years of age, whereas men were more often represented in the age group of 65 years.

The distribution of male suicides according to age during the war and post-war period was statistically significant (Figure 4). The average age was higher in the post-war period (52.0±18.2 vs. 50.3±18.6 years) ($p= 0.004$; $p<0.01$). The distribution of female suicides did not change during the war and post-war period (Figure 5) and there was no statistical difference between the average age in the war and post-war period (55.0±18.6 vs. 56.2±18.7 years) ($p=0.218$; $p>0.01$). (Figure 5)

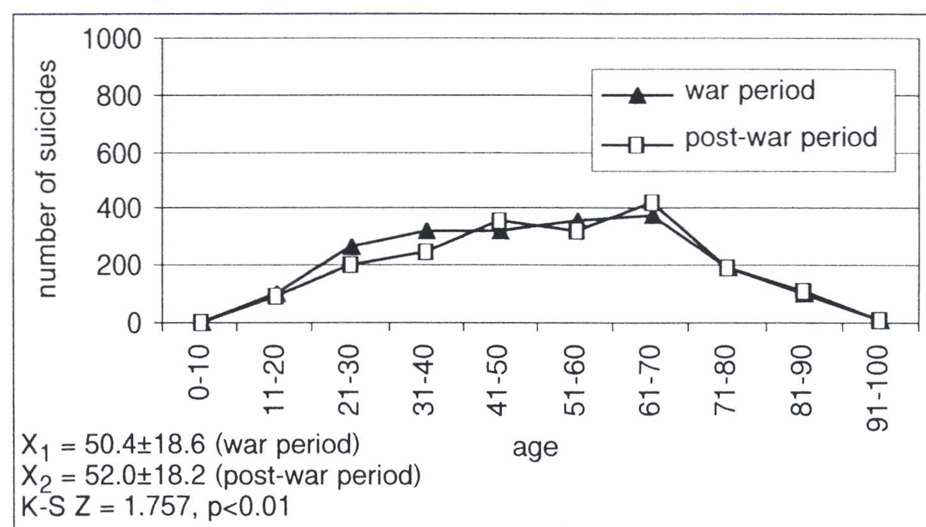
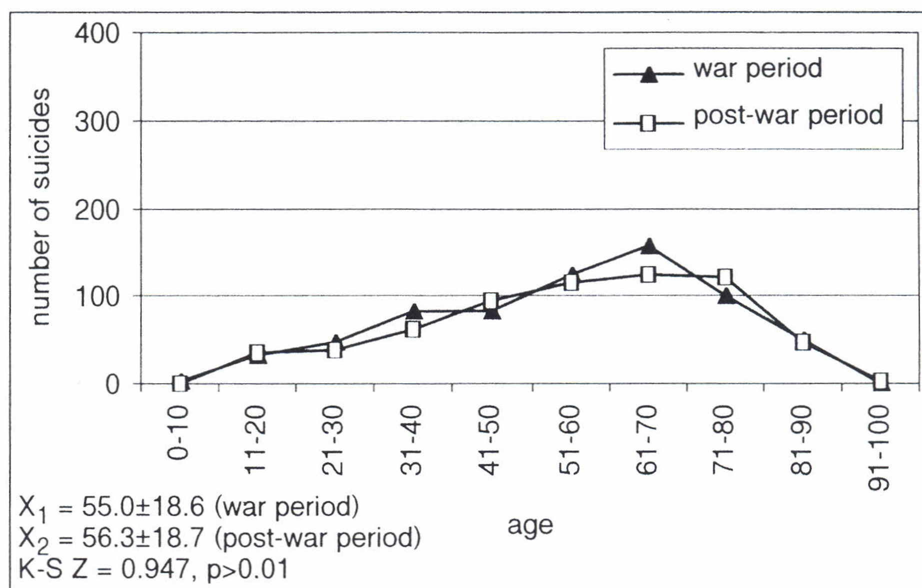


FIGURE 4
Distribution of male suicides according to age during the war and post-war period

➲ FIGURE 5
Distribution of female suicides according to age during the war and post-war period



Differences in some socio-demographic features, suicide methods and motives, and some risk factors variables according to gender have been presented in Table 2.

➲ TABLE 2
Socio-demographic features, suicide methods and motives and some risk factors among people who committed suicide according to sex in the period between 1990 and 2000

Features	Male%	Female %	χ^2-test	p
Current marital status			5.363	0.021
Married	70.1	76.7		
Other	29.9	23.3		
Having children			5.713	0.017
Yes	20.0	13.9		
No	80.0	86.1		
Employment			277.754	0.000
Employed	50.1	21.6		
Unemployed	4.4	29.4		
Retired	38.9	39.9		
Student	6.6	9.1		
Education			13.541	0.004
Did not finish school	0.6	0.6		
Elementary school	48.8	57.4		
High school	42.7	31.2		
Junior college/college	7.9	10.7		
Time of year			3.783	0.286
Autumn	24.4	24.9		
Winter	18.8	20.5		
Spring	28.8	26.8		
Summer	28.1	27.9		
Day of the week			4.767	0.574
Monday	16.1	15.4		
Tuesday	15.9	15.5		
Wednesday	14.2	14.3		
Thursday	14.6	13.0		
Friday	14.2	14.8		
Saturday	12.8	14.1		
Sunday	12.2	12.9		

➲ TABLE 2
(Cont. on the next page)

➲ TABLE 2 (continued) Socio-demographic features, suicide methods and motives and some risk factors among people who committed suicide according to sex in the period between 1990 and 2000

Features	Male%	Female %	χ^2-test	p
Place of committing suicide			11.874	0.018
Place of living	72.5	75.7		
Other	27.5	24.3		
Suicide method			674.653	0.000
Hanging	53.8	53.4		
Jumping from heights	5.2	14.2		
Drowning	1.9	11.3		
Jumping in front of the train/car	2.7	5.4		
Firearms, explosive	32.3	7.7		
Combined	1.6	1.6		
Suicide motive			55.569	0.000
Medical condition	67.9	80.4		
Emotional difficulties	8.2	7.5		
Financial, economic hardship	2.5	0.8		
Family conflicts	8.5	6.5		
Problems at work	0.8	0.5		
To avoid jail	1.3	0.3		
Alcoholism	9.8	2.5		
School failure	0.6	1.3		
Drug addiction	0.4	0.2		
Suicide announcement			0.004	0.953
Yes	80.7	80.9		
No	19.3	19.1		
Suicidal message			1.238	0.235
Yes	7.4	8.1		
No	92.6	91.9		
Previous health condition			253.055	0.000
Healthy	31.9	22.7		
Mental disturbances	30.4	59.8		
Alcoholism	20.0	4.7		
Drug addiction	0.8	0.4		
Physical disorders	16.8	12.4		
Previous suicide attempts			0.953	0.004
Yes, once	8.3	12.7		
Yes, more times	7.7	15.8		
No	84.0	71.5		
Ongoing conflicts			5.206	0.023
Yes	31.9	20.6		
No	68.1	79.4		
Alcohol intoxication			68.016	0.000
Yes	75.6	25.4		
No	24.4	74.6		

Married women committed suicide more often than married men ($p=0.021$, $p<0.01$), more often did not have children ($p=0.017$, $p<0.01$), and were less often employed (21.6%), compared with 50.1% in men. Men were statistically significantly bet-

ter educated; 42.7% finished high school, versus only 31.2% of women who finished high school ($p=0.000$, $p<0.001$).

We have not found statistically significant differences between men and women according to the time of year ($p=0.286$; $p>0.01$) and day of the week when the suicide was committed ($p=0.574$; $p>0.01$).

Women committed suicide more often in the place of living, whereas men committed suicide more often at some other place ($p=0.018$, $p<0.01$).

Hanging was the most frequent method of suicide among both men and women (in more than 50% of cases). Men used firearms and explosives as a suicide method more often than women, whereas women more often used jumping from heights (14.2%) and drowning (11.3%). Only 7.7% of women used firearms and explosives as a method of suicide ($p=0.000$, $p<0.001$).

There was a statistically significant difference between men and women according to the suicide motive: medical problems were more common among women (80.4% of women had medical problems compared to 67.9% of men). On the contrary, alcoholism seemed to be statistically more often present among men (in 9.8%) than among women (only 2.5%), as well as family conflicts (8.5% among men compared with 6.5% among women). Financial or economical hardship were present in 2.5% of men and 0.8% of women. The difference between men and women in suicide motives was statistically significant ($p=0.000$, $p<0.001$).

Both men and women left a suicidal message in 7 to 8% of cases, and about 80% announced the suicide.

When we analysed previous health condition, women suffered more often from mental difficulties (59.8%) and men had more often alcohol-related problems (20.0% of men vs. only 4.7% of women). The differences were statistically significant ($p=0.000$, $p<0.001$).

Previous suicide attempts, both single (12.7%) or multiple (15.8%), were more frequent among women, whereas 84.0% of men did not have a history of previous suicide attempts ($p=0.004$, $p<0.01$).

The ongoing conflict preceded the suicide more often among men (31.9%) than among women (20.6%) ($p=0.023$, $p<0.01$) as well as alcohol intoxication (75.6% of men vs. 25.4% of women) ($p=0.000$, $p<0.001$).

DISCUSSION

Suicide is an important psychopathological entity which should be, due to its complexity and phenomenology, studied from different aspects. In a contemporary world it represents also an important sociopathological entity; in most European countries the number of suicides is significantly higher than the number of deaths in traffic accidents (Schmidke, 1997).

According to the data of the Croatian Ministry of the Interior, the average suicide rate in the Republic of Croatia has not changed during the last 15 years, e.g. during the pre-war, war, and post-war period (1985-2000). Numerous studies indicated that the suicide rate decreased during war or during natural disasters, which resulted in psychological consequences similar to those in war (Shiori et al., 1999; Lester, 1994). A possible explanation of the fact that the suicide rate did not decrease during the war in the Republic of Croatia is a large number of refugees and displaced persons who represented almost 20% of the total population of the Republic of Croatia during 1992 (Kozarić-Kovačić et al., 1995). Such a situation demanded adjustment to the new stressful situation and was related to numerous psychological problems of both the individuals and the whole community.

According to the data of the Ministry of the Interior, the average suicide rate in Croatia in the pre-war, war and post-war period was 19.26 per 100.000 population. This means that the Republic of Croatia belongs to countries with a medium mortality rate due to suicide (Berman, 2000.).

According to the database of the "Health for All" program, the standard mortality rate due to suicide in the Republic of Croatia in 1995 was lower than the average mortality rate due to suicide in Europe, but higher than the average suicide rate in Central and Eastern Europe (Hrabak-Žerjavić et al., 2000). Because of the decreased trend of mortality due to suicide in Europe in 1997 (Hrabak-Žerjavić et al., 2000), the standard suicide mortality rate in the Republic of Croatia is higher than the average suicide mortality rate in Europe. Slovenia and Hungary belong to countries with a higher suicide rate than Croatia, whereas the suicide rate in Austria is slightly lower.

The number of suicides in our study varied according to age; a higher frequency has been registered among the elderly but also among the youth. A number of epidemiological studies both in the world and in this region also confirm the rule that the frequency of suicides increases with age (WHO, 1999; Kolesar, 1995; Etzerdorfer et al., 1996). The increased suicide rate among the elderly is usually related to physical illness, psychogeriatric disorders, loss of social roles and interpersonal relationships, as well as untreated depression (Rettersol, 1993).

Our results indicate that there were three times more men who committed suicide than women, whereas women who committed suicide were five years older on average than men. These indicators were similar to the data from literature (Snowdon, 1997). Distribution according to age was different between men and women.

More younger persons committed suicides, especially men in the 15-35 age group, and women in the 15-25 age group.

Our results can be compared with the results from other studies, especially those from Europe and the USA, which indicate an increase of suicide numbers among adolescents up to 25 years of age (Pritchard, 1996; Gould et al., 1996; Schaffer et al., 1996; Etzerdofer et al., 1996; Gould et al., 1998; Brent et al., 1999). Although the reasons for such an increase are not clear enough, some researchers relate them to the increased prevalence of mental disorders among the youth, increased drug abuse, or interpersonal relationship disorders.

A higher frequency of suicides among Croatian men up to 35 years of age during the war period could be related to the increase in suicides among war veterans, taking into account that some of them suffered from posttraumatic stress disorder or other stress related disorders. It is already known that suicide attempts are especially high among people who suffer from PTSD (Kessler, 2000) and PTSD is especially frequent in countries involved in war conflicts or those where war conflicts have just finished. This is probably the reflection of a small number of persons suffering from PTSD included in treatment. It would be very important to conduct a systematic research in Croatia in this field because PTSD has an impact on both individuals and the whole community. This is especially evident in suicide cases.

We have also found a difference in sociodemographic variables between men and women who have committed suicide. Being single, unemployed and without children is often found in literature as a risk factor among women who commit suicide (Berman, 1993-1998; Johanson and Sundquist, 1997). However, our study showed that suicide was more often committed by women who were married, retired, and without children.

Suicide method is usually different in different cultures. The most frequent suicide method in the world is hanging (Berman, 1998). In the USA, around 60% of all suicides are committed by using firearms (Centers for Disease Control and Prevention, 1996). On the contrary, in Canada, where people have less access to firearms, only 30% of suicides are committed that way. About 18% of all suicides in the USA are committed by poisoning through drug overdose. Researchers also believe that a certain number of fatal traffic accidents (where only the driver was in the car) are, in fact, suicides.

In our study, hanging was the most frequent suicide method among both men and women (in 50% of cases). However, men used firearms and explosives as a suicide method more often than women (Grubišić-Ilić and Kozarić-Kovačić, 2000), which could be explained by easier access to firearms due to war circumstances.

According to global indicators, only 15 to 25% of the people who commit suicide leave suicidal messages. In our study only 7 to 8% of people left suicidal messages. However, 80% have previously verbally announced/mentioned suicide, indicating the importance and seriousness of suicide announcements. Similar indicators have been demonstrated in the USA National Comorbidity Survey (Kessler, 1999) on the prevalence and risk factors for lifetime suicide attempts on a representative sample. The survey showed that 13.5% of people had suicidal ideas, 3.9% had suicide plans, and 4.6% had suicide attempts. Cumulative probabilities were 34% for the development from suicidal thoughts to suicide plan, 72% from suicide plan to suicide attempt and 26% from suicide thoughts to an unplanned attempt. There were 90% of unplanned and 60% of planned suicide attempts which happened within the first year after the suicide thought occurred. All risk factors (women, divorced, younger than 25, less educated and those with one or more DSM-R disorders) were stronger correlated to the suicide idea than to the progress from the suicide idea to suicide plan or attempt. The conclusions of this survey were that more prevention efforts should be focused on planned than unplanned attempts (due to the speed and unpredictability when they are created) and that more research is needed to determine unplanned attempts.

There are differences between men and women according to suicide motive. Medical problems were significantly more often present among women than among men (80.0% versus 67.9%), as opposed to alcoholism, which was more present among men. Other studies also emphasise the increase of suicide risk among people with psychiatric disorders (Conwell et al., 1996; Hopes and Williams, 1999) and among those who consume alcohol (Mäkelä, 1996). Previous health condition also has been found as a significant and important risk factor. Psychological disturbances in the health condition were more often among women who have committed suicide (among 59.8%) and alcoholism among men. Other studies also found alcohol and substance abuse as a more prevalent risk factor among men, as well as behaviour disorders and self-destructive behaviour. Depression and hopelessness was a more prevalent risk factor among women (Hopes and Williams, 1999; Beautrais et al., 1996).

The most common risk factors in both men and women are previous suicide attempts and mood disorders (Schaffer et al., 1996). According to literature, women attempt suicides more often, whereas men commit suicides more often (Neelman et al., 1997). We have confirmed those findings in our research.

Finally, we can emphasise that suicide is an important death cause especially in the male population. Prevention efforts should

be focused especially on the youth and the elderly and directed toward issues such as alcoholism, drug abuse, family crisis, firearms and explosives elimination, as well as economic status improvement among men. Prevention efforts among women should focus on previous suicide attempts, mental disorders, and unemployment.

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DRUŠ. ISTRAŽ. ZAGREB
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Epidemiološki indikatori suicida u Republici Hrvatskoj

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Cilj studije bio je istražiti moguće pomake u stopi suicida tijekom posljednjih 15 godina u Republici Hrvatskoj (1985.-2000.), distribuciju muških i ženskih suicida prema dobi i neke druge karakteristike prema spolu u razdoblju od 1990. do 2000., te distribuciju muških i ženskih suicida tijekom rata i u poslijeratnom razdoblju. Podaci su prikupljeni iz Registra suicida Ministarstva unutarnjih poslova i u tom razdoblju prijavljeno je 9 987 suicida. Stope suicida u posljednjih 15 godina nisu se mijenjale, uključujući ratno i poslijeratno razdoblje. Stopa suicida bila je 19,26. Najviša stopa suicida bila je u dobnoj skupini između 15 i 30 godina starosti i kod starijih od 65 godina. Žene su u prosjeku bile pet godina starije od muškaraca. Vješanje je bila najčešća metoda suicida (50 posto). Muškarci su rabili vatreno oružje i eksploziv češće nego žene. Zdravstveni razlozi su bili češći kod žena nego kod muškaraca, nasuprot alkoholizmu koji je bio češćim uzrokom suicida kod muškaraca. Gotovo 80 posto žrtava je prethodno najavilo samoubojstvo. Prevenciju bi trebalo usmjeriti protiv alkoholizma, zloupotrebe droga, obiteljskih kriza te na smanjenje posjedovanja vatrenog oružja i eksploziva i poboljšanje ekonomskog položaja kod muškaraca. A kod žena bi se valjalo usredotočiti na prethodne pokušaje suicida, mentalne poremećaje i nezaposlenost. Među objema spolnim skupinama prevenciju treba usmjeriti na mlade i starije i verbalnu najavu suicida valja ozbiljno procjenjivati.

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Epidemiologische Selbstmord-Indikatoren in der Republik Kroatien

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Das Ziel dieser Studie war zu ermitteln, ob es im Laufe der letzten 15 Jahre (1985–2000) zu Veränderungen in den Selbstmordraten in Kroatien gekommen ist. Des Weiteren wollte man die geschlechts- und altersgebundene Verteilung von Selbstmordfällen im Zeitraum 1990–2000 feststellen, im Besonderen während der Kriegsjahre (1991–95) sowie unmittelbar danach. Die Angaben wurden aufgrund des beim kroatischen Innenministerium geführten Registers von Selbstmordfällen gewonnen. In der Zeit von 1990–2000 wurden 9987 Selbstmordfälle verzeichnet. Die Selbstmordraten haben sich im Laufe der letzten 15 Jahre – die Kriegs- und Nachkriegsjahre mit einberechnet – nicht verändert. Laut amtlichen Angaben betrug die Selbstmordrate für den angegebenen Zeitraum 19,26. Die meisten Selbstmordfälle wurden in der Altersgruppe von 15 bis 30 sowie bei Menschen von über 65 Jahren verzeichnet. Täterinnen waren im Durchschnitt 5 Jahre älter als männliche Selbstmörder derselben Altersgruppe. Die am meisten praktizierte Selbstmordmethode war der Tod durch Erhängen (50%). Feuerwaffen und Sprengstoffe wurden von Männern häufiger verwendet als von Frauen. Bei Frauen überwogen gesundheitliche Gründe, während eine unheilbare Alkoholsucht öfter bei Männern vorlag. Fast 80% der Selbstmöder hatten ihr Vorhaben angekündigt. Vorbeugungsmaßnahmen sollten auf die Bekämpfung der Alkohol- und Drogensucht sowie die Linderung familiärer Krisen ausgerichtet sein; ebenso sollte der Besitz von Feuerwaffen und Sprengstoffen eingeschränkt und der wirtschaftliche Status von Männern aufgebessert werden. Bei Frauen sollten wiederholte Selbstmordversuche mehr beachtet werden, ebenso das Bestehen von geistigen Störungszuständen und Arbeitslosigkeit. In beiden Geschlechtsgruppen sollten Vorbeugungsmaßnahmen auf junge sowie auf ältere Menschen ausgerichtet sein. Ausdrücklich geäußerte Ankündigungen sollten ernst genommen werden.