JA ImpleMENTAL

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Country Profile: Croatia

Suicide and Suicide Prevention: Key Facts and National Priorities

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Introduction

The EU-Co-funded "Joint Action on Implementation of Best Practices in the area of Mental Health", short **JA ImpleMENTAL** has a duration of 3 years, lasting from October 2021 to September 2024. Detailed information can be found at the project's website JA ImpleMENTAL ja-implemental.eu. It aims to promote and improve mental health structures, services, capacity and outcomes in participating countries in 2 specific areas:

- mental health reform (promoting community health services) and
- suicide prevention.

Two national best practices - mental health reform in Belgium and the Austrian suicide prevention program SUPRA - serve as best practice examples. Selected components of these should be prioritized and implemented over the course of the JA in 14 i.e. 17 participating EU-countries. JA ImpleMENTAL comprises 6 Work Packages (WPs), 4 horizontal WPS and one for each best practice. **WP6 on suicide prevention** aims to support improvement in knowledge and quality of suicide prevention services. Defined elements of SUPRA should be transferred and pilot implemented at national/regional level, suicide prevention strategies in participating countries developed i.e. revised.

The present country profile is one of the major deliverables of the JA, presenting national priorities for suicide prevention embedded in contextually relevant facts. It summarizes results of the national Situation- and Needs Assessment (SANA), lists lessons learned, recommendations and prioritized measures for suicide prevention. It includes challenges and opportunities as well as outlining next steps necessary to scale-up i.e. promote national/regional suicide prevention activities. The country profile is a basis for strategy formulation, for decision-making and a declaration of commitment to suicide prevention.

1 Context

1.1 Country, Health and Social System

Localized centrally in Europe, Croatia is a republic consisting of 4 regions and 20 counties, with the capital City of Zagreb acting as the 21st county.

Croatian War of Independence from 1991 to 1995 led not only to an increase in exposure to traumatic events, but also to an increased number of unlegalized firearms (2). The pandemic of COVID-19 in 2020 occurred simultaneously with a devastating earthquake in Zagreb in March of the same year, followed by an even stronger earthquake in Petrinja in December, which put further strain on the healthcare system.

Table 1: Mid-year population estimates for 2021, number of persons by age and sex (1)

	Sex		
Age group	male	female	**total**
<18	343 666	325 028	668 694
18 - 64	1 163 872	1 179 188	2 343 060
65+	360 417	506 810	867 227
Total	**1 867 955**	**2 011 026**	**3 878 981**

Healthy life expectancy is low when compared to other EU countries, 58.5 at birth, and 5 at age 65 (3). A total of 19.9% of the population is at risk of poverty and social exclusion (4). Income inequality,

expressed as the Gini coefficient, was 29.2 in 2021, close to the EU27 value of 30.1 (5), and total healthcare expenditure relative to GDP was 7.8 % in 2020, lower than the EU value of 10.9% (6).

The Croatian Health Insurance Fund (CHIF) provides mandatory health insurance, financed by the mandatory contributions of 16.5% of gross salary paid by the employer for each employee (7) and voluntary complementary health insurance of around 10€ a month, depending on the provider. Access to healthcare is free for most of the population, but the number of healthcare professionals is lower than in the EU (8) leading to long waiting times.

1.2 Mental Health System

At the end of 2022, Croatian government adopted the Strategic Framework for Mental Health Development for 2022-2030 period. There is no stand-alone strategy for suicide prevention, but this Framework includes measures related to suicide prevention, including public health campaigns aimed at increasing health literacy and help seeking behaviors, reducing stigma, and providing support to persons who attempted suicide and their loved ones. A performance indicator mentioned in the Framework is a 10% reduction in suicide rates by 2030, when compared to rate in 2019 (9).

Mental health care in Croatia is organized on the primary, secondary, and tertiary level. On primary level, family physicians can refer patients to a psychiatrist or a clinical psychologist. County health institutes also have Services for mental health protection, prevention, and outpatient treatment of addiction with multidisciplinary teams, that can be used without a physician's referral. Hospital resources for mental health are presented in Table 2. There is no published data, and therefore no reference, for total government expenditure on mental health. However, according to an internal report made by CHIF in 2019, their total expenses (as the only insurance fund in Croatia) were 26.526.450.572 HRK, and expenses made by CHIF for mental health were 628.856.415,44 HRK, 2.3% of total expenditure on health.

Persons with severe mental health conditions that have the status of persons with disability, have several forms of support available, according to the degree of disability and their specific situation. This includes the right to financial allowance for disability, right to housing or organized housing, domestic assistance, psychosocial support or personal assistance (10).
According to results of the European Health Information Survey, 2.9% of the population with mental health care needs in 2019 could not access mental health services due to financial reasons, which is an increase from 1.7% reported in 2014, but still under the EU27 average of 3.2% (11).

Table 2: Facilities, number of beds and hospital admissions related to mental health, 2021 (12)

Indicator at national level		number	rate per 100.000 adult/minor population
Mental health hospitals	Facilities	7	0.22
	Beds	2.975	92.67
	Discharges	15.908	495.53
Psychiatric wards/units in general hospitals	Wards/units	22	0.69
	Beds*	701	21.84
	Discharges	12.072	376.04
Mental health inpatient facilities specifically for children and adolescents	Facilities	1	0.15
	Beds	37	5.53
	Discharges	750	112.16

*Included in this number are also beds for minors, although a very small fraction with no official data on the number

2 Suicide and Suicide Prevention

2.1 Situation Analysis (SA)

2.1.1 Suicide deaths: current situation and trends

Figure 1: Suicide rate in 2021, by age groups and sex (13; rates calculated by the author)

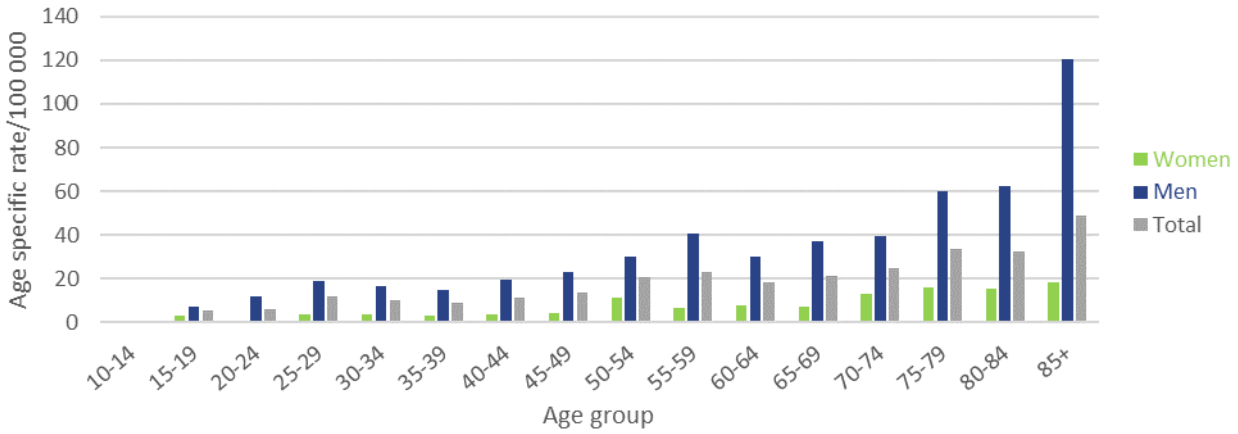
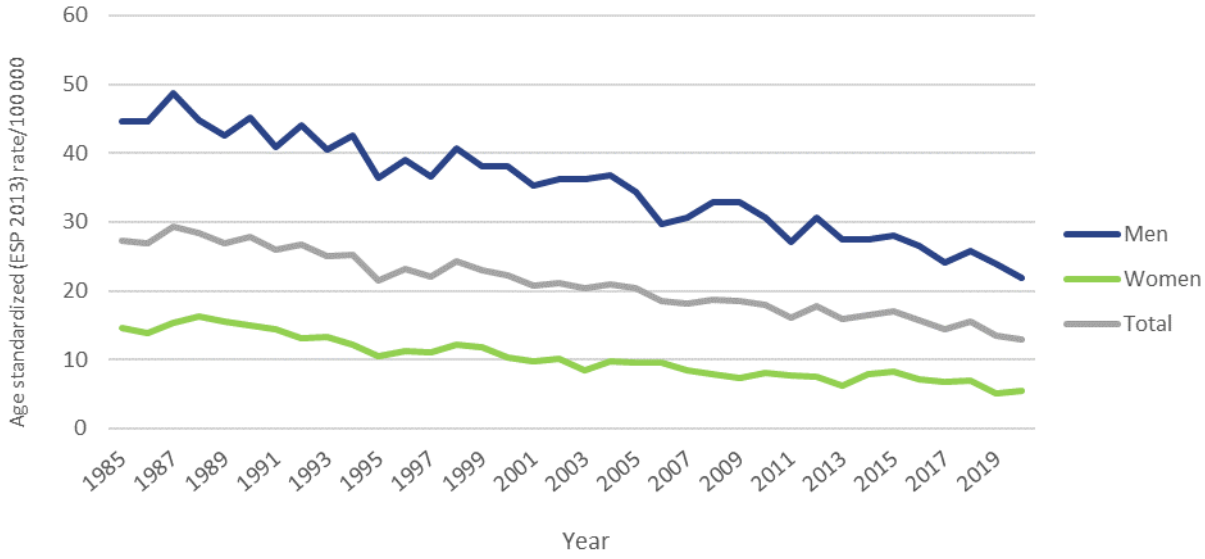


Figure 2. Suicide deaths trend, 1985-2020, by sex (13; rates calculated by the author)



In the last decades we see a decrease in suicide rates in Croatia, in both men and women. This finding is similar to those in other European countries. An annual report on suicide, with a short description of trend, suicide rates by age and sex, and other relevant data is published by the Croatian Suicide Registry at the Croatian Institute of Public Health. It includes data on the number, rate, age standardized rate of suicide, by age groups (0-64 and 64+, 0-14, 15-19, 20-49, 50-64, 65+) and sex. It also describes basic regional differences in suicides, and the ratio of suicide deaths caused by firearm. The report is usually available online on the CIPH web page in September on World Suicide Prevention Day, for the previous calendar year. It is also published in the Croatian Health Statistics Yearbook.

Table 3: Most common methods of suicide: 2021, by age group and sex (13)

Sex/Age	0-19	20-39	40-59	60-79	80+
Women	1. hanging 2. jumping in front of a moving object 3. -	1. hanging 2. poisoning 3. jumping from a high place	1. hanging 2. poisoning 3. drowning	1. hanging 2. poisoning 3. drowning	1. hanging 2. poisoning 3. other/unspecified
Men	1. hanging 2. jumping from a high place 3. -	1. hanging 2. jumping from a high place 3. poisoning/firearm	1. hanging 2. firearm 3. jumping from a high place	1. hanging 2. firearm 3. jumping from a high place	1. hanging 2. firearm 3. jumping from a high place/other and unspecified

2.1.2 Vulnerable groups and help seeking barriers

Box 1. Most common barriers people face when seeking psychosocial help

Barriers in access, including waiting time and accessibility in rural places

Stigma associated with seeking mental health help

Unaffordable private treatment/psychotherapy

Insufficient availability of mental health experts in the public health care as well as in the private sector

Box 2. Groups most vulnerable to suicide

According to available data and related to age group specific risk, elderly people are the most vulnerable to suicide, with highest suicide rates registered in this population. From the Eurostat data for 2020, Croatia was at a high 6th place for 65+ age population (4th when compared only to EU27 countries) (14).

Adolescents and young people do not have high suicide rates when compared to other age groups, but can be considered vulnerable to suicide since suicides are one of the leading causes of death in this age group. According to the report of the project "Surveillance and Prevention of Self-Harm" high risk groups for suicide are persons with psychiatric disorder, especially following discharge from hospital in previous weeks, persons with serious illness/handicap, persons who have a record of self-harm behavior in the past, prisoners, and offenders on probation.
Croatian war veterans are also commonly pointed out as especially vulnerable to suicide.
We can presume that emergency workers, LGBTQIA+ people, especially transgender people, are also under increased risk as this is a known finding from various studies, but unfortunately no data is collected in Croatia regarding the risk in these populations.

2.1.3 Self-harm

There is no attempted suicide registry in Croatia, so as a proxy data we presented data on hospital discharges due to self-harm (as the main or one of comorbidity diagnoses). Due to the way that the

data is extracted, we do not have the information on the means of self-harm, and the numbers are probably underestimated. The highest rate of self-harm is recorded in girls under 19 years of age, more than 5-fold higher than the rate for boys of the same age.

Table 4: Hospital discharges due to self-harm by age group and sex, number and rate per 100 000, 2021 (15)

	0-19		20-39		40-59		60-79		80+	
	N	rate	N	rate	N	rate	N	rate	N	rate
female	160	44.3	135	30.1	187	34.5	117	22.6	33	23.2
male	32	8.4	141	30.6	150	28.4	78	18.3	21	29.1

Ministry of Interior also publishes yearly reports on suicide attempts. These include only the attempts with police involvement, when the police is asked to do the inspection. It also includes all inspections, even if the persons involved are not Croatian citizens (for example, tourists, migrants). We can see from the Table 4 that this number probably does not reflect true number of suicide attempts, as it is not much bigger than the number of suicide deaths that Croatia has annually.

Table 5. Suicide attempts by age group and sex, number, 2022 (16)

	0-14	15-18	19-25	26-35	36-50	51-64	65+	**Total**
female	16	38	37	48	66	55	71	331
male	6	17	42	58	102	90	88	403

2.1.4 Available services and activities for suicide prevention

There is currently no nation-wide hotline for crisis intervention/suicide prevention, and no 24/7 nation-wide availability of in-person psychosocial/psychiatric crisis services. There is a Centre for crisis situations and suicide prevention working at the University Hospital Centre Zagreb that works 24/7 and can be reached nation-wide through their helpline, however, the telephone number that the Centre uses is not toll-free, therefore it is not available to everyone. Aside from that, even though the Centre can be reached through the helpline from anywhere in Croatia, the Centre is still situated in Zagreb and has limited powers when it comes to referring callers, especially those that are not calling from Zagreb.

"Teams for crisis situations" established by the Ministry of Science and Education have been operating in Croatia from 1995. Team members are specially trained for providing psychological help in different crisis situations, including suicide. They are most often invited for interventions by principals of educational institutions such as pre-school institutions, primary and secondary schools, student dormitories and higher education institutions, but they also have experience in providing psychological crisis interventions in centers for social welfare, private companies, banks etc. The education of experts working in the team is carried out by the Society for Psychological Assistance in cooperation with competent ministries, and the costs for intervention is covered by the competent ministry or the institution/ company that requested the intervention.

Regarding the nation-wide measures restricting the means of suicide in Croatia, Procurement and Possession of Weapons by Citizens Act has standards on limitations for gun ownership. A number of people have in their possession (illegal) guns and other weapon from the War of Independence. In 2007 a campaign was started by the Ministry of Interior in cooperation with the United Nations Development program in order to motivate people to return such weapon (with no sanctions), titled

"Less weapons, less tragedies". From 2010 the campaign is co-financed by the EU, and is regularly updated with impressive results. The share of suicide deaths due to firearm has decreased in Croatia,

Also, Croatian Health Insurance Fund established the Guidelines on the method of prescribing and issuing prescription drugs, stating that medicines containing narcotic drugs and psychotropic substances are prescribed only if they are necessary; also, maximum possible amount that a physician can prescribe is stated. Copies are issued for prescriptions for stated medicines, and physicians are required to keep a separate record on all prescribed medicines containing narcotic drugs and psychotropic substances.

There are no official recommendations for media as to how to report on suicide. However, there is cooperation between the media and mental health experts. As an example, a round table was held in co-organization of the City of Zagreb and the Center for Youth Health Zagreb in 2019 on the topic of "Media as a partner in suicide prevention". Participants were various experts in the area of mental health, media, City of Zagreb and patient organizations.

2.2 Needs Assessment (NA)

Based on the results of the Situation Analysis, we performed a Needs Assessment using the SWOT table methodology to explore strengths, weaknesses, opportunities, and threats related to suicide prevention in Croatia. Needs Assessment was done by the Implemental JA team at CIPH.

Table 6: SWOT Analysis

Factor	Contents					
Strengths	1. Long standing suicide registry with annual public reports	2. Universal, free health care, including mental health care	3. Improved reporting on suicide in media	4. Adoption of the Strategic Framework for Mental Health Development	5. Network of mental health services in county public health institutes	6. Mental health literacy program for educators of children and youth (Pomozi- da- „Help mi to“) and screening of mental health risks for school children
Weaknesses	1. No stand-alone suicide prevention strategy	2. No registry on self-harm or suicide attempts	3. No official instructions for media reporting on suicide	4. Limited research on risk factors and vulnerable groups for suicide	5. Waiting times for psychological and psychiatric help	6. Dependency on NGOs for service provision in mental health
Opportunities	1. Increased awareness of mental health importance due to COVID-19 and earthquakes	2. Participation in international projects related to mental health	3. Health care reform focused on prevention and primary health care (including mental health)	4. Existing postvention services that could be expanded in scope	5. Development of action plans based on the strategic framework, including an action plan for the prevention, early detection, and treatment of mental disorders	5. Cooperation with the NGOs, more government funding to allow for activities
Threats	1. COVID-19 and increase in mental health problems	2. Hanging is the most common method of suicide in all age groups- difficult to restrict means	3. Unknown number of left over, unlegalized firearms due to war	4. Increase in the number of people suffering from financial stress due to inflation	5. Bureaucratization and ensuring sustainability (financing)	6. The influence of social networks and digital media

3 Reflection on SANA results

SANA results have confirmed what has already been known in regards to the mental health system in Croatia. As in most hospital-based systems, there is a lack of services on primary level of care. Care in the community should be organized in a way that facilitates and promotes participation and recovery. It is important to ensure continuity of care and follow up. Services should be transparent enough for service users to find them and understand how to approach them easily.

The importance of mental health has been recognized and highlighted in Croatia in previous years, which led to, among other, to the Adoption of the Strategic Framework for Mental Health Development. However, the efforts for implementing concrete, measurable actions in the suicide prevention area are still lacking.

Data on suicide deaths is regularly published by the Croatian Suicide Registry, but there is no attempted suicides registry and very little research on vulnerable groups for suicide. Public focus is often on the importance of mental health in young people, with media stating the increase in suicide in children and adolescents. Although there are some indications of increased prevalence of mental health problems in this age group, there is no increase in suicide deaths, and due to lack of data we cannot know the extent of possible increase of suicide attempts. Suicide death rate in older people is very high, with lacking prevention activities focused on this age group. There are many established NGOs that provide free counseling and even psychotherapy to various vulnerable populations; e.g. people with cancer and their families, parents and children, young people, war veterans. However, they depend on sponsorships, EU projects and renewal of government funding, and are often situated in Zagreb or other large cities and therefore not widely available. Similarly, Teams for crisis situations initiative is volunteer based; experts are paid per intervention, but they volunteer on whether to participate in an intervention or not. Scaling up the Teams, ensuring regular financing and human resources could further improve postvention services in Croatia.

Prioritized measures for implementation and quick wins are presented in Box 3.

Box 3.

Prioritized measures for implementation

Overarching measure

- Adopting an action plan for Mental Health with measurable goals and outcomes based on the Strategic Framework – with areas related to suicide prevention

Other measures

- Improving availability of mental health care in the public health system
- Implementation of a nation-wide 24/7 hotline for suicide prevention
- Introducing multidisciplinary mobile mental health teams

QUICK WINS

- Social media posts aimed at reducing stigma associated with mental health problems
- Publishing instructions and tips on responsible reporting on the CIPH webpage
- Media workshop on recommendations for reporting on suicide

4 Next steps

- Introducing multidisciplinary mobile mental health teams

As the new healthcare system reform is focused on prevention, one of the goals is to introduce multidisciplinary mobile mental health teams. One of the strategic goals stated in the Strategic Framework for Mental Health Development is to form 30 such teams by 2030.

- Implementing a nation-wide 24/7 hotline for suicide prevention

Experts agree that it is necessary to establish a hotline for suicide prevention, and there are currently very early stages of negotiations in place with the University Hospital Centre Zagreb for implementing it.

- Development of action plans for Mental Health based on the Strategic Framework

For some of the action plans (action plan for community-based mental health) working groups have already been established, and others, such as the action plan for the prevention, early detection and treatment of mental disorders will be developed in the future. These Action Plans will have more concrete, measurable actions with defined timeframes for implementation.

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