

SUICIDE, INDUCED ABORTION AND STANDARDIZED DEATH RATE IN CROATIA IN RELATION TO NEIGHBOURING COUNTRIES: HUNGARY, SLOVENIA AND ITALY

Eduard Pavlović

*Department for Psychiatry and Medical Psychology at the Medical School in Rijeka
Psychiatric Clinic in Rijeka of Clinic Hospital Centre in Rijeka, Rijeka, Croatia*

SUMMARY

Objective: *Suicides and induced abortions are primarily both premature deaths. Standardized death rates often show the certain level of medical standards in the different countries. The aim of this paper was to determine suicide rates in Croatia and its neighbouring countries (Hungary, Slovenia and Italy) associated with induced abortions and standardized death rates*

Method: *It was a register linkage study. Information on suicides of women in Croatia, Hungary, Slovenia and Italy were linked with induced abortions and standardized death rates in these countries. Nationwide data in Croatia, Hungary, Slovenia and Italy in the period 1996-2002 i.e. the latest available data for each county was used.*

Results: *There were suicide rates in women: Croatia (2000)-10.3, Hungary (1999)-15.4, Slovenia (1999)-13.4 and Italy (1998)-3.6. There were induced abortions (% of live born children): Croatia (2002)-17.8, Hungary (2002)-69.7, Slovenia (2002)-49.6 and Italy (2002)-24.0. There were standardized death rates (1/10.000 population): Croatia (1998)-113.8, Hungary (1996)-109.3, Slovenia (1996)-109.3 and Italy (1996)-70.7.*

Conclusions: *The Croatian suicide rate and induced abortions have been lower than in Hungary and Slovenia. Croatia has been at the last place according to induced abortions but Croatia has been at the first place due to standardized death rates.*

Key words: *suicide - induced abortion - standardized death rate – Croatia - Hungary – Slovenia - Italy*

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INTRODUCTION

Suicide is an intentional and an arbitrary act at destroying the own life.

Abortion is an intention, artificially induced to terminate pregnancy which aims at destroying the foetus.

By reviewing the relevant literature an attempt was made to find guidelines to explain both the suicide and the elective abortion, i.e. the constituents in which these states overlap and /or share causes. An overlapping is considered to

exist in the interpersonal dynamics, as well as in relations within the modern society which favour both suicide and abortion.

Reports of mental complications after an induced abortion are controversial. Puerperal psychosis is rare (0.3 per 1000 abortions), but depression is more common (13–41%) (Zoleste et al. 1992). Long term follow up studies, however, have documented more positive reactions and fewer undesirable feelings than short term studies (Adler et al. 1992).

Table 1. Suicide rates and induced abortions in Croatia, Hungary, Slovenia and Italy from the latest available data for each country

Country	Population			Suicide rate			Induced abortion	
	Male	Female	Year	Male	Female	Year	% of live born children	Year
Croatia	2 012 642	2 269 574	2000	32.9	10.3	2000	17.8	2002
Hungary	4 613 174	5 525 670	2000	51.5	15.4	1999	69.7	2002
Slovenia	915 607	1 011 987	2001	47.3	13.4	1999	49.6	2002
Italy	27 088 133	30 546 193	2000	12.3	3.6	1998	24.0	2002

Data from medical birth register, abortion register, and hospital discharge register (Suicide rates, Summary of registered abortions worldwide)

It was determined the incidence of suicides in the period 1998-2000 by using national health registers of Croatia, Hungary, Slovenia and Italy. Suicide rates were analysed by induced abortions and standardized death rates in Croatia and the neighbouring countries.

SUBJECTS AND METHOD

Information on all deaths (n=113 800) in Croatia in 1998 was extracted from the register of death certificates (*Bilten o umrlima u Hrvatskoj*). About 926 had suicide as the main cause of death in 2000 (*Izvršena samoubojstva u Hrvatskoj 2000*). The suicides were linked with the induced abortion register (8000 abortions in 2002) (*Prekidi trudnoća u Hrvatskoj 2000*). The follow up period of one year was chosen according to the current definition. Suicides associated with pregnancy were not included in the analysis.

The death certificate register, collected by Statistics Croatia, is based on death certificates written by physicians. All the death certificates are checked by forensic specialists and by medical experts at Statistics Croatia. Information on age, cause of death, residence, and occupation were not included in the analysis.

Abortions were gathered from the register on abortions. More than 99% of abortions are registered, and the quality of data is high for the variables used in this study.

If a woman had been pregnant when she committed suicide the case could have been found in our data only if she was admitted to hospital at some time during pregnancy or if the pregnancy

was mentioned in the death certificate. As no such cases were found, suicides during pregnancy were not included in our analysis.

Differences in timing of the suicide and socio- economical differences were not tested with a specific test.

RESULTS

Among the men Hungary (1999) had the highest suicide rate -51.5 such as Slovenia (1999)-47.3 but Italy (1998) had the suicide rate of "only" 12.3. Croatia (2000) with rate of suicide of 32.9 was in the middle of them. Male and female proportion of rate of suicide in Croatia (2000), Hungary (1999) and Slovenia (1999) was approximately 3:1 but in Italy (1998) was approximately 4:1. Induced abortion was the highest in Hungary (2002) and Slovenia (2002), too. It was the smallest in Croatia (2002). Italy (2002) was in the middle referring to induced abortions. See Table 1.

The standardized death rate in Croatia (1998) was 113.8. Hungary and Slovenia (countries of CEE in 1996) i.e. Italy (country of EU in 1996) was 109.3 i.e.70.7. See Table 2.

Table 2. Standardized death rates in Croatia, Hungary, Slovenia and Italy from the latest available data for each country i.e. region of Europe

Country/year of data	Death rate
Croatia (1998)	113.8
Hungary (1996)	109.3 (CEE)
Slovenia (1996)	109.3 (CEE)
Italy (1996)	70.7 (EU)

Hungary and Slovenia were included in CEE (Bilten o umrlima u Hrvatskoj)

DISCUSSION AND CONCLUSIONS

In this study information from death certificates was linked with national health registers of Croatia, Hungary, Slovenia and Italy to find out more recent information on suicides, induced abortions and standardized death rates. “Only“ 3.6 /100.00 of the Italian women (1998) committed suicides in relation to 15.4 i.e. 13.4 in Hungary i.e. Slovenia (1999) or in Croatia (2000) with 10.3/100.000. But induced abortions (% of live born children) were “only” 17.8 in Croatia (2002) against to 69.7 i.e. 49.6 in Hungary (2002) i.e. Slovenia (2002) and Italy (2002) with 24.0.

The data showed that the standardized death rate associated with the European economical region was the highest in Croatia (1998) with 113.8/10.000 population in relation to Italy as a country of EU (1996) with “only” 70.7 i.e. with 109.3 in Hungary and Slovenia as countries of CEE in 1996 (Bilten o umrlima u Hrvatskoj).

The literature reviews for years 1996–2002 show that the lowest suicide rate of women was in Italy which had the lowest standardized death rate, too.

Our data clearly show, however, that women who have experienced an abortion have an increased risk of suicide, which should be taken into account in the prevention of such deaths in Hungary and Slovenia.

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Correspondence:

Eduard Pavlović, MD, PhD, Assistant Professor, Psychiatrist
Psychiatric Clinic in Rijeka, KBC Rijeka
Cambierieva 17/7, 51000 Rijeka, Croatia
E-mail: edopavlovic@net.hr