



zavod za javno zdravstvo međimurske županije

# The Strategic Plan for Tackling Health Inequalities in Međimurje County through Health Promotion 2014-2020

ISBN 978-953-57941-1-0 (EPUB)  
ISBN 978-953-57941-4-1 (CD-ROM)



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This document arises from the project ACTION-FOR-HEALTH which has received funding from the European Union in the Framework of Health Programme.



Co-funded by  
the Health Programme  
of the European Union

Unless otherwise stated, the views expressed in this publication do not necessarily reflect the views of the European Commission.

ISBN 978-953-57941-1-0 (EPUB)  
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Title: The Strategic Plan for Tackling Health Inequalities in Međimurje County through Health Promotion 2014-2020

Title of the translation: Strateški plan za unapređenje zdravlja i smanjivanje nejednakosti u zdravlju u Međimurskoj županiji od 2014.-2020.

Publisher: INSTITUTE OF PUBLIC HEALTH OF MEĐIMURJE COUNTY  
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Čakovec, December 2013

ISBN 978-953-57941-1-0 (EPUB)  
ISBN 978-953-57941-4-1 (CD-ROM)

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COUNTY**

When using the data from this publication please specify the source.

Čakovec, 2013



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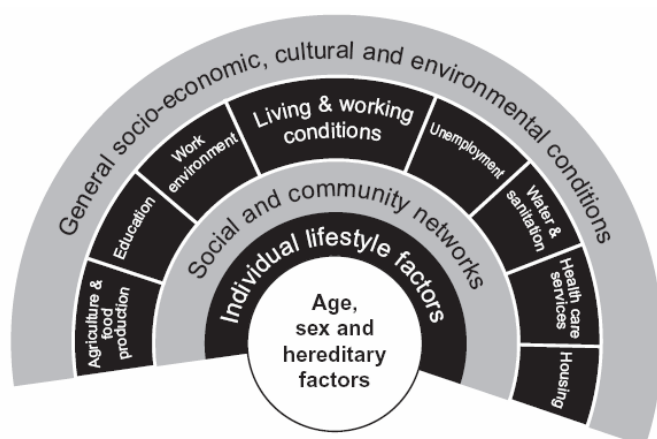
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## 1. Introduction

According to the definition of the World Health Organisation, health is the state of complete physical, mental and social well-being, and not merely the absence of illness or infirmity<sup>(1)</sup>. A somewhat similar definition is offered by Breslow, who sees health as a dynamic equilibrium between an individual (group, community) and their surroundings. For an individual, a group or community to reach a state of complete physical, mental and social well-being, they should have the possibility to identify and recognise their aspirations, fulfill their needs and either change the environment or cope with it<sup>(2)</sup>.

The classic Dahlgren-Whitehead model of health determinants speaks of various levels of influence of certain determinants on the health potential of an individual. Whitehead has described the following factors as being unchangeable: age, gender and hereditary factors. However, she also sees them as a combination of potentially changeable risk factors, expressed through a number of influence layers, including life habits, physical and social surroundings and the general socio-economic, cultural and environmental conditions<sup>(3)</sup>.



**Figure 1.** The Dahlgren-Whitehead model (Dahlgren and Whitehead's rainbow: social determinants of health). Source: Whitehead, M. and Dahlgren, C. "what can be done about inequities and health?", *The Lancet*, 338, 8774, 26 October 1991, 1059-1063.

According to the Ottawa Charter for Health Promotion 1986, the basic conditions for health are peace, adequate housing, education, food, income, stable ecosystem, sustainable exploitation of resources, social justice and health equity. That is to say that one's life and health are not merely influenced by one's biological, hereditary and behavioural attributes; in fact, the characteristics of the social group to which one belongs have a considerably



stronger impact on human health. In this sense, health inequalities can actually be regarded as a consequence of unequal opportunities in life <sup>(4)</sup>.

Health inequalities can be defined as the differences in health status or in the distribution of health determinants among different population groups. It is important to distinguish between the inequality and the inequity of health. Some health inequalities are attributable to biological variations or free choice and others to the external environment and conditions mainly outside the control of individuals concerned (WHO definitions). Health inequalities exist on the supra-national level (between countries), on the national level (between regions in the same country) and within regions (between different local groups). Socio-economic inequalities in health are a major challenge for health policies worldwide <sup>(5)</sup>.

Therefore, the World Health Organisation, in its document “Health-for-All Policy for the 21st century”, places equity and solidarity at the centre of concern, and together with the civilian and political rights equally important are the economic, social and cultural rights which include the right to work and to be educated, social security, adequate housing and food as well as the highest possible health standard and the benefits of scientific progress.

The World Health Organisation emphasises that better health is possible to ensure through healthy lifestyle promotion and by reducing the risk factors of health that arise from environmental, social or bi-behavioural characteristics of one's surroundings. It is equally important to develop a health system that would be financially sustainable and just in its promotion of health incomes, would be based on the policy and practice of “non-exclusion” (available, accessible, efficient), and whose services would meet the needs of its user. Apart from that, it is important to develop a health policy within the health system and in general to create one that would take into account the social, economic and environmental facets of health <sup>(6)</sup>. These settings will be our guidelines in the design and implementation of the Strategic Plan for Tackling Health Inequalities in Međimurje County through Health Promotion.

### **1.1. The framework of the Strategic Plan for Tackling Health Inequalities in Međimurje County through Health Promotion and its methodology**

The Strategic Plan for Tackling Health Inequalities in Međimurje County has been developed as part of the ACTION-FOR-HEALTH project, partly funded by the EU. Its primary objective is to reduce health inequalities by using methods of health promotion and the EU Structural Funds. The first step in developing the plan was to carry out the situation analysis for health inequalities at national and county level. The project team of experts at the Institute of Public Health of Međimurje County, in collaboration with other experts from the Institute and elsewhere, conducted a detailed analysis of health determinants. This was based on the





data provided by EUROSTAT, National Bureau of Statistics, Croatian Institute of Public Health and other international, national and regional databases and various other sources (expert and scientific publications). Some data were also provided by the Institute of Public Health of Međimurje County (both published and not). Indicators were gathered via online questionnaire prepared by a team of experts at the Dutch Institute for Health Improvement – CBO, in charge of the ACTION-FOR-HEALTH project (**Work package 4 - Situation overview, needs assessment and examples of good practice in the field of health inequalities**). Having completed the situation analysis, our team of experts focused on carrying out the needs assessment. For that reason, a few focus groups were organised for a number of partners, where the project objectives and the current situation with regard to health inequalities at national and county level were in short presented. This was followed by a discussion to estimate strengths, weaknesses, opportunities and possibilities in the context of reducing health inequalities in the county. In addition, all partners were asked to fill out an open-ended questionnaire so that an insight into the available knowledge, time, good will, financial, human and other resources could be gained. The existing networks and their way of functioning, as well as their policies, objectives and management, were then assessed. More than 35 people from various county sectors took part in focus groups, and the open-ended questionnaire was filled out by more than 60 people (contacted via email, telephone or in person). The needs assessment also entailed an online questionnaire prepared by experts at the Dutch Institute for Health Improvement, based on the Dutch Framework for Health Promotion. Situation analysis and needs assessment are essential steps in creating the Strategic Plan for Tackling Health Inequalities in Međimurje County.

Most significant results of situation analyses and needs assessments, and the methodology with good practice examples in tackling health inequalities from seven European countries, have been presented in the joint project publication "ACTION-FOR-HEALTH Situation Analysis and Needs Assessment in Seven EU-Countries and Regions, Reducing Inequalities in Health).



## 2. A need for the Strategic Plan for Tackling Health Inequalities in Međimurje County through Health Promotion

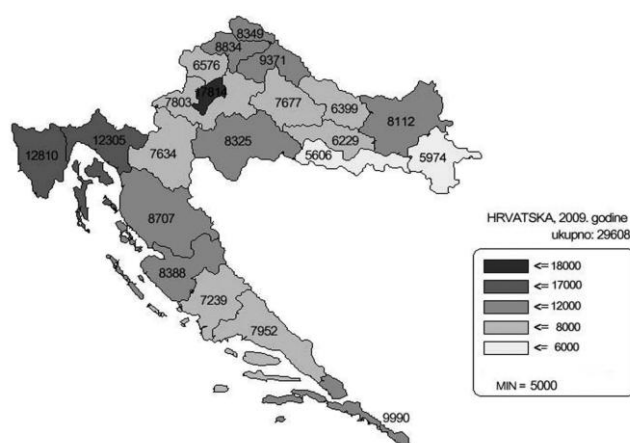
The problem of health inequality is of great interest to all transitional countries, including Croatia, which has experienced great changes in all aspects of health care system. Countries in transition are being faced with ever higher health care costs due to demographic changes, the rising expectations with regard to health care right and the general constraints in health care funding <sup>(5)</sup>.

Health inequalities, as in all other European countries, are also evident in the Republic of Croatia. In fact, according to the research conducted by Šučur, the self-estimated inequalities concerning health status and access to health care of different population groups, based on income differences, urbanisation level and regional distribution, are more conspicuous in Croatia than in other EU countries.

Significant differences have been determined between different regions in Croatia. People of Central Croatia (Karlovac, Sisak-Moslavina and Bjelovar-Bilogora counties) report experiencing most difficulties when it comes to health and access to health services. Eastern Croatia (Virovitica-Podravina, Požega-Slavonija, Brod-Posavina, Osijek-Baranja, Vukovar-Srijem counties) follows Central Croatia in terms of the negative perception of health and the access to health services. The most favourable situation is in the Zagreb region (the City of Zagreb, Zagreb County) and North Adriatic (Primorje-Gorski kotar, Lika-Senj, Istria)<sup>(7)</sup>.

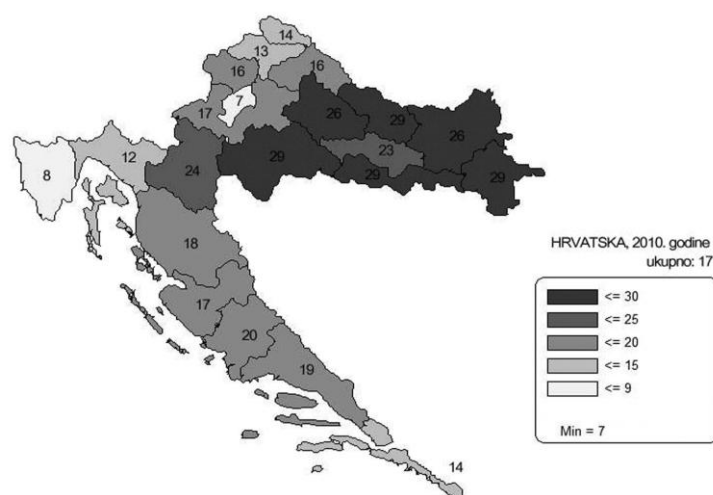
### 2.1. Income, unemployment and education

Notable differences between Croatian counties are evident in GDP, employment and education, which is reflected in the differences between health indicators. Figure 2 shows considerable regional disproportions concerning the level of development. The most underdeveloped counties are those of Central and Eastern Croatia, and by far the highest GDP per capita is noted in the City of Zagreb. Primorje-Gorski kotar and Istria also show GDPs per capita above the Croatian average. The City of Zagreb has more than one third of the GDP reached, followed by Split-Dalmatia (9%) and Primorje-Gorski kotar (8%), as well as Istria, Osijek-Baranja and Zagreb County (6% each). The lowest value of 1% (for each) in the total GDP is found in the counties of Lika-Senj, Virovitica-Podravina and Požega-Slavonija<sup>(8)</sup>.



**Figure 2.** Gross domestic product (GDP) per capita (EUR) across counties (EUR) 2009. Source: the Croatian Central Bureau of Statistics (2012); the Report of 14 March 2012. No. 12.1.2. Source: National Strategy of Health Care Development 2012-2020, Government of the Republic of Croatia, 2012.

Furthermore, regional disproportions are present in Croatia with regard to unemployment rate (Figure 3). In 2010, most counties had higher unemployment rates than the Croatian average. For the City of Zagreb the registered unemployment rate was the lowest, whereas it appeared highest for Brod-Posavina, Vukovar-Srijem, Virovitica-Podravina and Sisak-Moslavina<sup>(8)</sup>.

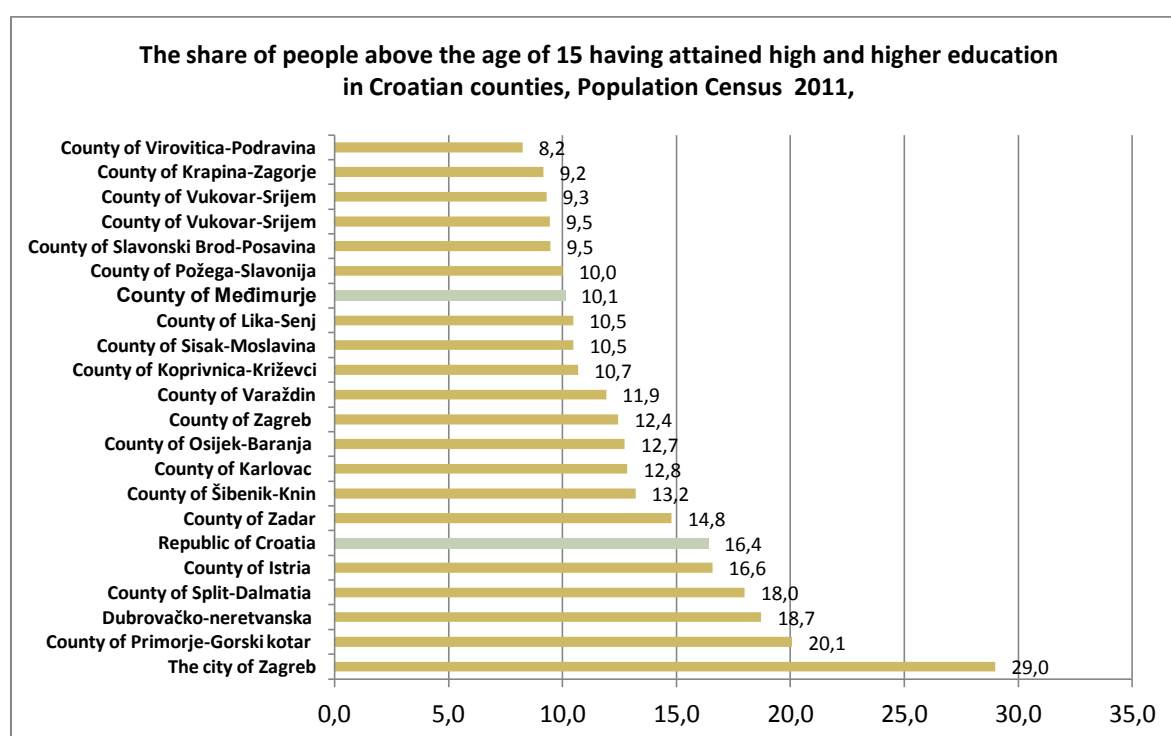


**Figure 3.** The registered unemployment rates across counties 2010 (%). Sources: Croatian Central Bureau of Statistics (2012), Monthly Statistical Report 2; Croatian Employment Service (2010), Analytical Bulletin No. 4. Source: National Strategy of Health Care Development (Nacionalna strategija razvoja zdravstva) 2012-2020, Government of the Republic of Croatia, 2012.

The Republic of Croatia is characterised by striking differences in the educational structure of its counties. According to the most recent data from the Population Census of 2011, most highly educated people older than 15 were found in the City of Zagreb (29%), followed by



Primorje-Gorski kotar (20.1%), Dubrovnik-Neretva (18.7%), Split-Dalmatia (18%) and Istria (16.6%); the Croatian average was 16.4%. The lowest shares of highly educated population were found in Virovitica-Podravina (8.2%), Krapina-Zagorje (9.2%), Bjelovar-Bilogora (9.3%), and finally Vukovar-Srijem and Brod-Posavina (10% each). In Međimurje County the share of highly educated people was 10.1%<sup>(9)</sup>. Differences in the educational structure have a strong impact on health inequalities in a number of factors. Well-documented is the statistical fact that life-expectancy in the case of higher educational status is longer than in the case of lower educational status. Individuals of lower educational status also show a tendency towards lower health literacy, which is reflected in poor health incomes (more chronic diseases, bad compliance in the application of recommended treatments, higher mortality etc.), poor lifestyle, and higher health care costs<sup>(10)</sup>. All this has a negative influence on the development of Croatia, not just at health level but also at social and economic levels.



**Figure 4.** The share of people above the age of 15 with high education in Croatian counties. Source: Croatian Bureau of Statistics, Population Census 2011; the chart was created at the Institute of Public Health, County of Međimurje<sup>(9)</sup>

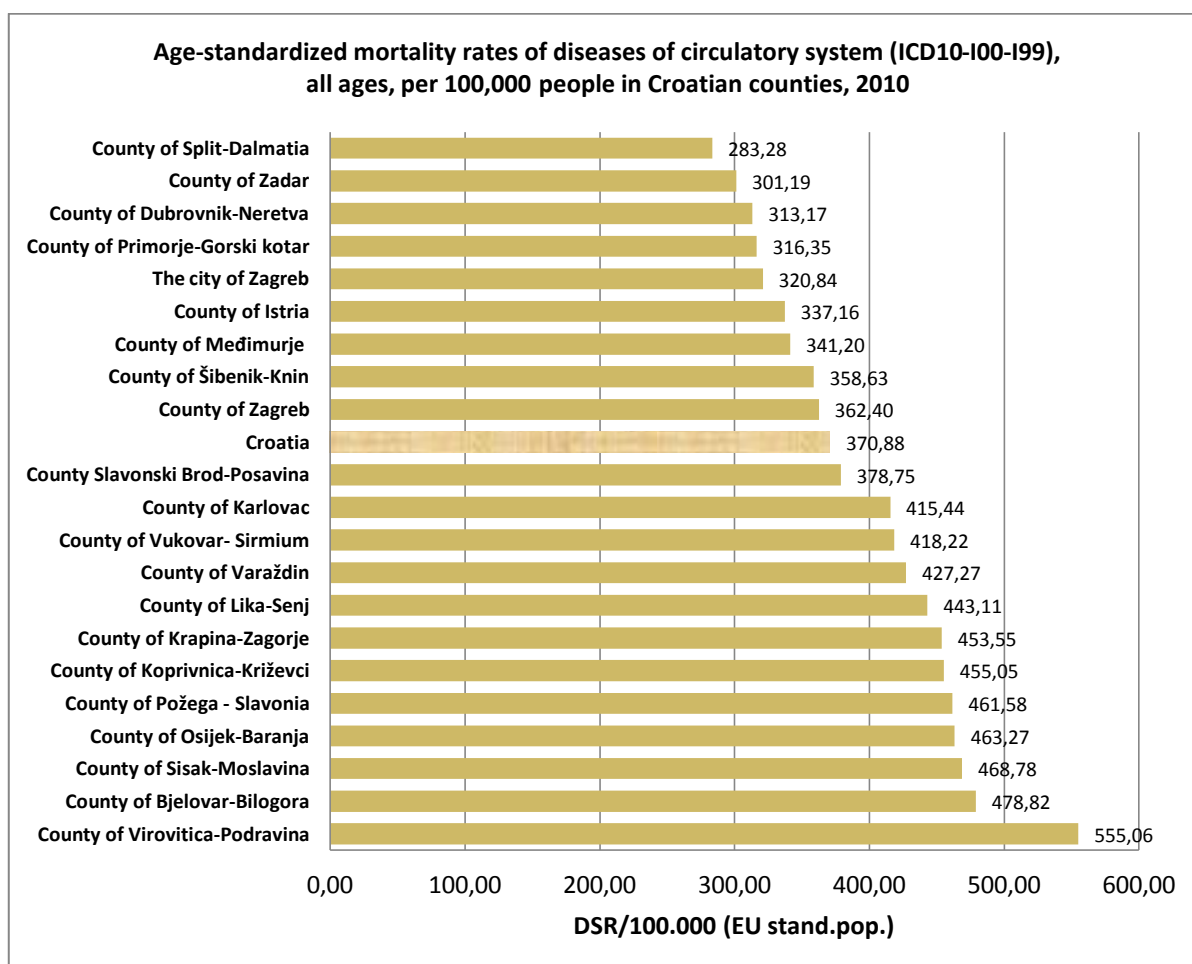
## 2.2. Geographical distribution of the leading causes of death in the Republic of Croatia

The leading causes of death in Međimurje County as well as Croatia in 2010 were cardiovascular diseases (with the share of 46% in the total number of deaths in Međimurje,



and 49% in Croatia), malignant diseases (28.8%:26.3%), followed by injuries, poisoning and other consequences of external causes (6.1%:5.7%)<sup>(11)</sup>.

In 2010 the standardised mortality rate for **cardiovascular diseases** was for all ages in Croatia 370.88/100,000. The highest mortality rate was found in Virovitica-Podravina (555.06/100,000) and the lowest in Split-Dalmatia (283.28/100,000). Mortality rates are mostly higher in the continental part of Croatia and lower in the coastal region, with the exception of Međimurje County (341.2), Zagreb County (362.4) and the City of Zagreb (320.84), which also showed lower mortality rates than the Croatian average. Of 1,235 people (609 men and 626 women) who died in Međimurje County in 2010, 568 people (232 men and 336 women) died of cardiovascular diseases, with the share of 46% in the total number of deaths <sup>(12)</sup>.

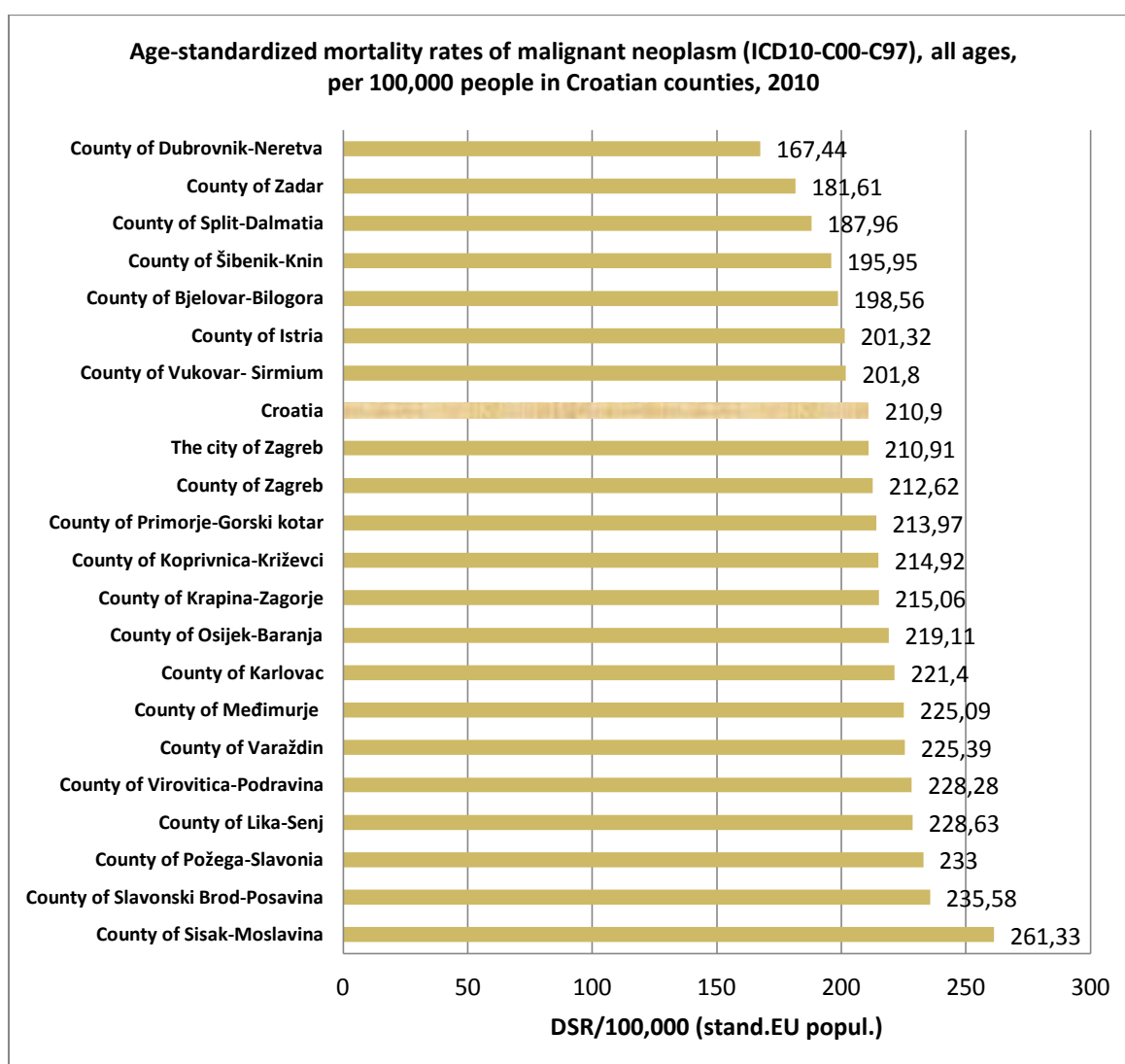


**Figure 5.** Age-standardised mortality rates for circulatory system diseases (ICD 10, I00-I99), all ages, per 100,000 population, 2010, Croatian counties. Source of data: Croatian Institute of Public Health, National Bureau of Statistics, standardised mortality rates have been calculated at the Institute of Public Health County of Međimurje (age-specific rates have been calculated on the basis of the estimated population number of the



Republic of Croatia in mid 2010, followed by the standardisation by direct method per European standard population)<sup>(12)</sup>

In 2010, age-standardised mortality rate for **cancer** (ICD 10-C00-C97) was for all ages in Croatia 210.9/100,000 people. The highest mortality rate was recorded in Sisak-Moslavina (261.33) and the lowest in Dubrovnik-Neretva (167.44). Međimurje County was also above the Croatian average in terms of mortality rate for cancer (225.09). In 2010, 356 people in Međimurje County died from malignant diseases (213 men and 143 women), and their share in the total number of deaths was 28.8%<sup>(12)</sup>.

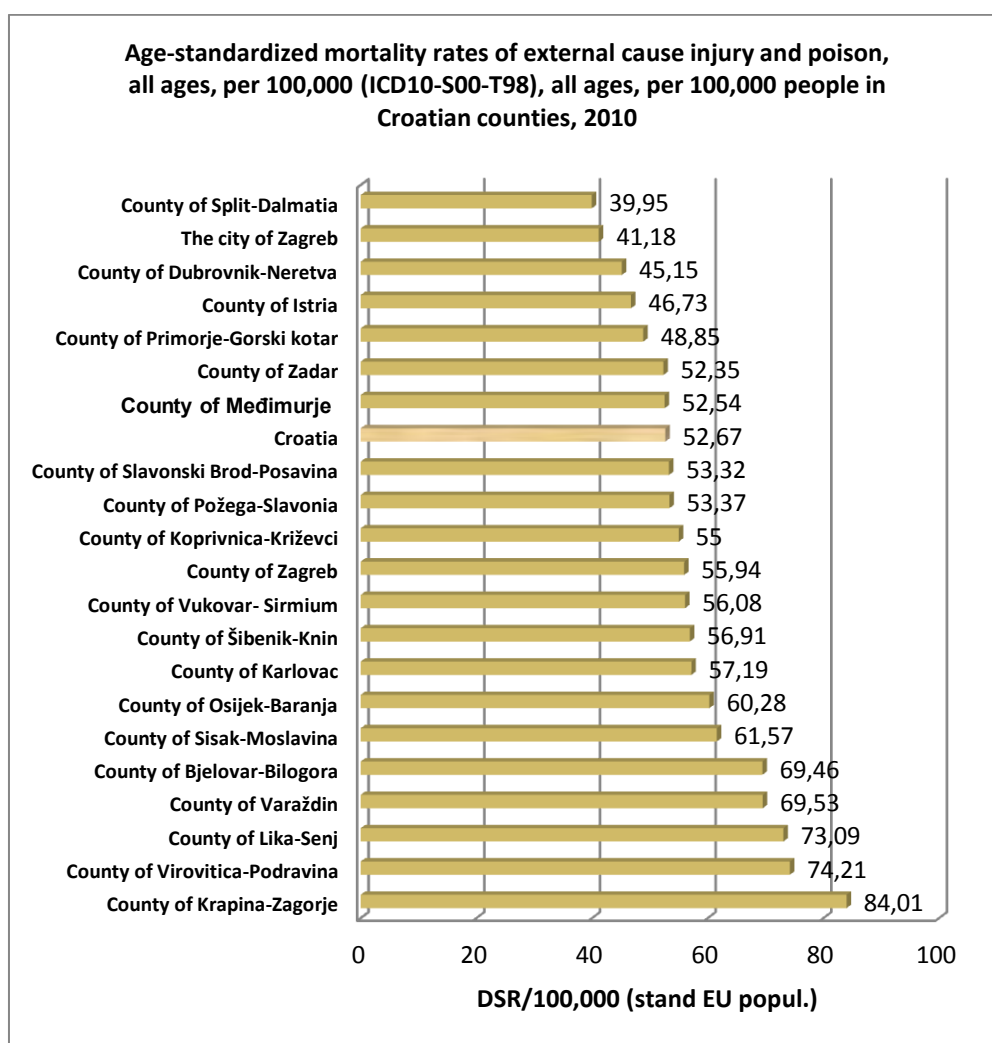


**Figure 6.** Age-standardised mortality rates of malignant diseases (ICD 10-C00-C97), all ages, per 100,000 people, 2010, Croatian counties. Source of data: Croatian Institute of Public Health, National Bureau of Statistics, standardised mortality rates have been calculated at the Institute of Public Health County of Međimurje (age-specific rates have been calculated on the basis of the estimated population number of the



Republic of Croatia in mid 2010, followed by the standardisation by direct method per European standard population)<sup>(12)</sup>

In 2010, age-standardised mortality rate for **injuries, poisoning and other consequences of external causes** (ICD 10 S00-T98) was in Croatia 52.67/100,000. The lowest mortality rates were recorded in Split-Dalmatia (39.95/100,000) and the City of Zagreb (41.18/100,000), whereas the highest mortality rates were found in Krapina-Zagorje (84.01/100,000) and Virovitica-Podravina (74.21/100,000). Međimurje County has a slightly lower mortality rate (52.54/100,000) compared with the average for Croatia. In 2010, injuries were in Međimurje County the third leading cause of death, with 75 deaths (36 men and 39 women), and their share in the total number of deaths was 6.1%<sup>(12)</sup>.



**Figure 7.** Age-standardised mortality rates of injuries, poisoning and consequences of other external causes (ICD 10 S00-T98) all ages, 2010, Croatian counties. Source of data: Croatian Institute of Public Health, National Bureau of Statistics, standardised mortality rates have been calculated at the Institute of Public Health County of Međimurje (age-specific rates have been calculated on the basis of the estimated population number of the



Republic of Croatia in mid 2010, followed by the standardisation by direct method per European standard population)<sup>(12)</sup>

In 2007, the Republic of Croatia, in accordance with the regulations of the Treaty of Accession to the European Union, signed the Joint Inclusion Memorandum-JIM with the aim of fighting poverty and social exclusion <sup>(13)</sup>, and in 2011 the Development Strategy of Social Care System in the Republic of Croatia 2011-2016 was adopted <sup>(14)</sup>. Two very important documents, whose main objective is also to reduce health inequalities in the Republic of Croatia (besides having other important goals), have been adopted recently: the National Strategy of Health Care Development 2012-2020 and the Strategic Plan of Public Health Development 2011-2015 <sup>(8,15)</sup>. To carry out the objectives of the Strategy of regional development in the Republic of Croatia 2011-2013 is also extremely important for improving the well-being of all Croatian regions and reducing the lagging behind the EU average. The goals of the strategy focus on the socio-economic development of Croatia, the reduction of regional inequalities and strengthening the development potential of those parts of Croatia that lag behind the rest <sup>(16)</sup>. What is more, a new Law on Regional Development of Croatia is currently being drafted.





### 3. Health inequalities in Međimurje County

#### 3.1. Basic information

Međimurje County is the smallest county in the Republic of Croatia covering 730 sq km. It is bordered by the Mur river to the north and east, and the Drava river to the south. With its 156.11 population per square km it is the most densely populated county in Croatia. According to the Population Census of 2011, in Međimurje County live 113,804 people (55,601 men and 58,203 women). People aged 0-14 take the share of 16.9% population in Međimurje, or 15.2% in Croatia. The percentage of people older than 65 is in Croatia 15.6%, whereas the Croatian average is 17.7%.

The average population age in Međimurje is 40 years, and in Croatia 41.7. The City of Čakovec is the administrative, cultural and political centre of the county. Administratively and politically speaking, the county comprises two more towns and 22 municipalities. The predominant national minority in Međimurje are the Roma people. According to the Population Census of 2011, in Međimurje live 5,107 Roma people and their share in the total number of population is 4.49%. The same source states that 16,975 Roma people were registered in Croatia, of which a registered 30% live in Međimurje<sup>(9)</sup>.

There were 11,738 people with disabilities recorded in Međimurje on 17<sup>th</sup> January 2013, of which 6,363 men (54%) and 5,375 women (46%). People with disabilities thus take the share of 10.3% of county's population total. The greatest share of people with disabilities, 5,761 (49%), is of economically active age, while 16% of them (1,831) is aged 0-19. In Međimurje County, the total prevalence of people with disabilities as well as the prevalence of economically active age and the age group above 65, are below average. At the same time, the prevalence of children age (0-19) is above the average and the highest recorded in Croatia. According to the available data on education, 76% of people with disabilities did not finish primary education or only have primary education, 17% have secondary education, whereas 1% of people with disabilities have higher or highest level education, and 6% of them finished special needs education. As found in the database of employed people with disabilities, in Međimurje County 273 people are employed (both the currently employed and those temporarily unable to work), of which 67% are men and 33% are women. Around 55% of people, who are users of social care services, are in constant need of assistance and care. In Međimurje County also live 399 veterans with disabilities and 102 people who were left with consequences of war operations from World War II, or are civilian invalids of war and postwar<sup>(17)</sup>. People with disabilities are, therefore, an especially vulnerable population group who are in need of special attention in the efforts to reduce health inequalities.



### 3.2. Socio-economic data

In 2010, the average monthly net salary per employee in legal entities in Međimurje County, according to the Central Bureau of Statistics, was 4,251 HRK or 584 EUR (4,495 HRK/617.45 for employed men and 3,941 HRK/541.34 EUR for employed women), this being the lowest paid net wage in all counties. In 2010, the highest paid net wage per employee, on average, was found in the City of Zagreb, with 6,245 HRK total (5,871 for women and 6,580 for men), whereas the Croatian average was 5,329 HRK or 737 EUR (5,575 HRK for men and 5,026 HRK for women) <sup>(18)</sup>.

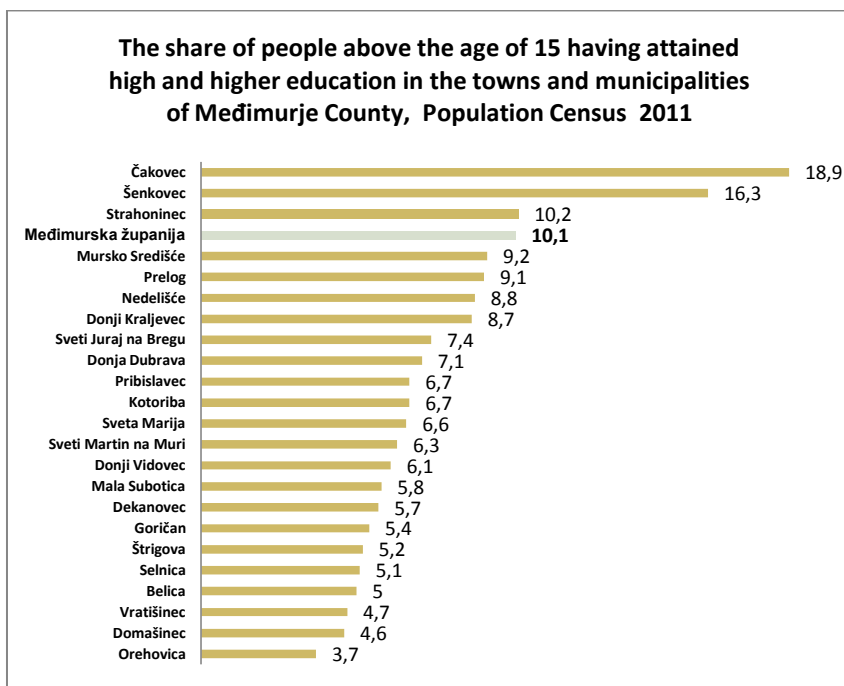
According to the National Bureau of Statistics, in 2011 the poverty risk rate was in the Republic of Croatia 21.1% (20.0% for men and 22.1% for women). It was found highest for people aged 65 and more (27.3%). This group also showed the biggest discrepancy gender-wise (21.5% for men and 31.3% for women) <sup>(19)</sup>. Another source (Ivica Rubil, Accounting for regional poverty differences in Croatia, the Institute of Economics, Zagreb, January, 2013) states that, in 2010, the poverty risk rate for Croatia was 17.7%, and 12% for Međimurje County. A lower poverty risk rate compared with Croatian average according to the same source was, apart from Međimurje County, found in seven other counties – Istria 3.9%, the City of Zagreb 7.9%, Dubrovnik-Neretva 9.3%, Primorje-Gorski kotar 9.5%, Krapina-Zagorje 9.6%, Split-Dalmatia 16.3% and Zagreb 16.7%. The highest poverty risk rate was found in Virovitica-Podravina County, 47.5% <sup>(20)</sup>.

According to the Croatian Employment Bureau, Regional Office Čakovec, on 30<sup>th</sup> September 2012, 7,564 unemployed people were registered in Međimurje County, of which 1,750 (23.1%) were the unemployed below the age of 25. There were 38,578 employed people and 46,142 people of active population registered. Thus, the overall unemployment rate in Međimurje County was 16.4% - the unemployment rate of men being 14% and of women 19.3% <sup>(21)</sup>. In Međimurje County, the unemployment rate appears to be very high among the Roma national minority. According to the aforementioned research of Šlezak, Sociologija i prostor, 51 (2013), in the Roma settlement of Kuršanec, as shown by a study from 2009, the employment rate was no higher than 3.78%. Of 15 employed people, there were 14 men and only one woman <sup>(22)</sup>.

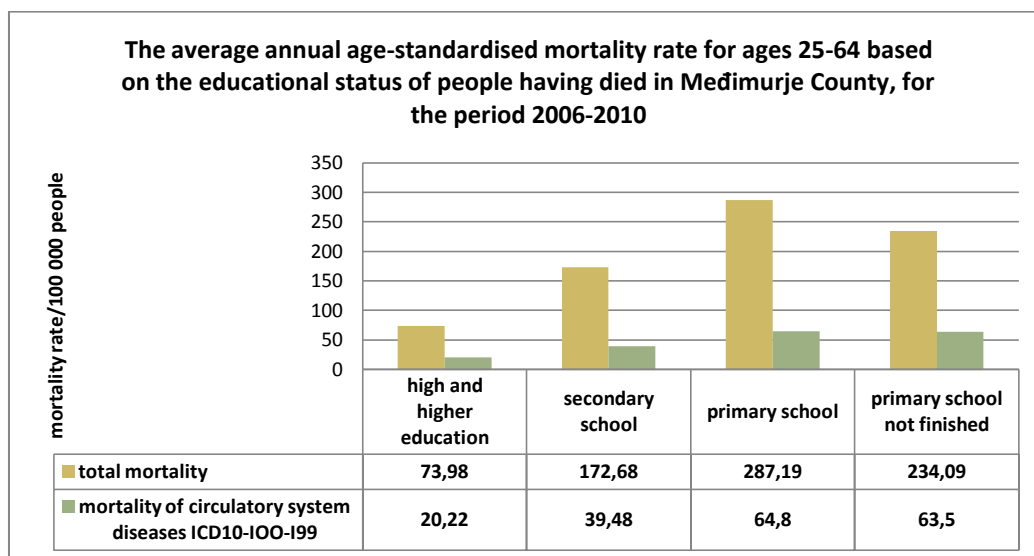
According to the National Bureau of Statistics, the unemployment rate for the year 2012 was in Croatia higher than in Međimurje County, 18.3% (16.4% for men and 20.5% for women), whereas in the total number of the unemployed, those aged 25 or less had the share of 20.5% in the total number of unemployed people <sup>(23)</sup>.



In Međimurje County an extremely unfavourable situation has been recorded in terms of education compared with the overall situation in Croatia. The share of population older than 15 who had completed at least secondary education in Međimurje County, according to the Population Census for 2011, amounted to 51.8% (63.1% for men and 41.3% for women), while the average for Croatia was 52.6% (60% for men and 45.9% for women). Apart from the above stated, the share of people with high level education was in Croatia 16.4% (16.7% for women and 16% for men), and no higher than 10.1% in Međimurje County (10.9% for women and 9.2% for men). The share of people who had finished less than eight grades of primary school in Croatia was 9.6% (13.1% for women and 6.2% for men), and in Međimurje County the percentage is as high as 15.3% (20.2% for women and 10.1 for men). An exceptionally low level of education is evident among the Roma population in Međimurje County. In the context of education, notable discrepancies are found in the county. The greatest share of highly educated people is recorded in the towns and in Šenkovec and Strahoninec municipalities, whereas the lowest share of highly educated people is found in Orehovica, Domašinec and Vratišinec (Figure 8)<sup>(9)</sup>. The research of Šlezak, *Sociologija i prostor*, 51 (2013), who analysed the structure of Roma population on the basis of the second largest Roma settlement of Kuršanec, with 960 people in 2009 (around 18% of total Roma population in Međimurje), has been of great help in this respect. According to this research, almost one fourth of people older than 15 never attended school (23.5%), 56.5% left primary school, 15.9% finished only primary school, and 4.2% of them finished secondary school. An extremely low educational status of Roma population leads to the lack of capacity to engage in any qualified work, which gives way to a high unemployment rate of Roma people<sup>(22)</sup>.



**Figure 8.** The share of people above the age of 15 having attained high or higher education in Međimurje County. Source: Croatian Bureau of Statistics, Population Census 2011; the chart was created at the Institute of Public Health, County of Međimurje<sup>(9)</sup>



**Figure 9.** The average annual age-standardised mortality rate based on the educational status of people having died in Međimurje County. Source: Croatian Bureau of Statistics, Population Census 2011, DEM 2(2006-2010); the chart was created at the Institute of Public Health, County of Međimurje.



### 3.3. Health and health inequalities

The life expectancy in Croatia, according to EUROSTAT, was for 2010 76.1 years (72.9 years for men and 79.2 years for women) <sup>(24)</sup>. According to the National Bureau of Statistics, life expectancy in Međimurje County is close to the Croatian average and was in 2008/2009 72.14 years for men and 79.8 years for women – 7.7 years longer for women than men. The longest life expectancy is on average in Adriatic Croatia, especially in the coastal region, whereas the lowest life expectancy is in Pannonian Croatia. The lowest life expectancy is estimated for men of Krapina-Zagorje County (68.8 years), and the longest of Dubrovnik-Neretva (75.23 years). For women the number is again highest in Dubrovnik-Neretva (81.96 years) and lowest in Bjelovar-Bilogora (77.5 years) <sup>(25)</sup>. The leading cause of death in Međimurje County as well as Croatia are cardiovascular diseases (with the share of 46% in the total number of deaths in Međimurje in 2010, and 49% in Croatia), malignant diseases (28.8%:26.3%), and finally injuries, poisoning and other consequences of external causes (6.1%:5.7%)<sup>(11)</sup>.

### 3.4. Health inequalities and cardiovascular diseases

In the span of 15 years, a considerable decrease in mortality due to cardiovascular diseases occurred in Međimurje County. Since 2004, they have been one of five county public health priorities. In spite of that, however, their burden remains as evident as ever, and it is essential to invest more effort to continue with the trend of reducing mortality and morbidity from cardiovascular diseases, as well as to reduce health inequalities in connection with these diseases. Cardiovascular diseases are the leading cause of death and hospitalisation in Međimurje County. The standardised mortality rate for cardiovascular diseases in Međimurje County was in 2012 lower than the Croatian average (341.2/100,000 for Međimurje County and 370.75/100,000 for Croatia), as well as the mortality for ischemic heart disease (156.34/100,000:164.21/100,000). Mortality for cerebrovascular diseases was in Međimurje County only slightly higher than the average for Croatia (108.28/100,000 for Međimurje County and 106.77/100,000 for Croatia). However, mortality rates for cardiovascular diseases are in Međimurje County higher than in 27 countries of the EU, and higher than in Slovenia and Austria <sup>(12)</sup>.

### 3.5. Geographical distribution of cardiovascular diseases in Međimurje County

To analyse the geographical distribution of cardiovascular diseases in Međimurje County, we have used the data on death causes for Međimurje County in the period 2006-2010,



registered with the Institute of Public Health County of Međimurje. In the five-year period, 2,822 people died of cardiovascular diseases (81,196 men and 1,626 women), the annual average being 564 people (239 men and 325 women). This is the share of 47.3% in the total number of deaths during that time. The share of deaths of cardiovascular diseases was considerably higher for women than men. In the five-year period altogether 5,969 people died of all causes. Among them were 3,082 men and the share of those who had died of cardiovascular diseases in the total number of deaths was 39%. In the same period altogether 2,887 women died and the share of female deaths due to cardiovascular diseases was 56%.

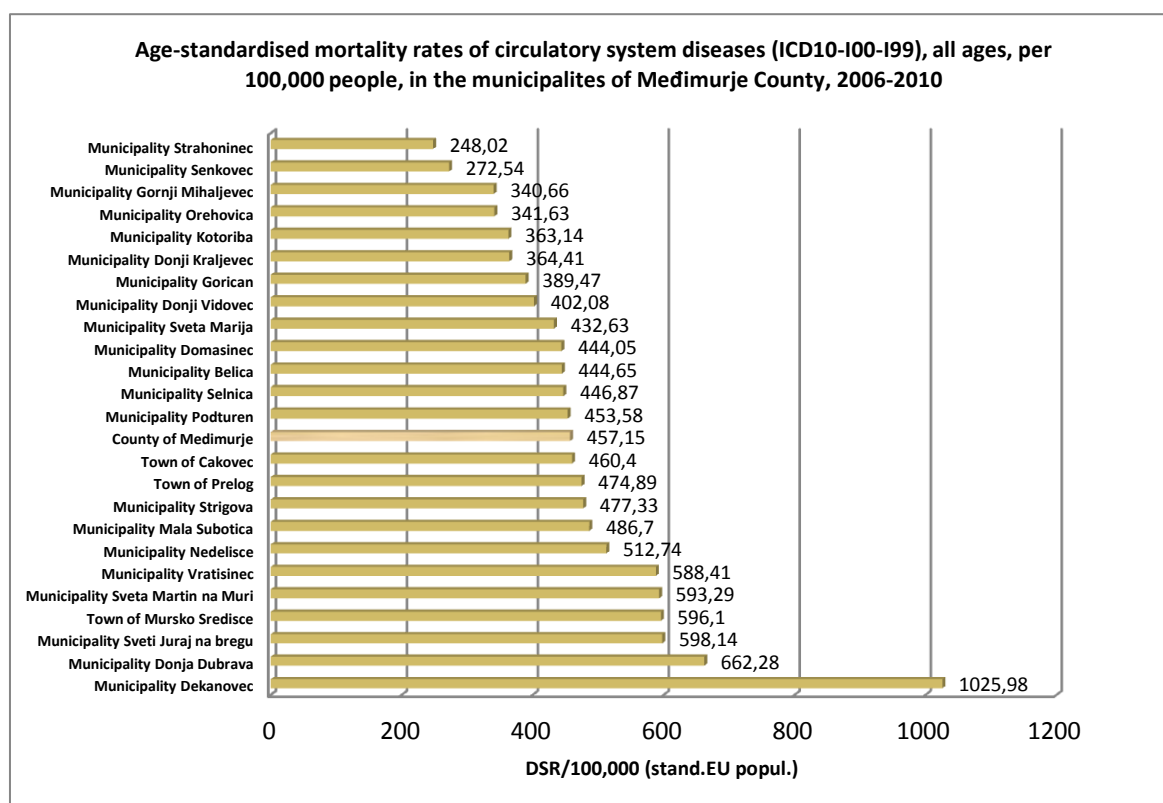
In order to compare the data for cities and municipalities of Međimurje County, annual average age-standardised rates have been calculated (per European standard population). The annual average standardised mortality rate for cardiovascular diseases for the period 2006 – 2010 in Međimurje County was for all ages 457.15/100,000; and it was higher for men (561.38/100,000) than women (389.41/100,000). For the ages 0-64 years it was 54.4/100,000; and also considerably higher for men (83.56/100,000) than women (27.11/100,000). The highest mortality rate was noted in the smallest municipality, territorially and population-wise (with only 832 citizens), the municipality of Dekanovec, where the mortality for all ages was 1025.98/100,000, and for the age group 0-64 it was 139.33/100,000. In the period 2006-2010 altogether 91 people died in the municipality, 42 of them of cardiovascular diseases, with the share of 46% in the total number of deaths.

The lowest mortality rate for all ages was noted in the municipality of Strahoninec (248.02/100,000), with 67 deaths during the five-year period, of which 21 were the result of cardiovascular diseases, with the share of 31.4%. The lowest mortality rate for the age group 0-64 was recorded in Gornji Mihaljevec (17.31/100,000 st).

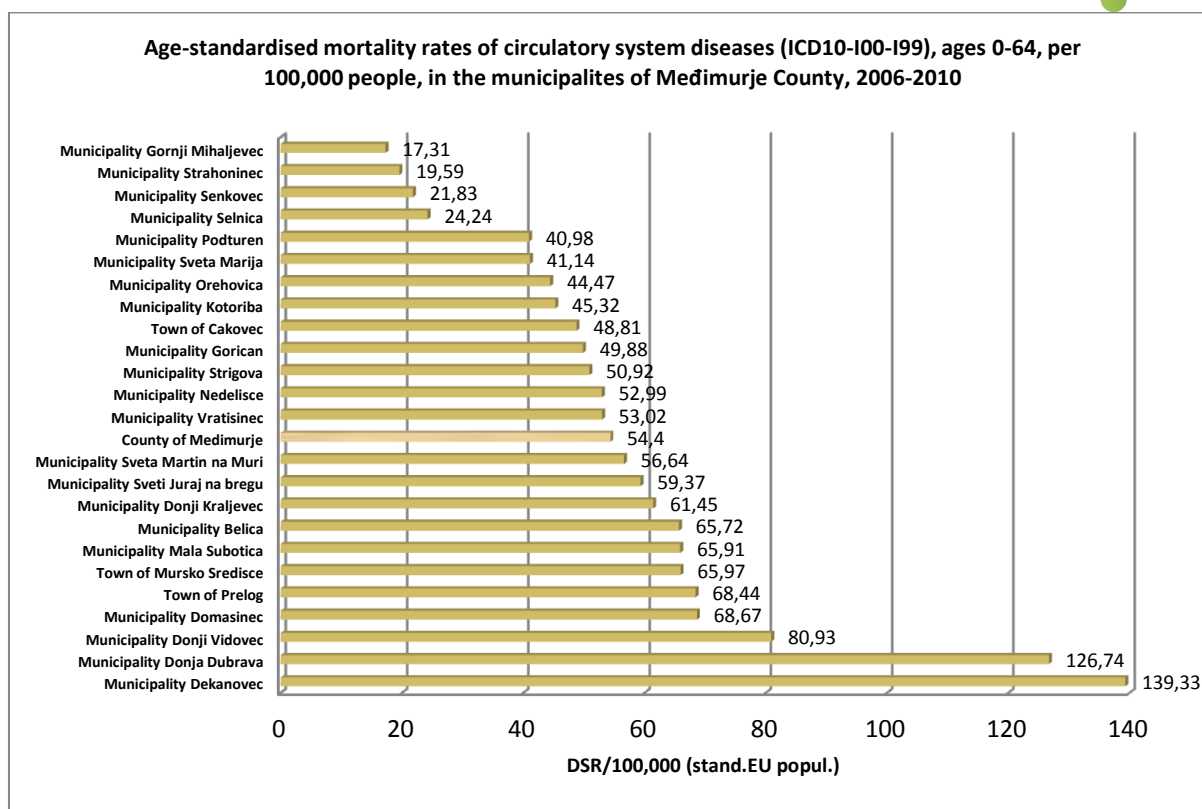
With regard to gender, for all age groups, the mortality rates for men are again highest in the municipality of Dekanovec (1,536.48/100,000), and lowest in the municipality of Strahoninec (288.82/100,000), whereas for the age group 0-64, Donja Dubrava shows the highest mortality rate for men (226.85/100,000) and Gornji Mihaljevec the lowest (32.82/100,000). Mortality rates are lower for women than men in general. The mortality of women of all age groups is again highest in the municipality of Dekanovec (904.81/100,000), and lowest in the municipality of Šenkovec (214.65/100,000). For the age group 0-64 mortality rate remains highest in Dekanovec, with 151.32/100,000, and it is lowest in Selnica (10.16/100,000). However, during that period, for the ages 0-64, in four other municipalities not one female death of cardiovascular diseases was recorded (Strahoninec, Kotoriba, Gornji Mihaljevec and Goričan).



As already mentioned, the highest mortality rates of cardiovascular diseases, total and for both genders, were found in Dekanovec. However, mortality rates (total and for both genders) are also higher than the county average in Donja Dubrava, a municipality farthest from the county centre (the City of Čakovec), followed by Nedelišće, the biggest municipality in the county, as well as in three other municipalities and a city situated in the Upper Međimurje – municipalities of Sveti Martin na Muri, Sveti Juraj na Bregu, Vratišinec and the town of Mursko Središće<sup>(26)</sup>.



**Figure 10.** The average annual age-standardised mortality rate for cardiovascular diseases, all age groups, 2006-2010, Međimurje County. Source of data: Croatian Institute of Public Health, National Bureau of Statistics; age-specific mortality rates have been calculated at the Institute of Public Health County of Međimurje on the basis of the estimated population number in Međimurje in mid 2010<sup>(26)</sup>



**Figure 11.** The average annual age-standardised mortality rate for cardiovascular diseases, ages 0-64, 2006-2010, Međimurje County. Source of data: Croatian Institute of Public Health, National Bureau of Statistics; age-specific mortality rates have been calculated at the Institute of Public Health County of Međimurje on the basis of the estimated population number in Međimurje in mid 2010<sup>(26)</sup>

### 3.6. Socio-economic and environmental factors which can influence health inequalities in connection with cardiovascular diseases in Međimurje County

**Age and gender** are extremely important personal factors that influence mortality of cardiovascular diseases, and notable differences with regard to them can be observed. In Međimurje County in 2010, 568 people died of cardiovascular diseases, of which 336 were men and 232 women. Among the total number of deaths that year from cardiovascular diseases, 12.2% (69 people) were aged 64 or less, with a considerably higher share of men dying at the age of 64 and less (53 deaths, the share of 26.1%). The share of women who died at the age of 64 or less was 4.8% (16 female deaths). Age-specific mortality rates for cardiovascular diseases grow with age and are higher for men than women of all age groups, except for ages 45-49 and above 85 years, when the rate is higher for women. A more notable mortality increase begins above the age of 50<sup>(12)</sup>. Mortality for cardiovascular diseases, but also the different data for men and women, certainly could have been influenced by gender differences in the prevalence of harmful risk factors such as dietary





habits, physical activity, smoking, alcohol consumption, the use of medical services, health literacy, education, income and beliefs and opinions of individuals.

**Lifestyle factors.** According to Croatian Health Survey 2003, the prevalence of unhealthy dietary habits was higher for men in all regions. The respondents in Međimurje County belonged to the Northern Region, where convincingly the highest burden of overweight, obesity and central obesity cases was found. Among men who belonged to the Northern Region in the same survey, the highest prevalence of high blood pressure was noted (47.06%), followed by the high prevalence of insufficient physical activity (37.7%, it was only higher in the City of Zagreb) and a very high prevalence of alcohol overconsumption (13.12% for men, it was only higher in Eastern and Adriatic regions). The highest prevalence of alcohol overconsumption was found among women in the Northern Region, 1.45%. Only the prevalence of smoking was for both genders lowest in the Northern Region (10.54% of women and 24.07% of men).

According to Croatian Health Survey 2003, the highest synthetic regional cardiovascular burden defined by incidents (heart attack, stroke), blood pressure, overweight/obesity (BMI, waist circumference) and risky behaviours (smoking, physical inactivity, high alcohol consumption, inadequate nutrition) was recorded in the Northern Region – 53.1% for men and 54.2% for women. It was highest for women of Central Region with 56.5%, and Eastern Region with 55% <sup>(27,28,29,30,31,32,33)</sup>.

Conclusions on the influence of certain health risk factors for our population can be made on the basis of the qualitative research regarding the health needs of Međimurje County, conducted as part of the programme A Healthy County, with 174 respondents from the community and a group of observers taking part, including interviews, focus groups and surveys. One of the questions in the research was: "What harms your health and your family's health?" The most common answer categories (5) for the community included stress, existential insecurity, bad dietary habits, pollution and different kinds of addiction (smoking, alcohol, drugs). In the observer group the answer categories were almost identical - stress, the state of being overworked, poor dietary habits, pollution and material insecurity <sup>(34)</sup>.

On studying the determinants pertaining to personal factors as well as income and the level of education, which could affect mortality due to cardiovascular diseases in Međimurje County in the period 2006-2010 statistically relevant differences between men and women were noted. For instance, statistically less men had been treated for the diseases from which they died – 87.8%:92.3% (OR is 0.60, and 95% CI – 0.47-0.78), the share of men not having finished primary education compared with women is considerably lower – 35.2%:55.4% (OR



is 0.44, and 95% CI – 0.37-0.51), considerably more men than women die in the hospital – 40.1 %:34.3% (OR is 1.28, and 95% CI – 1.10-1.50), and the share of men who are financially independent is notably higher than that of women of the same group– 88.9%:73.8% (OR is 2.84, and 95% CI 2.84 – 3.51) <sup>(35)</sup>.

**Occupation, income and education** are very important socio-economic determinants of health. Considering the fact that the population of Međimurje County is less educated, insufficient knowledge and awareness about the most notable risk factors for cardiovascular diseases as well as the symptoms could have affected the level of morbidity and mortality for cardiovascular diseases. What is more, Međimurje County had the lowest paid average monthly net wage compared with all other counties in 2010 <sup>(9,18)</sup>.

Prospective studies have shown that stress in general as well as the stress at work is related to increased morbidity and mortality risk for cardiovascular diseases, which is in no connection with smoking or other risk factors. In the doctoral dissertation by Šikić Vagić J., (*Psihosocijalne karakteristike kao čimbenici rizika u hospitaliziranih koronarnih bolesnika u Hrvatskoj*, the School of Medicine, University of Zagreb, Zagreb, 2010), professional stress as a possible risk factor for cardiovascular diseases is found in 12.2% of patients; 15% of men in Continental Croatia suffers from professional stress in terms of professional failure or the losing of a job, whereas in Mediterranean Croatia the percentage is 8.7%. According to the same research, the lowest incomes were reported by women respondents in Continental Croatia (19.3% of them had the income of less than 2000 HRK) <sup>(36)</sup>.

In the qualitative study of the population's health needs conducted in Međimurje County, stress is marked as a very important factor, and it is mostly caused by economic as well as social conditions. Most commonly this is reflected in the existential concern (unemployment, fear of losing a job, insufficient income, the housing problem), stress caused by various other obstacles (in civil engineering, administration, in obtaining health care), stress due to overwork, stress due to fear of death or social isolation, poor family relations, the lack of understanding for the needs of those who are ill, etc. <sup>(34)</sup>.

**Social determinants related to cultural and environmental factors.** According to a qualitative study regarding the health needs of Međimurje County, the awareness about the importance of activity for the health improvement and preservation, is still insufficient, especially in the smaller rural regions. Apart from the lack of knowledge, this is also influenced by the cultural norms; e.g. people who take walks or ride bicycles for recreation are generally perceived as not having anything better to do (or are not interested in spending their time more "usefully"), and the situation is aggravating enough for women due to overwork and family-related obligations (the inequalities pertaining to female roles



and tasks), who then lack time for physical activity (even if they show interest). The same research showed the lack of sporting and recreational facilities, halls, clubs (both places and programmes), as well as bike trails <sup>(34)</sup>. According to the research by Šikić Vagić, the more educated men and women with ischemic heart disease are statistically more physically active. Also, men tend to be notably more physically active than women <sup>(36)</sup>.

In Međimurje County, which is, because of a specific geographical position, a wine-bearing region, alcohol consumption has got a positive connotation and is socially acceptable, even expected on many occasions. The whole community contributes to this idea by promoting wine-related tourism, examples of which are the "wine roads," "new wine christening", "St Urban wine days" (*Dani vina uz Sv. Urbana*), etc. The local media marketing is quite influential here as well, especially when it comes to young people, by promoting various kinds of "parties" (e.g. vodka party, bambus party, etc.), the law that prohibits the selling of alcohol and cigarettes to those under 18 is ignored. Especially problematic is the beer and wine advertising, which is allowed by law, because both are considered to be food products and not merely alcoholic beverages (this applies to Croatia in general) <sup>(37)</sup>.

Tradition also affects the dietary habits of the Međimurje County population, even though the latest studies point to a growing trend of abandoning the traditional diet, which abounds in saturated fat of animal origin, red meat and salt-cured products and is characterised by the insufficient amount of fruit and vegetables <sup>(38)</sup>.

A number of studies conducted in Croatia have confirmed the assumption that the burden of cardiovascular diseases is more prominent in continental and rural parts of Croatia. Therefore, we investigated the situation in Međimurje County as well <sup>(39,40)</sup>. During the research of some determinants that might have influenced mortality for cardiovascular diseases (was the person treated or not for the disease that led to death, the share of people dying without having finished primary school, had the person been hospitalised when death occurred, was the person financially dependent), regardless of gender, a statistically relevant difference between people who died in municipalities and cities of Međimurje County has been observed only in the case of personal income. A considerably lower number of deaths of people who had not been financially dependent was determined in municipalities of Međimurje, as opposed to deaths in the cities of Međimurje – 77.5%:84.7% (OR is 0.62, and 95% CI – 0.51-0.76). Among the men who died of cardiovascular diseases no statistically relevant differences were found in the aforementioned research on determinants with regard to cities and municipalities. For women, differences in education were observed; in municipalities of Međimurje County there is a statistically less prominent share of women who did not finish primary school than in the cities - 53.65%;59.3% (OR is 0.79, and 95% CI – 0.65-0.97), whereas in municipalities there is a smaller share of women who are not



financially dependent compared with the share of those in the towns of Međimurje - 70%;80.6% (OR is 0.56, and 95% CI – 0.44-0.72) <sup>(35)</sup>.

The differences in mortality for cardiovascular diseases in cities and municipalities of Međimurje County could have been influenced by the differences in public transport, cultural norms and the predominant attitudes of the community on health and health-related behaviour, the community's social networks and the accessibility of health care <sup>(41)</sup>.

Public transport is not developed enough, and it is worse in Upper Međimurje than in Lower Međimurje, and public transport fares from the remote places in Međimurje could also have influenced the delay in seeking medical assistance. Given that the Emergency Medical Service was by 2012 located only in the City of Čakovec, as well as the specialist services (which will remain in current location), greater spatial distance of medical care and high public transport fares, could have had an impact on the differences in mortality of cardiovascular diseases.

### 3.7. Possible obstacles and solutions available

After the situation analysis, we started with the process of needs assessment. The needs assessment was carried out by means of a questionnaire prepared by the experts from the Dutch Institute for Health Improvement, which is based on the Dutch Framework for Health Promotion. In order to assess the needs and possible solutions, we organised several focus groups with a number of partners, introducing them briefly to the project objectives and the current situation with regard to health inequalities both at national and county level. This was followed by a discussion with the aim of assessing the strengths, weaknesses, opportunities and possibilities when it comes to reducing health inequalities associated with circulatory system diseases. In addition, all partners were asked to complete a semi-structured questionnaire with open-ended questions all partners were asked to fill out an open-ended questionnaire so that an insight into the available knowledge, time, good will, financial, human and other resources could be gained. The existing networks and their way of functioning, as well as their policies, objectives and management, were then assessed. Based on the results of the needs assessment, we would like to highlight strengths and possibilities, obstacles and challenges and the main development needs.

**Strengths and possibilities** (factors that can contribute to easier realisation of the Strategic Plan). In Međimurje County highly competent multidisciplinary teams of experts have been formed (the Team for Health and Implementation of the Health Plan for Međimurje County, whose members have finished two phases of education as part of the programme “A Healthy County”, and the Health Council together with the Council of Social Welfare, Međimurje County). These teams of experts are experienced in drafting strategic documents



addressing health, which are selected through participatory method and in agreement with the policy-makers, profession and direct beneficiaries – the community itself. In Međimurje County there is a number of different strategies and action plans (adopted on the basis of the bottom-up approach) in which health promotion and prevention as well as early detection of chronic non-communicable diseases are considered a priority, in the same way as strategies for the promotion of regional development and fight against poverty and social exclusion. In the Long-Term County Health Plan 2008-2012 (adopted as part of the programme Health – Plan for It – County Public Health Capacity Building Programme, or "A Healthy County"), coronary heart disease, cerebrovascular diseases, insufficient physical activity, smoking and overconsumption of alcohol among children and the younger population are health problems of high priority. In County Health Care Plan, adopted in 2010, health promotion and the prevention as well as control of both communicable and non-communicable chronic diseases, injuries and disabilities, and the protection of vulnerable and socially deprived groups are the development areas of great importance. In the Development Strategy of Međimurje County 2011-2013, as part of the secondary goal - To foster human resources and improve the quality of life, one of the development needs is to enhance health care in terms of prevention and strengthen the "healthy lifestyle trend." There are two more county documents important in the context of reducing health inequalities – the Social Map of Međimurje County, adopted in 2012, and the Rural Development Strategy of Međimurje County adopted in 2009. In Međimurje County a European Union project is being carried out (IPA Component IV – Human Resources Development) – "Support for the social welfare system in the process of further deinstitutionalisation of social services," under whose wing the Council for Social Welfare of Međimurje County is working on the Plans of Social Services in an expanded team. Through training as part of the Healthy Counties programme, through the creation of strategic documents addressing health in the county and other documents, and finally through the implementation of a number of projects and activities as part of the Health Plan for Međimurje County, the communication and cooperation within and between different sectors of regional and local self-governments, decision-makers, health and social sector, education, NGOs and the media have been improved. Additional effort is needed to create the network's infrastructure and to more clearly define the protocols when it comes to the functioning of and each member's contribution to the network.

Despite the availability of a number of strategies that might contribute to the reduction of health inequalities as well as a few highly competent multidisciplinary teams of experts, experience and cooperation, certain obstacles need to be overcome in the forthcoming period for the efficient application of strategies and plans <sup>(42,43,44,45,46)</sup>.



**Possible obstacles and challenges:** insufficient funding for plan implementation, the lack of awareness about the prevailing public health problems (and health inequalities) and the population's lack of interest therefor, the lack of motivation and contribution of stakeholders, the lack of experts' time where motivation exists, the lack of motivation and support of the local and regional self-governments, the lack of support at national level (whereas the local self-government has little authority and low funds), the gap between legislation and scientific achievements, poor economic situation, the lack of cooperation of all stakeholders, the risk of discontinuity because of the lack of funds or human resources, non-compliance with laws and regulations, the attitudes and insufficient motivation of people, tradition, the lack of qualified staff, insufficient motivation of professionals to work on projects due to no or little financial compensation, older age – a barrier to becoming involved in activities and the problem of health care insufficiently addressing the needs of older population, poor literacy of the Roma population, the lack of experts' understanding for the needs of individual target groups, insufficient funding for education.

**The main development needs.** It is necessary to additionally influence the level of awareness of county leaders about the importance of continuity in carrying out the aforementioned plans and strategies as much as the importance of investing in health (not only in the segment of health care) for the development of the county (it is important to think of "Health in all Policies"). It is also important that certain decisions are made in accordance with adopted plans. Apart from that, it is necessary to clearly develop the system of funding the programmes and actions of health promotion, in state and county budgets. What is more, there is an objective lack of experts who deal with health promotion. There is no estimation whatsoever as to the sufficient number of experts in the public health service nor the Institutes of Public Health. Also, field nurses within healthcare centres are focused on secondary and tertiary prevention to a greater extent than on primary prevention and health promotion, and family doctors also mostly deal with curative medicine. To this we add the fact that the general public, experts and politicians are not convinced that the methods of health promotion are effective, partly due to the lack of attention paid to the dissemination of results and programme evaluation, and partly because it takes a long time to see any results. The AIR project of EU (Addressing Inequalities Interventions in Regions) recommends that the intervention to reduce health inequalities should be shielded from rash expectations and too short political programme plans <sup>(47)</sup>. Especially prominent is the need for an interdisciplinary approach and the cooperation of the public, business and civil sectors as well as cooperation with the media (at the same time justly including all stakeholders). For the implementation of the plan it is necessary to have at our disposal a sufficient number of partners and make obligatory the cooperation of the target population for which the plan is intended, with actions being long-term. Moreover, the need for a more consistent application of existing laws and the adoption of more efficient legislation is evident as well as



the need to improve the quality of work of all state institutions. Finally, the importance of strengthening the social responsibility of business organisations in order to promote the health of their employees has also been highlighted.

In the context of economic crisis, the cutting-downs in health budgets and the ever growing health care needs, it is required that the opportunity given to Croatia (with all its counties) as the 28<sup>th</sup> member of EU be used to the fullest. This can be accomplished by using the financial resources as part of EU Structural Funds, thereby reducing health inequalities and raising capacities, or the competence of public health experts in the field of health inequality. Different EU programmes are also available in Croatia. The Community Programme 2014-2020, for example, highlights health promotion (including the reduction of health inequalities) and the creation and spreading of information and knowledge on health as its main goals.

#### 4. Aims and objectives

One of the goals of the ACTION-FOR-HEALTH project is tackling health inequalities through methods of health promotion. The situation analysis of Croatian counties has shown conspicuous differences in life expectancy, mortality rates, self-evaluation of health status, health care accessibility, socio-economic factors, lifestyle and other health determinants. Numerous inequalities have been observed among counties as well as within Međimurje County itself. Therefore, the main goal of the strategic plan is:

**TACKLING HEALTH INEQUALITIES IN MEĐIMURJE COUNTY THROUGH HEALTH PROMOTION METHODS – FIRSTLY, BY COMPARING MEĐIMURJE COUNTY WITH OTHER COUNTIES IN CROATIA; SECONDLY, BY COMPARING TOWNS AND MUNICIPALITIES WITHIN MEĐIMURJE COUNTY; AND THIRDLY, BY COMPARING DIFFERENT POPULATION GROUPS OF MEĐIMURJE COUNTY.**

There is an abundance of reasons to focus the efforts of the state, regional and local governments, public health sector and many others on the reduction of health inequalities. Firstly, health inequalities are not ethically acceptable, being unjust and possible to prevent. Apart from that, poor health often leads to poverty and social exclusion. Therefore it is essential to keep improving health of the most vulnerable population groups, who are most prone to illness. If we succeed in achieving that, public health would be far more effective, making it possible to reduce the increased trend of health service needs that are becoming harder to meet. In other words, by reducing health inequalities, we are reducing health care



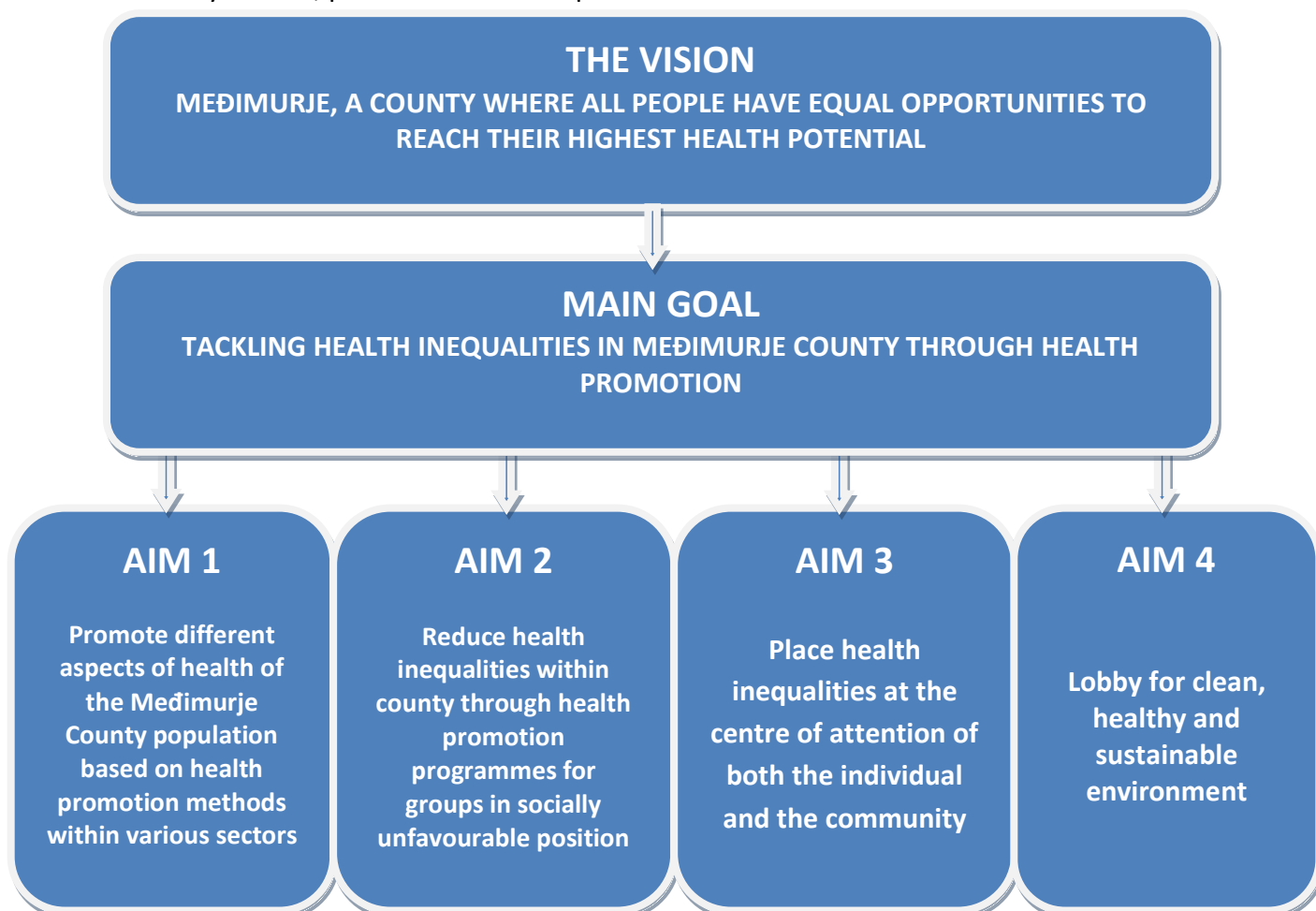


costs and increasing employment rate, which contributes to the economic progress at personal, regional and national level <sup>(48)</sup>.

Based on the analysis presented by the Commission on Social Determinants of Health, World Health Organisation, there are three basic principles for achieving health equality:

- 1) improve everyday life, i.e. the circumstances in which people are born, grow, live, work and age;
- 2) deal with the unjust distribution of power, money and resources – the driving force in accomplishing acceptable conditions for everyday life – globally, nationally and locally;
- 3) assess the magnitude of the problem and anticipate efficiency of the action, gather workforce with knowledge and skills with respect to social determinants of health, spread knowledge and raise awareness about social determinants of health <sup>(49)</sup>.

Apart from the aforementioned basic principles that are to be met, the main methods in the efforts to reduce health inequalities are the methods of health promotion that will focus on creating acceptable social health policies and a health-supporting environment. Acting as the cornerstone of the plan's actions, these methods will also focus on strengthening the community actions, personal skill development and a reorientation of health care.



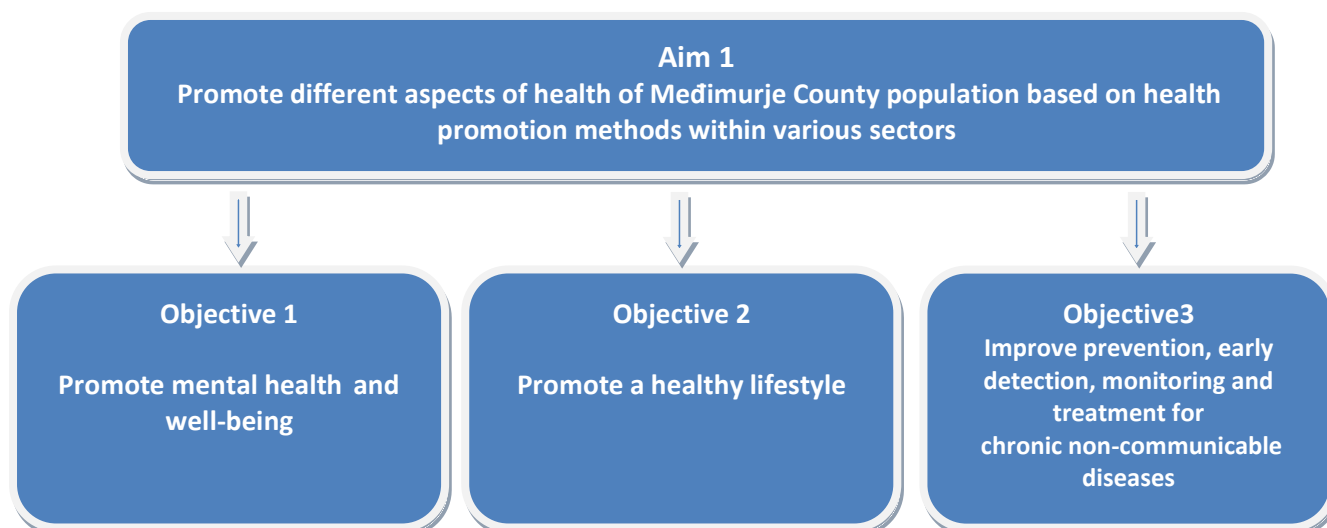




#### 4.1. Aim 1: Promote different aspects of health of the Međimurje County population based on health promotion methods within various sectors

Health promotion is "the process of enabling people to increase control over, and to improve, their health. To reach a state of complete physical, mental and social well-being, an individual or group must be able to identify and to realise aspirations, to satisfy needs, and to change or cope with the environment. Health is, therefore, seen as a resource for everyday life, not the objective of living. Health is a positive concept emphasizing social and personal resources, as well as physical capacities. Therefore, health promotion is not just the responsibility of the health sector, but goes beyond healthy lifestyles to well-being" <sup>(4)</sup>.

In reducing health inequalities between the populations of Međimurje County and the City of Zagreb or the North Adriatic, different strategies, that should rely on multisectoral cooperation, are at our disposal. According to the Ottawa Charter, interventions can focus on the **individual** (education, informing, personal skill development, risk factor assessment, early disease detection) or the entire **community** based on population approach. The latter entails community actions by creating social and material environment that supports health and facilitates healthy choices of behaviour, and by adopting and implementing public policies <sup>(4)</sup>.

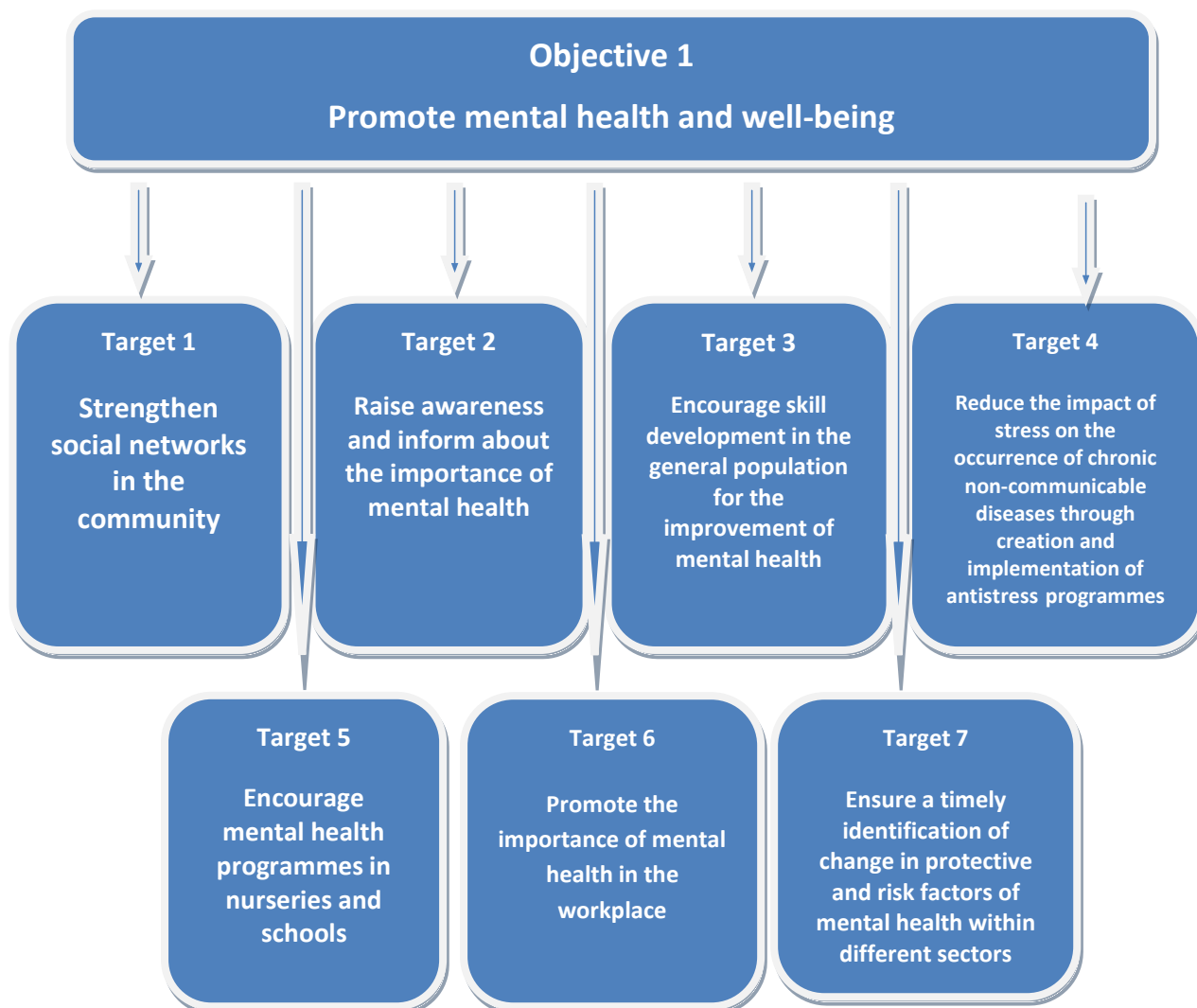




#### 4.1.1. Objective 1: Promote mental health and well-being

According to the WHO, mental health is part of our general health and not merely the absence of a mental illness. The same source states that mental health is the state of well-being in which an individual realises their potential, is able to cope with normal levels of stress, productive and able to contribute to the community. Mental health also includes a sense of satisfaction, tranquility, success and optimism. In 2008, the European Pact for Mental Health and Well-Being defined a number of priority areas of action: prevention of depression and suicide, promotion of mental health and well-being of children and adolescents, promoting mental health and well-being in workplaces, older people's mental health and well-being, and promoting social inclusion and combating stigma. The Republic of Croatia has adopted the National Mental Health Strategy for the period 2011-2016 which revolves around the treatment and rehabilitation of patients with mental illnesses, relying on the proactive approach (mental health promotion, preservation and prevention). This will serve as our guideline in this strategy <sup>(50)</sup>.

Lifestyle today presents a growing threat for our mental health. It is therefore necessary to support the protective factors through a number of activities, i.e. to adopt healthy life attitudes, skills and habits that would contribute to our mental health. The importance of proactive approach is illustrated by research results showing that 1 in 5 women and 1 in 10 men will at some point in their life suffer from depression <sup>(51)</sup>. What is more, the share of mental disorders in hospitalised patients is for Croatia quite high – 7.4% in 2010. Most common are the disorders as a consequence of alcohol consumption and schizophrenia, which were the leading diagnostic subcategory. The Situation Analysis has shown that Northern and Eastern Regions of Croatia (Croatian Health Survey, 2003) have a very high prevalence of alcohol consumption. In fact, standardised mortality rate (per 100,000 people) of diseases connected with the overconsumption of alcohol (ICD 10, the codes K70, 73, 74, F10 and T51) was in 2010 highest in the counties of Krapina-Zagorje (54.1), Koprivnica-Križevci (36.8), Bjelovar-Bilogora (25.7), Virovitica-Podravina (24.9), Međimurje (23.5) and Varaždin (21.8), with the Croatian average of 16.5 <sup>(26)</sup>.



#### 4.1.1.1. Target 1: Strengthen social networks in the community

The community is a social identity that entails a limited social and spatial mobility and represents a population whose members are consciously identified with one another. It is manifested by the formal and informal relations among its members and the existence of cohesion based on the sense of belonging. Because they live within the same space, they take part in common activities. The WHO and European project for mental health promotion have described the Ottawa Charter for Health Promotion conceptual framework for prevention strategies, which suggests community interventions by creating public health policies (taking care of health, diet, environment etc.) and a supporting environment, by strengthening activities of the community (strengthening social networks, actions of the community pertaining to drug abuse etc.) and similar (WHO, 1986) <sup>(51)</sup>.

**Activities:**

- 1) Encourage partnership development in the local community between institutions of the health and social care system, the local self-government and business units – based on the mutual investment and improvement of the quality of life in the community
- 2) Strengthen the protective factors in terms of giving support to personal growth and development, to healthy family development, and to networking, cooperation and project partnership within the community in order to achieve a healthy environment that would support one's safety, improvement of the quality of life as well as health
- 3) Participate in the development, implementation and improvement of general health care programmes for vulnerable population groups: children with disabilities and developmental risks, the elderly, victims of violence, mentally ill, the unemployed, socially excluded etc.
- 4) Take part in programmes of capacity development for providing services in the community by educating volunteers within the support network
- 5) Encourage the activity organisation processes of the community by initiating intergroup situations, new types of communication and interaction, by the encouragement of the sense of belonging to a group, making its resources available and creating a sense of shared responsibility.

**Indicators:**

- 1) Number of meetings, symposiums and conferences held for the community stakeholders with the aim of common investment in improvement of the quality of life in the community
- 2) Number of volunteers partaking in the activities of the promotion of health care for the vulnerable population groups
- 3) Number of activities that involve community members and are focused on strengthening cohesion.

**4.1.1.2. Target 2: Raise awareness and inform about the importance of mental health**

Mental health promotion is a process that helps improve the quality of life and increase personal control, so as to achieve personal responsibility for one's mental health. Under the patronage of WHO, the European Pact for Mental Health and Well-Being was adopted on a high-level conference in 2008, the aim of which was to promote the importance of mental



health in the domain of public health, productive learning and social cohesion in the EU (52,53).

**Activities:**

- 1) Inform the public (timely and in an affordable way) about the factors relevant to their lives and health by distributing clear and simple information; this should encourage community members' personal engagement and at the same time abide by the rules of efficient communication – primarily by simplifying texts and making the use of all available media and means of informing more flexible (brochures, media appearances and public hearings, television, internet, radio, newsletters, etc.)
- 2) Inform the population about the importance and relationship of mental and general health, and provide them with knowledge that would facilitate their reading, assessing and understanding of information pertaining to mental health
- 3) Given that the media are prompt and comprehensive in spreading information, it is essential to create media campaigns about the importance of mental health care and include media representatives in the multidisciplinary work of expert teams
- 4) Provide education for segmented population groups in order to raise awareness and knowledge about the importance of mental health, early detection of behavioural difficulties and changes in mental health in self and others, and actions taken in case of problem detection.

**Indicators:**

- 1) Articles published for the general public informing about healthy lifestyles
- 2) Number of media statements informing the public about the importance of health
- 3) Number of educational lectures and public hearings on the importance of mental health and the early detection of problems in mental health, organised to raise awareness and knowledge of community members.

**4.1.1.3. Target 3: Encourage skill development in the general population for the improvement of mental health**

Mental ability is reflected in all aspects of human behaviour. To be mentally functional is to use one's 'gifts' and resources, from intelligence to physical disposition, in the optimal and well-balanced way by satisfying one's personal and community needs. The body can be healthy in every aspect, genetic disposition may be unburdened and intelligence immaculate. However, a person may still behave in a completely inefficient, even harmful



way, presenting a threat for themselves or the community. Unhappiness of such a person may lead them to the verge of suicidal behaviour, even in the case of quite favourable life circumstances.

For the shaping and structuring of one's personality, its morality, strength, stability and capacity to adapt to adverse circumstances, or tenacity and skill to solve problems or change reality (not at the expense of others), it is crucial to apply measures for the improvement and preservation of one's mental health <sup>(50,52,54)</sup>.

**Activities:**

- 1) Improve community programmes of efficient free time management for all age groups, especially children, adolescents, families, the elderly, persons with disabilities, the long-term unemployed
- 2) Take part in improving the social and health-related conditions of life in the community, thus offering to its members, especially children and adolescents, the possibility of a healthy and fulfilled life, at the same time helping them develop interest in socially valuable key objectives in the process of mental health promotion
- 3) Provide psychoeducation on psychological aspects of existing problems (for example, the connection between physical pain and trauma), on anxiety and other symptoms, inform about efficient strategies for coping with stress, changing dysfunctional attitudes, overcoming fear
- 4) Develop competencies for changing the situation of the long-term unemployed threatened by social exclusion.

**Indicators:**

- 1) Reports on cooperation with the Croatian Employment Service, Regional Office Čakovec and activities for improved employability of the long-term unemployed
- 2) Number of activities and events organised in local communities for the improvement of social and health-related conditions of life
- 3) Reports on the cooperation with local community leaders and the number of meetings held to discuss the possibility of offering more community-level content for constructive and creative ways to spend free time
- 4) Number of public discussions held for the promotion of mental health and well-being.



#### 4.1.1.4. **Target 4: Reduce the impact of stress on the occurrence of chronic non-communicable diseases through creation and implementation of antistress programmes**

The social changes witnessed by the past decade have compelled modern man to acquire skills for finding meaning and achieving balance in his surroundings. Overburdened and stressed, experiencing lack of satisfaction in personal life and workplace, we are trying to cope with the quick pace imposed on us by the modern life. Negative psychological states can lead to disorders and imbalance of physical functions. Strong and persisting negative feelings that are a result of accumulated stress can with time evolve into an illness – the body's typical response. People have a hard time adapting to stressful situations so they look for other solutions <sup>(52,55)</sup>.

##### **Activities:**

- 1) Create, implement and improve stress-management interventions to achieve general effectiveness in the workplace, especially for those professions that are psychologically demanding and therefore more stress-prone (health workers, teachers, social workers, police officers, those working in shifts, etc.)
- 2) Create and organise training programmes for stress management focusing on the individual level of protection by strengthening the personal capacity for stress management. This may be done by learning social and communicational skills that facilitate integration in the working environment and increase the general satisfaction with life (of individuals and families)
- 3) Organise and conduct training on stress management for individuals experiencing work-family conflict.

##### **Indicators:**

- 1) Number of workshops for professions most prone to stress with the aim of improving strategies for stress management and the number of workshop participants
- 2) Number of lectures organised for the working population on stress-related topics and the number of lecture attendants
- 3) An overview of research results for ways of coping with stress in helping professions.

#### 4.1.1.5. **Target 5: Encourage mental health programmes in nurseries and schools**

Children are an especially vulnerable group and are therefore given special attention and care. One analysis shows that the field of children's status and rights has shown in the



Republic of Croatia considerable progress in recent years. However, some challenges remain unfaced, especially for the most vulnerable children, e.g. those without parental care, children whose parents are in prison or are for some reason unable to care for them, children whose families are living in difficult conditions, and younger children with developmental delays. Finally, experts should pay special attention to the promotion and protection of children's mental health. The aforementioned analysis shows that, in spite of Croatia's signing numerous treaties on children's rights and adopting countless national documents, "there is the obvious need for coordination, stronger implementation of measures and cooperation of the responsible institutions" <sup>(58,59,60)</sup>.

**Activities:**

- 1) Develop, implement and continuously evaluate the efficiency of interventions for improving the communicational skills of children, adolescents and families in general, making them a tool for better self-advocacy and healthier life choices
- 2) Stress the importance of creating a safe environment for children (playgrounds, nursery and school yards)
- 3) Promote and explain the importance of teaching children about self-protective behaviour, to make them feel more powerful in protecting themselves in certain situations (e.g. a stranger's offer, alcohol, drugs and tobacco, risky behaviour, games of chance, etc.)
- 4) Promote and justify the importance of child-parent relationship and affectionate behaviour for the child's mental health and adjusted behaviour; the importance of the upbringing style adopted by parents for the preservation and improvement of their child's mental health; the importance of quality parental care. In other words, it is essential to address the devastating consequences of poor parental skills and child neglect, and other parent-child topics of relevance.
- 5) Promote storytelling to children as a factor of strengthening the prosocial behaviour in children, through education in nurseries, training organised for parents, in cooperation with local libraries
- 6) Organise children's workshops for developing good personal and social skills, which can boost children's capacities for the successful affirmation of their own strengths, making them more inclined to healthy life choices
- 7) Contribute to the improvement of approach and capacities of expert services in the educational system, so as to help all participants (children, teachers and educators, parents), by assisting, developing, preventing, planning and evaluating, in the following aspects of everyday life: 1 playing, learning and teaching, 2 culture, upbringing and discipline, 3 physical, personal (cognitive and emotional) and social development, 4 a child's enrollment into nursery school





and their transition to primary school, 5 education and professional guidance, 6 social and/or financial problems.

**Indicators:**

- 1) Number of workshops and lectures in educational institutions, targeted at the improvement of children's mental health
- 2) Number of meetings of educational experts
- 3) Number of conferences, conventions and workshops promoting storytelling to children
- 4) Number of children's workshops for the improvement of their mental health
- 5) Reports from the meetings of local community representatives and health experts with regard to the improvement of health in children and adolescents.

**4.1.1.6. Target 6: Promote the importance of mental health in the workplace**

A workplace can have a strong impact on mental health, good or bad. Given that today more time is spent at work than anywhere else, it is extremely important for the workplace to make one feel productive and able to fulfill one's expectations. A stressful working environment, on the other hand, can lead to depression, anxiety and other mental disorders or states. In Croatia's continental region the situation analysis has shown a high occurrence of hospitalisations (especially of men) for the coronary heart disease due to professional stress. This type of stress is a powerful risk factor and should therefore be given special attention, especially since the qualitative analysis of health needs in Međimurje County has revealed stress as one of the most negative factors affecting the life quality of its population <sup>(53)</sup>.

**Activities:**

- 1) Conduct research on the ways of dealing with stress in helping professions so as to widen the range of effective ways of dealing with stress in the workplace
- 2) Carry out activities for the early detection of problems and a timely intervention for the workers whose mental health is endangered by working conditions
- 3) Raise awareness and educate family doctors about the early detection of mental health problems pertaining to work and working conditions, and encourage them to cooperate in the early detection when it comes to such individuals
- 4) Inform and educate employers and managers about employing people with mental health problems by providing adequate support and refraining from social labeling,



which is to offer psychosocial aid to individuals with mental health problems in adjusting to the conditions and requirements of their workplace.

**Indicators:**

- 1) Number of workshops for professions that are most prone to stress, with the aim of improving strategies for coping with stress and the number of workshop participants
- 2) Number of lectures for the working population with the aim of educating about stress-related topics and the number of lecture participants
- 3) Level of cooperation of public health representatives and family doctors
- 4) Number of conferences and meetings held to raise the awareness of managers/employers about the effects of workers' good mental health on working efficiency.

**4.1.1.7. Target 7: Ensure a timely identification of change in protective and risk factors of mental health within different sectors**

A local community displays a number of protective and risk factors, which determine the residents' quality of life and their children's development. Thus, certain aspects of the community can improve the well-being of people. Finally, their identification, use and strengthening can contribute to good mental health <sup>(53,56,60)</sup>.

*Protective factors:*

- I. The awareness of people holding key positions in the community about the importance of supporting children, adolescents and other population groups in need, and the importance of investing in the accessibility and quality of health care services.
- II. The capability of a local community to offer its members socialisation incentives (a community that instills norms and values, eg. tradition and education) and social cooperation (to widen the social support network).
- III. Feeling safe in the community: zero tolerance for criminal activities and leaving school; respecting the prohibition of selling alcohol to underaged persons (under 18); the existence of social control, messages against delinquency.
- IV. Raising awareness among people that it is everyone's responsibility to carry out and promote activities for the protection of vulnerable groups by actively contributing to the community, different associations and institutions.
- V. Creating conditions for stable families – supporting parents who are devoted to their role.



- VI. The network of services promoting mental health protection by sustaining a supporting environment and conditions in which individuals fulfill their potential and the positive context of their everyday life is emphasised.

*Risk factors:*

**NEGATIVE SOCIAL AND FAMILY ENVIRONMENT:**

- I. Marginalised families living in poor conditions, socially excluded, people outside the health care system and the unemployed
- II. Parents of poor mental health: mental patients and drug addicts
- III. High level of family stress, e.g. a difficult illness or death in the family, negative family atmosphere, separation or divorce
- IV. Irresponsible parenting: neglected or molested children
- V. Negative parent-child interaction, domestic violence and manipulation during divorce
- VI. Negative family models – parents prone to antisocial or asocial behaviour.

**NON-FAMILY ENVIRONMENT:**

- I. Interpersonal influence: belonging to groups that show deviant behaviour, social isolation (lack of close relationships), molesting and violence
- II. Cultural factors: environment prone to criminal activities, weapon and drug accessibility
- III. Belonging to a subculture with a tendency to fear, violence and bad parenting
- IV. Poverty and economic deprivation, high level of unemployment, poor accessibility of health services, lack of useful programmes for children and adolescents outside the school system, media presentment and tolerance of violence, easy access to alcohol, liberal attitudes to drug abuse and other criminal activities <sup>(53,56,60)</sup>.

**Activities:**

- 1) Identify risk factors within the community in order to remove or alleviate their influence or identify protective factors in order to strengthen them, through different programmes as a result of multisectoral cooperation
- 2) Promote and explain the role and importance of protective factors with regard to healthy and safe behaviour and the ways of implementing them in everyday life.

**Indicators:**

- 1) Level of participation of all included in the activities of health promotion (from community representatives to residents)



- 2) Number of activities intended to improve the quality of community life
- 3) Number of projects and programmes intended to improve the quality of community life
- 4) Local reports on the activities carried out in the community.

#### 4.1.2. Objective 2: Promote a healthy lifestyle

Health is the basic requirement to improve the quality of life and help the development of the society as a whole. Each individual is responsible for their own health. However, the state shares that responsibility in that it has the power to act directly or through different sectors to create conditions for a healthy lifestyle.

The most significant factors of an unhealthy lifestyle are insufficient physical activity, unhealthy diets, smoking, drug abuse and overconsumption of alcohol. It has been scientifically proven that the above listed risk factors have a great impact on the development, progression and arising complications of the leading chronic non-communicable diseases: cardiovascular diseases, diabetes, certain cancer sites, some forms of chronic lung diseases, obesity, osteoporosis and diseases of the musculoskeletal system. Moreover, insufficient physical activity and unhealthy dietary habits are associated with the development and persistence of high blood pressure, as well as high levels of cholesterol and blood sugar <sup>(61,62)</sup>.

According to the Croatian Health Survey of 2003, the highest synthetic cardiovascular burden defined by attacks (heart attack, stroke), blood pressure, overweight, abdominal obesity and risky behaviour (excessive drinking, unhealthy diets, physical inactivity, smoking) was noted for men in the Northern Region - 53.1% - to which belonged the respondents of Međimurje County. For women of the Northern Region it was even higher, 54.2% (although it was still higher for women of the Central Region – 56.5%, and Eastern Region – 55%) <sup>(33)</sup>. Therefore, the promotion of a healthy lifestyle is one of the most important targets in the process of reducing health inequalities in Međimurje County.

During needs assessment, one of the priorities highlighted (as stated by a number of partners) was the importance of providing the spatial, financial and human resources for the continuity in carrying out the project of health promotion that have already proven their efficiency as part of the programme "A Healthy County" conducted in Međimurje County. Also, the partners stressed the importance of providing financial resources from the state and local community budgets for health improvement and protection. Finally, special emphasis was placed on the importance of networking and better cooperation of different institutions for the successful health promotion.



#### 4.1.2.1. Target 1: Promote health-enhancing physical activity

For the health and personal development of all individuals, it is essential to have the opportunity to lead an active life and engage in sports and recreational activities regardless of gender, age, social and economic status, functional abilities or ethnocultural background. A number of scientific studies have confirmed that regular physical activity reduces the risk of coronary heart disease and stroke, diabetes, high blood pressure, depression, colon and breast cancers. What is more, regular physical activity is essential in maintaining adequate body weight and keeping the musculoskeletal system healthy. Apart from the numerous studies on the health benefits of physical activity, an increasing number of recent studies also point to other benefits – psychological, social, economic and ecological.

Special attention needs to be directed toward promoting physical activity from the earliest age, given that the benefits of physical activity in childhood and youth are immense and extend to adulthood. These benefits entail physical and mental health, as well as socialisation in childhood, and may guarantee good health in adulthood, extending the habit of regular physical activity acquired in childhood to adulthood.

Even though the benefits of physical activity in childhood and youth are being increasingly addressed and a lot is known about them, the prevalence of inadequate physical activity is among children and adults as high as ever. A number of studies have shown that the level of physical activity decreases with age and is lower in female population. Moreover, the tendency toward physical activity is less common in people of lower education and socio-economic status and vulnerable groups. Therefore, to reduce health inequalities, it is necessary to encourage the overall population, and not only the socially disadvantaged groups, to lead an active life. In order to achieve success, it is important to know and understand attitudes, beliefs, expectations, needs, capabilities and behaviours of certain population groups.

This area is in great need of social marketing so as to be accepted by the overall population. Once accepted, it may be modified and certain ideas, views, practices or behaviours may be abandoned. Moreover, it is important to stress that the units of local self-government, through spatial planning, construction and public utility, have a big role in health-friendly landscaping and creating conditions for the promotion of physical activity and active lifestyle.

If we care to acquire better understanding of the reasons why some people are more active than other, it is essential to understand the major determinants of physical activity that can



be divided into several categories – personal characteristics, social environment, physical environment (residential and natural environment), family influence and other types of social support.

In order to succeed in raising the number of people who are physically active, we should resort to the multi-sectoral cooperation and successful partnerships. The key sectors that should be in collaboration are: local community and non-governmental organisations, nurseries, schools and universities, health sector, working environment, transport and city planning <sup>(63,64,65)</sup>. As published in the Lancet in 2012, effective evidence-based interventions that can increase the population's level of physical activity regardless of age include, for example, the initiatives based on successful partnerships, i.e. activity coordination of the health sector in cooperation with a number of other sectors and organisations. Similarly, they include different informational approaches to the promotion of physical activity by organising campaigns at community level, mass media campaigns, campaigns for the use of staircases instead of elevators and escalators, etc. The Lancet also suggests initiatives to increase social support for physical activity in the community, neighbourhood or workplace. The level of physical activity in children and youth can be increased by comprehensive strategies for the promotion of physical activity in schools as part of physical education (PE), classroom activity, after-school sports and recreation, and active transport. Furthermore, approaches based on active policies and interventions can ensure access to facilities and services for sports and recreation, while at the same time the adjustment of infrastructure through planned construction of towns, neighbourhoods and streets, as well as active transport policy can be efficient. In order to support initiatives for the promotion of physical activity in an acceptable way, those in charge should undergo training regarding the interconnection of physical activity and health or the basics of public health and ways of cooperating with different sectors. Even though it is important to inform people about physical activity so as to offer motivation therefor, the main priority of public health sector should entail making sure that the environment is safe and supportive of healthy choices <sup>(66)</sup>.

**Activities:**

- 1) Organise educational workshops with the purpose of raising awareness and knowledge about the interconnection of physical activity, health and well-being, and improve knowledge on effective interventions in the promotion of physical activity and the importance of intersectoral cooperation (for health and educational experts, members of non-governmental organisations, mayors and prefects and other groups of interest)
- 2) Organise programmes for different population groups with the common goal of informing about the benefits of physical activity and teaching the skills for achieving regular physical activity



- 3) Lobby for landscaping that would support physical activity and active lifestyle (construction, improvement and maintenance of pedestrian paths and cycling tracks, health paths, trim trails, parks, sports and recreational halls and centres, public transport
- 4) Include representatives of children, adolescents and people with disabilities as well as their organisations in the process of needs assessment, planning, phases of construction development and improvement of buildings or surfaces to support an active lifestyle
- 5) Broaden the range of sports and recreational programmes for different age groups
- 6) ensure free or subsidised access to sports and recreational programmes and facilities for socially disadvantaged groups and elderly people through different programmes and projects
- 7) Use services of public informing for the promotion of active lifestyle of elderly people and people with disabilities so as to remove stereotypes, which appear as an obstacle to physical activity of these population groups
- 8) Organise comprehensive campaigns for the promotion of physical activity that include different sectors of society and activities for all social groups
- 9) Develop intersectoral cooperation and coordination for the successful setup of campaigns promoting physical activity
- 10) Support programmes focusing on social cohesion – encourage units of local self-government to organise different events in the community, including sports and recreational activities
- 11) Promote social and cultural norms that encourage physical activity
- 12) Encourage individuals, families and the whole community to overcome obstacles to physical activity
- 13) Lobby for more PE lessons in primary and secondary schools, as well as universities
- 14) Ensure funds and conduct research on a regular basis with regard to the level of physical activity of different population groups
- 15) Create healthy lifestyle conditions for people with developmental disabilities; adjust the existing capacities and build new ones
- 16) Strengthen the social responsibility of businesses for them to partake in promoting physical activity and health among their employees
- 17) Encourage active transport and physical activity in the workplace.

**Indicators:**

- 1) Number of educational workshops and programmes held, the level of participants' knowledge and positive reactions for having joined the programme



- 2) Number of campaigns for the promotion of physical activity carried out, number of participants, media announcements and reports, and the number of educational and promotional materials distributed
- 3) Number of research activities on the the level of physical activity of different age groups
- 4) Share of physically active population based on different age groups
- 5) Political support through projects for the promotion of physical activity – funds provided
- 6) Number of programmes for the promotion of physical activity in the workplace
- 7) number of designed, printed and distributed educational materials (handbooks, brochures, leaflets)
- 8) Number of educated staff in the field of sports and recreation
- 9) Meters of walking and cycling tracks created
- 10) Trim trails, sports halls and sports and recreation centres built.

#### 4.1.2.2. Target 2: Promote a healthy diet

In the last few decades, the county's situation with regard to nutrition has changed as a consequence of significant technological, social and economic changes that have influenced our lifestyle, especially in terms of intensity and types of physical activity, dietary habits and the structure and ways of family functioning. The contemporary way of life is also characterised by the constant lack of time, greater exposure to stress due to time pressure, increased competitiveness and availability of fast, tasty, cheap and high-calorie food, which is consumed in great amounts. All this results in the growing number of overweight and obese people. Obesity is an important risk factor when it comes to the leading causes of morbidity and mortality today – cardiovascular diseases, stroke, diabetes, high blood pressure, certain cancer sites and many other diseases, states and disorders. Adult obesity of Croatian population is in both genders associated with old age, rural environment and frequent intake of the 'hidden' fats of animal origin, and the lower education in women. The connection of obesity and old age is the strongest, and healthy behaviour in both genders is socially conditioned. The prevalence of obesity, according to the Croatian Health Survey of 2003, is largest in the Northern Region to which belonged the respondents from Međimurje County <sup>(28)</sup>. Therefore, the implementation of this plan should focus on improving our population's dietary habits so as to reduce the prevalence of obesity.

In the context of disease prevention, i.e. maintaining health by means of a healthy diet, it is important to talk about the quality of food that is consumed. Being aware of the importance of a balanced diet with plenty of fresh fruits and vegetables, and limited intake of simple





sugars and saturated fat, should go hand in hand with being aware of the origin of food that is consumed as well as its place and way of production. The best and healthiest fresh fruits and vegetables come from local organic farming, where they are grown without adding harmful chemicals, at the same time preserving nature and the balance of the local ecosystem. Organic farming ensures the production of high quality and safe food rich in nutritional value as well as in vitamins, minerals and antioxidants. Given that this way of production prohibits the use of easily soluble fertilizers, chemically synthesized plant protection products (pesticides), genetically modified organisms and products derived from these organisms and various growth regulators, there should be no residues of these substances found in food products or the consumer. Fruits and vegetables grown locally and freshly picked are delivered to the end user in the shortest time possible, which guarantees the food's freshness and quality. Also, fuel consumption in transportation is minimal, thus reducing pollution. Međimurje County is by tradition an agricultural area, abundant in small farms that grow and produce fresh fruits and vegetables in an environmentally sound manner. However, contact with end users is difficult or even denied because of the inability of small farms to penetrate the market due to unfair competition (large retail chains) that import cheap food products sold in different classes of quality, which are often as questionable as their actual nutritional value.

The United Nations have declared 2014 as the year of family farms, with the aim of calling people's attention to the importance and preservation of the system of local food supply and food sovereignty in the local communities.

To encourage people in Međimurje to produce organic food, but also consume this locally and ecologically produced food, we should introduce a certain percentage of such foods in schools, homes for the elderly, hospitals and elsewhere. Similarly, by encouraging social facilities to purchase organic and local (produced in the county) food products, we raise awareness about the importance of consuming high quality food from local farms. The economic effect of the process is an added value, given that the economic entities involved in the production and delivery of foods are guaranteed at least partial economic stability, thus ensuring the stability of the county's economy as a whole<sup>(89,90,91)</sup>.

**Activities:**

- 1) Increase accessibility of safe and healthy food for all population groups by:
  - I. monitoring the eating conditions in public places - epidemiological surveillance of hygienic and sanitary, as well as technical conditions in public (restaurants and other catering establishments) and community facilities (companies, nurseries, schools, recreation centres, student restaurants, soup kitchens, hospitals, etc.)



- II. increasing availability of healthy food in community and public facilities by educating the staff planning and preparing meals and training the management personnel
- III. lobbying local and regional governments for the improvement of community eating conditions (through higher costs of subsidising community eating)
- IV. supervision of facilities for the production and distribution of food through epidemiological surveillance of hygienic-sanitary and technical conditions in these facilities and their maintenance and improvement
- V. monitoring the implementation of measures of HACCP in objects and persons involved in the production of food and water for human consumption
- VI. lobbying local food manufacturers for the production of food with reduced amounts of salt, fats of animal origin, etc.
- VII. conditioning and, if necessary, subsidising the procurement of food from local organic farming (10-20%) in public facilities

**Indicators:**

- I. Number of epidemiological surveillance processes and the supervision of HACCP system conducted
- II. Monitoring of the registration of infectious diseases and epidemics
- III. Number of educational seminars conducted
- IV. Height of the approved grants for community eating
- V. Number of local food manufacturers
- VI. Number of local food manufacturers who produce food with reduced amounts of salt, fats, sugar, etc.
- VII. Number of local organic farmers involved in the distribution of food to public facilities
- VIII. Percentage of organic food from local farms included in the menus of public facilities.

2) Improve the dietary habits of Međimurje County residents by:

- I. promoting the importance of proper nutrition for pregnant women, infants and young children through Counseling Centre of Primary Gynecologists, family doctors, field nurses, courses for pregnant women, breastfeeding support groups, enforcement of programmes Children-Friendly Maternity Wards, etc.
- II. improving knowledge and skills for the healthy nutrition of pregnant women and parents by organising training courses and workshops – choose several key messages that need to be adopted – exclusive breastfeeding until a child is at least six months old, increase the intake of fruits and vegetables, reduce the use



- of energy-rich food and beverages (especially the food with 'empty' calories, rich in calories but poor in nutrients)
- III. improving knowledge and skills for the healthy nutrition of health professionals, particularly in primary health care, the staff of educational institutions, social workers, members of NGOs and others by organising educational seminars and practical workshops
  - IV. improving knowledge and skills of school children and university students about the principles of proper nutrition through the implementation of various projects, courses, workshops, and through the work of Counseling for Healthy Nutrition as part of the Department of School Medicine (Public Health Institute of Međimurje County)
  - V. organising media campaigns to raise awareness about the importance of proper nutrition in health promotion and disease prevention, using methods of social marketing (in connection with or regardless of the Breastfeeding Week, World Food Day, European Obesity Day, World Heart Day, World Health Day)
  - VI. promoting healthy diets and healthy lifestyles in the media and on web portals
  - VII. creating informative and educational materials on the principles of healthy nutrition for various age groups
  - VIII. ensuring continuous work of the Counseling for the Prevention of Overweight and Obesity at the Department of Public Health, Međimurje County and continuous work of educational and supportive groups focusing primarily on weight control, and health in general
  - IX. organising and conducting field analyses of body weight composition and other indicators of nutritional status of the general population, in combination with the doctor's consultations regarding healthy diets and adequate physical activity
  - X. establishing a local model of intersectoral cooperation in order to promote healthy nutrition in different sectors of society.

**Indicators:**

- I. Number of breastfeeding support groups operating in Međimurje County and the number of their members
- II. Share of children exclusively breastfed until six months of age
- III. Number of attendants of courses for pregnant women
- IV. Number of seminars and workshops held with the aim of vocational training
- V. Number of media campaigns and public health actions organised and the number of published media reports
- VI. Number of designed, printed and distributed educational materials



- VII. Number of field analyses conducted with regard to body weight composition and other indicators of nutritional status and the number of participants in field operations
- VIII. Monitoring of eating habits - for example, the share of people meeting the recommendations of proper fruit and vegetable intake and other indicators (in 2014 the European Health Survey (EHIS2) is to be conducted).

#### 4.1.2.3. Target 3: Reduce the use and harmful effects of tobacco, alcohol and other addictive substances

Smoking is considered to be the most important avoidable risk factor for a number of diseases that cause premature death. The World Health Organisation (WHO) warns that every year over 6 mil. people die from the consequences of smoking, and among them are around 600,000 second-hand smokers. Given that the developed countries show a trend of the reduction in the number of smokers, the tobacco industry is more prone to choosing adolescents as its target population, and it is therefore necessary to focus on their protection when applying different prevention activities. In this sense, extremely important is the adoption and implementation of positive legislative measures that would prohibit smoking in indoor public places, increase the price of cigarettes and prohibit cigarette distribution among adolescents. Advertising tobacco products is another issue, and we find that it is necessary to include both children and adolescents in prevention programmes as well as education related with tobacco use and its risks for health <sup>(68)</sup>.

Harmful alcohol consumption has serious consequences for the health of society – for individual and family development and thereby the development of the society as a whole. People of lower socioeconomic status experience more serious consequences of harmful alcohol consumption even in case of smaller amounts of alcohol, which is probably due to differences in the way of drinking and the quality of alcoholic drinks. According to the World Health Organisation, around 2.5 mil. people die of the consequences of alcohol consumption. The same source states that drinking is the third leading risk factor when it comes to premature death and disability, given that the harmful use of alcohol is a risk factor for more than 60 types of diseases and injuries. This problem represents a serious threat to men; it is the leading mortality risk factor for men aged 15 – 59, mostly on account of causing injuries, physical violence, cardiovascular diseases and digestive system diseases. The consequences of alcohol are especially harmful for younger age groups. For example, 9% of all deaths for ages 15 – 29 can be attributed to the harmful effects of alcohol <sup>(68,69)</sup>. In the Northern and Eastern Regions of Croatia, the situation analysis has shown a high prevalence of alcohol consumption (Croatian Health Survey, 2003). Accordingly, the standardised mortality rate (per 100,000 people) of diseases related with the overconsumption of alcohol



(ICD 10, codes K70, 73, 74, F10 and T51) in 2010 was highest in those counties. In Međimurje County the standardised mortality rate of this type of diseases was also higher than Croatian average (23.5:16.5). Today, there exist numerous evidence on the effectiveness and profitability of different interventions and policies aiming at the reduction of harmful alcohol consumption, and they will be our guidelines in this strategy. Unfortunately, efficient interventions for the reduction of health inequalities and the negative consequences of alcohol abuse among the poor are scarce.

Drug supply, which has become more diverse, has increased in Croatia in the recent years. At the same time, availability of drugs has also increased and influenced the growing trend of drug abuse, especially among adolescents. Some of the most common reasons for the abuse of drugs and other addictive substances among children and adolescents include social affirmation among peers, the pursuit of pleasure, curiosity, personal and family problems, difficult life conditions and ignorance <sup>(70)</sup>.

#### **Activities:**

- 1) Raise general awareness and inform the public about the harmful effects of the use of addictive substances through media campaigns, round tables, educational seminars, exhibitions, etc.
- 2) Increase the visibility of different county associations, organisations and initiatives that offer quality free-time activities for children, adolescents and adults
- 3) Develop a positive attitude toward a life without smoking, drinking and addictive substances, and ensure a schooling environment that would put less pressure on students and offer more educational content
- 4) Raise awareness of our population, especially children and adolescents, when it comes to positive effects of healthy lifestyles that contribute to good mental health (activities related with sports and recreation, healthy social life, volunteer work in the community, etc.), and warn on the negative effects of drug abuse
- 5) Control and monitor the application of regulations associated with the reduction of cigarette and alcohol accessibility to adolescents
- 6) Periodically conduct research on attitudes, habits and drug abuse in children and youth of Međimurje County
- 7) Conduct independently created prevention programmes: Aggressive child, Early detection of problems associated with growing-up, *Procvjetajmo*.

#### **Indicators:**

- 1) Number of lectures and conferences for the prevention of addiction
- 2) Number of children's workshops for the prevention of addiction



- 3) Number of public discussions targeted at raising awareness about the harmful effects of the use of addictive substances
- 4) Number of publications on the topic of the prevention of addiction, (independent) articles in professional and popular journals, magazines and other publications
- 5) User assessment of the work of Counseling Centre for Alcohol-Related Problems and Alcoholism
- 6) Number of new users in the programme of the resocialisation of addicts
- 7) Continuity in carrying out the programmes of prevention – Aggressive child, Early detection of problems while growing-up, *Procvjetajmo*
- 8) Published results of the research "Attitudes, habits and use in connection with addictive substances among adolescents of Međimurje County" (*"Stavovi, navike i korištenje sredstava ovisnosti kod mladih Međimurske županije"*)



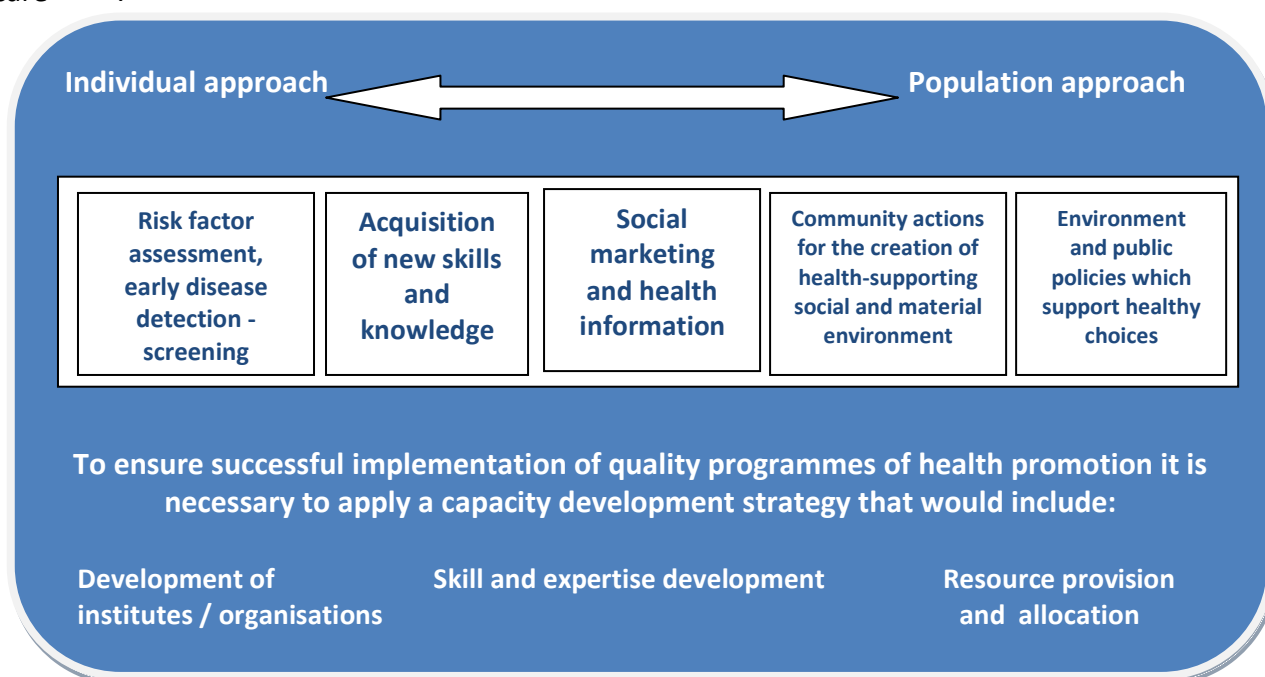
#### 4.1.3. Objective 3: Improve prevention, early detection, monitoring and treatment for chronic non-communicable diseases

Chronic non-communicable diseases are the leading cause of death in global terms, with 36 millions deaths in 2008. The most fatal are cardiovascular diseases, malignant diseases, diabetes and chronic lung diseases, and one fourth of deaths occurs in people under 60 <sup>(61)</sup>. The leading causes of death in Međimurje County are also the chronic non-communicable diseases, whose share in the total mortality is rising, while at the same time the share of deaths for people under 60 is decreasing. In 1995 the share of people who died of chronic non-communicable diseases in Međimurje County was 83%, of which 16% were below the age of 60. Fifteen years later, in 2010, chronic non-communicable diseases were the cause of death for as many as 94% of people, whereas the share of people dying before the age of 60 was reduced to 12.7% <sup>(71)</sup>. According to the situation analysis conducted as part of this project, the leading causes of death in both Međimurje County and Croatia were in 2010 the cardiovascular diseases (with the share of 46% in the total number of deaths in Međimurje and 49% in Croatia), malignant diseases (28.8%:26.3%), and injuries, poisoning and other consequences of external causes (6.1%:5.7%). The standardised mortality rate for cardiovascular diseases per 100,000 people was in the same year in Međimurje somewhat lower than Croatian average (341.2:370.88), for malignant diseases somewhat higher (225.09:210.9) and for injuries, poisoning and other consequences of external causes it was slightly lower in Međimurje compared with Croatia (52.54:52.67). Number of people dying of diabetes is almost three times as high than 15 years ago in Međimurje (18 deaths in 1995 and 50 in 2010). In 2010, the standardised mortality rate in Međimurje County (28.93/100,000 people) was considerably higher than Croatian average (20.22/100,000 people) and was among highest of all counties (only in the County of Vukovar-Srijem was it higher with 33.39/100,000 people). In the same year, mortality of chronic lung disease was in Međimurje County considerably lower than Croatian average (16.49/100,000 : 21.07/100,000) and among lowest of all counties (as many as 15 counties showed higher mortality rates) <sup>(26)</sup>.

Given that cardiovascular diseases are the leading cause of death in Međimurje County, we would like to address the causes of health inequalities with regard to them. Even though they usually appear in middle age, they are diseases with a long period of incubation. Thus the socio-economic determinants of health can have life-long effect on cardiovascular health. Unfavourable life conditions in childhood as well as parents' belonging to a certain social class, strongly affect cardiovascular health. Smoking, insufficient physical activity, unhealthy diets, high blood pressure, obesity, high cholesterol levels and diabetes increase the risk of cardiovascular diseases in middle age. The prevalence of these factors is higher among people of lower social status. In old age the accessibility of health care, family support and other types of social support, as well as a sense of control over one's life and health have a strong



impact on cardiovascular health. The impact of the aforementioned health determinants is also very different with regard to socio-economic factors. The health outcomes in case of cardiovascular diseases are also much worse in people of lower socio-economic status, which needs to be taken into consideration when planning measures for the reduction of health inequalities <sup>(68)</sup>. Health promotion, therefore, asks for a life-long approach, i.e. a comprehensive prevention strategy that advocates the implementing of measures of health promotion at the same time at population level and through active approach when it comes to groups and individuals who are healthy, or at risk of becoming ill / already ill, in order to prevent any complications and ensure a longer life of better quality. It is equally important to ensure availability and maximum management of patients by effective treatment and health care <sup>(72,73)</sup>.



**Figure 12.** Intereventions of health promotion and strategies of capacity development. Based on source: Working in Health Promoting Ways. A strategic framework for DHHS 2009.-2012., Tasmanian Government, 2010.

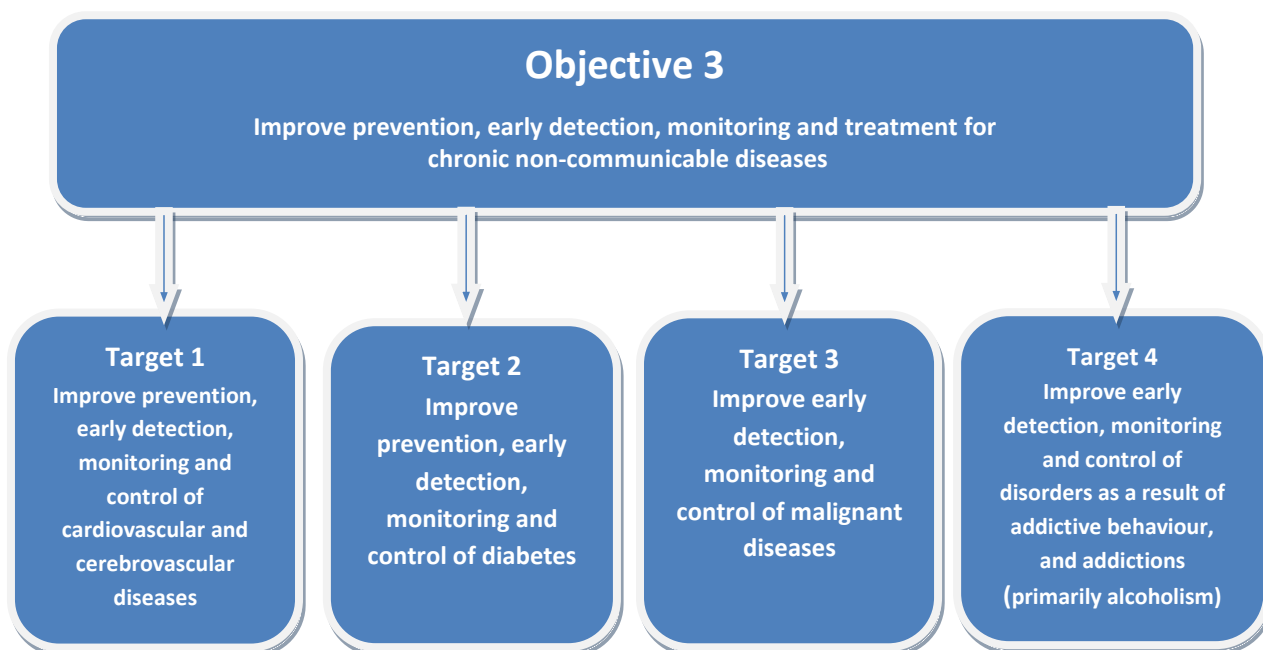
Through different activities as part of this objective there will be an attempt to prevent or delay occurrences, causes, complications or relapse of chronic non-communicable diseases and improve the patients' quality of life. We will be focusing on the leading causes of death – cardiovascular and cerebrovascular diseases, malignant diseases, injuries, poisoning and other consequences of external causes and diabetes. Over 80% cases of cardiovascular and cerebrovascular diseases and diabetes type 2, and over 30% cases of malignant diseases are possible to prevent by eliminating the key risk factors – smoking, unhealthy diet, insufficient physical activity and harmful alcohol consumption, while additional reduction is possible to achieve by methods of early detection, timely treatment and successful rehabilitation and resocialisation.





We will be focusing on the leading causes of death – cardiovascular and cerebrovascular diseases, malignant diseases, injuries, poisoning and other external causes of death, as well as diabetes. Over 80% of cardiovascular and cerebrovascular diseases, together with diabetes type II, and over 30% of malignant diseases are possible to prevent by eliminating the main risk factors – smoking, inadequate diet, insufficient physical activity and the harmful alcohol consumption. Additionally, they can be prevented by applying methods of early detection, timely treatment as well as successful rehabilitation and resocialisation.

Through measures of healthy lifestyle promotion directed at the whole population through lifelong approach (and which have been addressed as part of other objectives), there is an attempt to reduce the risk of the healthy population turning ill (primary prevention). Measures of secondary prevention and early detection of illnesses are an attempt to identify risks for becoming ill and support the population in changing its behaviour and in better disease control. In other words, it is an attempt to detect a disease in its early phases and thereby prevent progression and hospitalisation. With persons who have already been diagnosed with a disease, early and adequate treatment is an attempt to postpone the occurrence of complications and relapse. People are also encouraged to change behaviour and to be in better control of diseases, by strengthening the community ties and offering mutual assistance (disease control and tertiary prevention) <sup>(61,74)</sup>.





#### 4.1.3.1. Target 1: Improve prevention, early detection, monitoring and control of cardiovascular and cerebrovascular diseases

Activities within this target will be carried out at county level, but primarily in towns and municipalities with the highest noted mortality rates for cardiovascular diseases – in the municipalities of Dekanovec, Donja Dubrava, Nedelišće, Sveti Martin na Muri, Sveti Juraj na Bregu, Vratišinec and the town of Mursko Središće.

##### **Activities:**

- 1) Lobby for the implementation of a programme for systematic prevention of cardiovascular diseases in family medicine
- 2) Lobby at national, regional and local levels for balanced investment, i.e. fair allocation of resources in preventive and curative health care
- 3) Organise several-week, weekly or monthly campaigns for raising awareness of the public on the importance of prevention, early detection and timely treatment of cardiovascular diseases
- 4) Design, organise and conduct programmes for informing and educating the population about risk factors for cardiovascular diseases and development of personal skills to encourage the necessary change of behaviour
- 5) Conduct public health actions for the early detection of risk factors, i.e. states that increase the risk of cardiovascular diseases (blood glucose level, cholesterol level, triglycerides level, blood pressure, body mass index, waist circumference, waist-to-hip ratio, smoking, alcohol consumption, family and personal history)
- 6) Educate population about signs of heart attack and stroke, as well as the importance of early calling of emergency medical services for percutaneous coronary intervention and thrombolytic therapy in earliest possible phase (in case of indication)
- 7) Keep ensuring (through lobbying for continuous financial and human resources) for the unobstructed implementation of the project of care for acute heart attack patients through the network of primary percutaneous coronary intervention
- 8) Organise and carry out workshops for acquiring skills and knowledge in the field of reanimation with the use of automatic external defibrillator – as part of the programme for public access defibrillation "RESTART A HEART – RESTART A LIFE" ("POKRENI SRCE – SPASI ŽIVOT")
- 9) Design, print, publish and distribute informative and educational materials for prevention, early detection, treatment, rehabilitation and resocialisation of patients
- 10) Modernise the equipment for acute treatment of cardiovascular diseases



- 11) Form a counseling clinic, as part of the secondary prevention programme for cardiovascular disease patients that would be open once a week at Čakovec County Hospital
- 12) Lobby for the regionalisation of invasive cardiology development in Međimurje that would cover three counties - Varaždin, Koprivnica-Križevci and Međimurje
- 13) Form a team of experts – all interested persons who would come together in an attempt of a more successful cooperation, information dissemination, planning, conducting and evaluation of regular activities, i.e. activities as part of special programmes and projects for prevention, early detection, monitoring and control of cardiovascular and cerebrovascular diseases
- 14) Reaffirm the work of associations of cardiovascular disease patients for better control of the disease.

**Indicators:**

- 1) Increased resource allocation for preventive health care
- 2) Systematic prevention of cardiovascular diseases is carried out as part of family medicine programmes
- 3) Number of media campaigns conducted
- 4) Number of designed and implemented programmes to inform and educate the population about the risk factors and the number of participants
- 5) Number of carried out public health actions of early risk factor detection
- 6) Improved knowledge of the population about the signs of cardiac arrest and stroke, reduced time from the onset of symptoms to the arrival of emergency medical service
- 7) The project of emergency PCI is being carried out
- 8) Number of workshops and their participants – the project "RESTART A HEART – RESTART A LIFE"
- 9) Designed, printed and distributed educational materials and their number
- 10) A founded Medical counseling clinic for cardiovascular disease patients as part of Čakovec County Hospital, open once a week
- 11) Methods of invasive cardiology made more available
- 12) A formed group of experts working on the improvement of prevention, early detection, monitoring and control of cardiovascular and cerebrovascular diseases
- 13) Associations of cardiovascular disease patients having been formed



#### 4.1.3.2. Target 2: Improve prevention, early detection, monitoring and control of diabetes

##### **Activities:**

- 1) Raise awareness and knowledge of the general public about diabetes risk factors and motivate them to change behaviour – through media campaigns, public health actions, workshops, lectures
- 2) Lobby primary health care doctors for a national health care programme of diabetes patients, and in this way help the early detection and better control of the disease, as well as prevent any complications and the enhancement of patients' quality of life
- 3) Carry out field actions of early detection of diabetes by carrying out public health actions
- 4) Stress the importance of early detection of diabetes in pregnant women (especially in those at high risk)
- 5) Prepare professional material for printing and other media - production and distribution of educational materials on websites, TV, through radio broadcasts, etc.
- 6) Encourage new patients to join the Association of Diabetics
- 7) educate members of diabetes associations for secondary and tertiary prevention
- 8) Lobby for units of local self-government to support the work of diabetes associations and the forming of new ones where needed.

##### **Indicators:**

- 1) Number of media campaigns, public health actions, workshops, lectures and participants
- 2) Number of field actions of early diabetes detection carried out, number of people included in the early detection programme
- 3) Increase in the number of preventive check-ups in primary health care
- 4) Increase in the number of new patients who regulate diabetes by adopting healthy habits
- 5) Increase in the number of new diabetes patients with no complications
- 6) Number of designed and disseminated printed and other materials in the media
- 7) Regular and precise filling in of the registry of persons with diabetes (CroDiab).



#### 4.1.3.3. Target 3: Improve early detection, monitoring and control of malignant diseases

##### Activities:

- 1) Raise awareness and knowledge of the general public about malignant disease risk factors and motivate them to change behaviour – through media campaigns, public health actions, workshops, lectures
- 2) Organise public health actions, lectures, workshops and media campaigns for the promotion of national programmes for the early detection of breast cancer, colon cancer and cervical cancer in order to enhance knowledge, perceptions, self-help skills and encourage people to change their behaviour accordingly (especially in the context of programme response)
- 3) Conduct research on the reasons for poor response to national programmes of early cancer detection (especially colon cancer)
- 4) Support the work of the County Cancer League Čakovec and associated clubs of cancer patients for the better rehabilitation and resocialisation of cancer patients
- 5) Promote the importance of a healthy lifestyle in secondary and tertiary cancer prevention – support programmes of psychosocial support, sports and recreation programmes, workshops on healthy eating, etc.
- 6) Lobby for the active inclusion of primary health care in the promotion and implementation of national programmes for the early detection of cancer
- 7) Organise educational workshops for non-governmental organisations (pensioners', women's, sports and recreational associations, etc.) to improve response to programmes for early cancer detection
- 8) Organise lectures, seminars and other forms of education for medical secondary school and university students, as well as for health experts as part of professional training.

##### Indicators:

- 1) Number of media campaigns, public health actions, workshops, lectures, as well as the number of participants and the positive reactions of users
- 2) Number of promotional and educational materials disseminated
- 3) Activity of the County Cancer League, Čakovec, and its clubs
- 4) A survey carried out in order to ascertain the reasons for not taking part in the programme of early detection of the colon cancer
- 5) Response to programmes for early cancer detection and share of FOB (fecal occult blood) tests carried out
- 6) Share of cancers detected in early stages.



4.1.3.4. **Target 4: Improve early detection, monitoring and control of disorders as a result of addictive behaviour, and addictions (primarily alcoholism)**

**Activities:**

- 1) Early detection of persons at risk of developing addictive behaviour through collaboration of school and medical staff
- 2) Provide accessible forms of addiction treatments
- 3) Enhance cooperation with non-institutional forms of treatment
- 4) Strengthen the possibility of early detection, treatment and rehabilitation in case of mental disorders and disorders as a result of the use of addictive substances for the whole population of our county and in this way reduce the number of such disorders
- 5) Early detection, monitoring and registration of experimentors and addicts, individual and family counseling, group therapy
- 6) Test urine for the presence of drugs in groups or individuals showing risky behavior and drug addicts in the process of quitting
- 7) Implement programmes for the resocialisation of addicts
- 8) Continue with the work of the Counseling centre for alcohol-related problems and alcoholism, thereby offering professional and logistic support to clubs of treated alcoholics as a proven effective method of non-institutional treatment and rehabilitation of alcoholics
- 9) Through the work of the Counseling Centre for Alcohol-Related Problems and Alcoholism, formalise and enhance the cooperation of all subjects involved in treating and caring for people having problems with excessive drinking (Centre for Social Welfare, hospital, Institute of Public Health, police, primary health care – field nurses and family doctors).

**Indicators:**

- 1) A well-established cooperation between the school and the health care system for persons at risk for developing addictive behaviour
- 2) Number of public discussions held for adults aimed at raising awareness about the harmful effects of addictive substances and the opportunities for early detection, treatment and rehabilitation, and the number of participants
- 3) Evaluation of counseling for alcohol-related problems and alcoholism by the users
- 4) Number of new users in addict resocialisation programme
- 5) Number of people who attend at clubs of treated alcoholics and good cooperation established between the clubs and other institutions
- 6) Better cooperation established between the subjects involved in treating and caring for people having problems with excessive drinking.

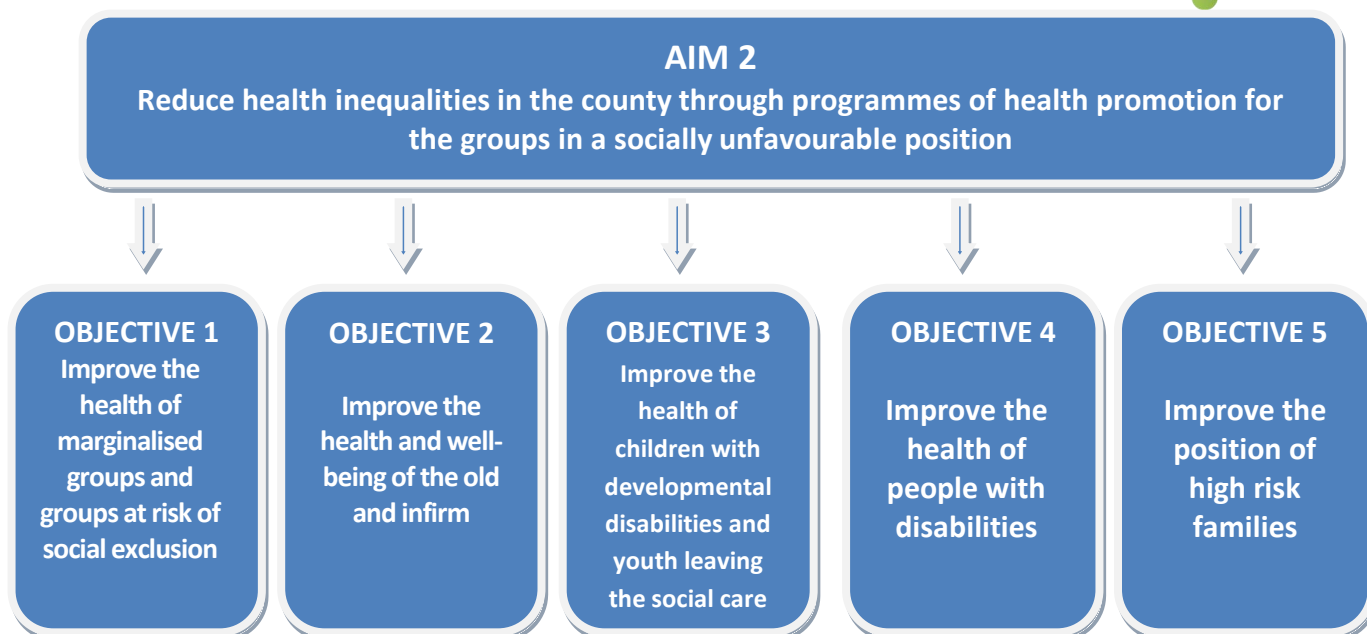


#### 4.2. Aim 2: Reduce health inequalities in the county through programmes of health promotion for the groups in a socially unfavourable position

Socially disadvantaged position is associated with socio-economic characteristics such as income, employment, education and socio-economic status; socio-cultural features such as gender, ethnic origin and background, religion / religious affiliation, culture, migration status and social capital; socio-geographic features such as the life in a deprived environment; age. Groups in a socially disadvantaged position can actually be affected by more than just one group of features <sup>(75)</sup>.

Since cardiovascular diseases are the leading cause of death and hospitalisations in Međimurje County, we will draw special attention to the connection between cardiovascular diseases and socially disadvantaged position. Social status affects behavioural risk factors, the development of cardiovascular diseases and their outcomes. Other psychosocial and material factors are also important when it comes to the problem of cardiovascular diseases, for example: lack of social support, inability to cope with stress in the workplace, reduced seeking of medical assistance, poor access to health care and high comorbidity. For this reason it is necessary to achieve balance of strategies and interventions, focusing on total population on the one hand and on population groups in the socially disadvantaged position on the other <sup>(68)</sup>.

As part of the EU project (IPA IV) "Support for the social welfare system in the process of further deinstitutionalisation of social services" and the chapter on Assessment and Planning of Social Services, which has been implemented in Međimurje County since April this year, the Council for Social Welfare of Međimurje County in extended membership has reached a consensus on the definition of five groups that are in a socially disadvantaged position in Međimurje County. In this segment of the Strategic Plan for Tackling Health Inequalities we will try to combine the situation analysis and needs assessment from the aforementioned IPA and the ACTION-FOR-HEALTH project.



#### 4.2.1. Objective 1: Improve the health of marginalised groups and groups at risk of social exclusion

Even though the notion of social exclusion is becoming commonplace among experts as well as the general public, it remains theoretically unsubstantiated and empirically unproven. Certain countries have their own definitions of social exclusion. In 2001, in an attempt to transform the concept of social exclusion into a measurable tool, the EU adopted a set of indicators to monitor social exclusion, i.e. 18 statistical indicators covering four aspects of social exclusion: financial poverty (income), employment (labour market), health and education. The risk of marginalisation and poverty is in Croatia connected with exclusion from the labour market. In other words, employment is not only the most significant determinant of position in the society, but is also very important for one's income, social stability and health, finally providing a sense of meaning to one's life and making one an active member of the society (76).

In December 2012, the Croatian Employment Service, Regional Office Čakovec, recorded 8,040 unemployed people, as part of the EU project (IPA IV) "Support for the social welfare system in the process of further deinstitutionalisation of social services," conducted in Međimurje. If we carefully observe the situation in Međimurje County, we will find that it is quite unfavourable, especially in terms of the disparity of supply and demand in the labour market, as well as the indicators based on gender, age, level of education, waiting time and other limiting factors connected with the possibilities of employment (77). By the end of





2012, the situation with the unemployed who had been registered, as based on negative circumstances in the labour market, was as follows: the share of women was 52.3% (4,204) and the share of people with lower educational levels or deficits (no school or only primary school) was 2,760 or 34.3%. Furthermore, there were 1,831 or 22.8% young people under 24 and similarly 1,985 or 24.7% of people above 50 registered as unemployed. The share of people that were registered as long-term unemployed (more than 12 months) was 2,291 or 36.5%, and of people having no working experience 1,682 or 20.9%. When it comes to people with disabilities, the share was 177 or 2.2%, and of people with reduced employability 1,085 or 13.5%. The situation for the members of Roma community was only estimated at 1,100 or 14.0%, and finally, the share of war veterans was 389 or 4.8% (77).

Unemployment is often based on the merging of a number of factors of reduced employment (e.g. education deficit, disability, old age, long-term unemployment, etc.), and it can actually be estimated that a significant number of unemployed people recorded can be considered difficult to employ or marginalised in the labour market i.e. socially excluded, which is estimated at more than 4,000 unemployed, with the share of 50% in the total number of the unemployed.

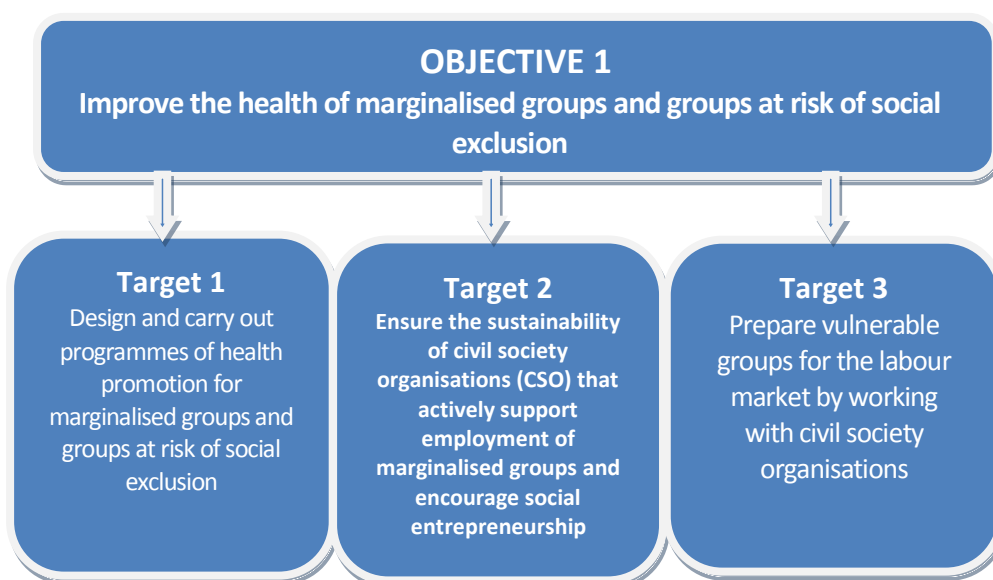
Long-term unemployment has special impact on health. Meta-analyses in a number of studies have shown that the long-term unemployed people are at risk of mental illness and anxiety disorders that is twice as high compared with the employed. Total mortality is 60% higher for the unemployed than the overall population. Additionally, alcohol can both lead to loss of a job on the one hand or be its consequence on the other. Apart from that, unemployment increases the risk of heart attack and stroke, whereas malignant diseases often lead to loss of a job. All the facts point to the vicious circle of unemployment and illness which can only be broken by a combination of different interventions – health care accessibility, social intervention and measures to promote health for the unemployed (78).

People without the primary education are at highest risk of social exclusion. Given that Međimurje County, as based on Population Census of 2011, showed a considerably higher share of people above 15 not having finished primary education (15.3%) compared with the whole country (9.6%), it is important to place special emphasis on regular education and lifelong learning. According to the Department of School Medicine, Institute of Public Health County of Međimurje, of 1,458 children who enrolled in the first grade of primary school in 2004, 195 children (13.37%) never finished primary school. In most cases they are children of the Romani population. The same source states that 4.5% of secondary vocational school students (3-year programmes) and 1.24% of secondary school students attending 4-year programmes did not finish secondary education. Therefore it is essential to persist in finding



cause for leaving primary and secondary school, so that guidelines and an action plan to tackle the problem might be created (26) .

Croatia and Međimurje County take special notice of education when it comes to socially disadvantaged groups. In Zagreb, on 21st August 2013 the Ministry of Science, Education and Sport signed an EU Grant as part of IPA IV tender titled "The integration of disadvantaged groups into the regular education system", which meant 984,363 EUR of financial aid to Međimurje County. The main objective of the grant is to promote equal opportunities in education accessibility for socially disadvantaged groups. This is to fund implementation of the project that will contribute to the inclusion of disadvantaged youth in the educational system. The funds were granted to Međimurje County, Association of the Blind and Visually Impaired of Međimurje County, Primary School of Mursko Središće, Nursery School of Čakovec, Primary School of Orehovica and Primary School of Podturen. Apart from the mentioned funds, additional funds will be granted to other institutions and associations from Međimurje who are partners of beneficiaries from other counties: Association of Educators "Krijesnica" and the Primary School of Tomaš Goričanec Mala Subotica.





#### 4.2.1.1. Target 1: Design and carry out programmes of health promotion for marginalised groups and groups at risk of social exclusion

##### **Activities:**

- 1) Improve support programmes for the long-term unemployed to arrange free time activities in the community
- 2) Create and organise stress education programmes focusing on the individual level of protection by strengthening personal capacity to cope with stress, overcome stress in different situations (e.g. unemployment) and manage stress by adopting social and communicational skills that facilitate the integration of individuals in the future working environment, as well as the skills that increase the quality of and overall satisfaction with life
- 3) Identify and analyse the reasons for abandoning primary and secondary education – it is necessary to come up with guidelines and an action plan to reduce the problem
- 4) Offer psychological support to the long-term unemployed
- 5) Develop and carry out several-week programmes of healthy lifestyle promotion for marginalised groups and groups at risk of social exclusion
- 6) Develop and conduct a survey on the lifestyle of the Roma community and encourage its members in participatory assessment of their health needs
- 7) Develop health promotion programmes for the Roma community, respecting their culture and traditions
- 8) Work on further improvement of the partnership with the Roma community in order to increase their participation in health promotion programmes, and to encourage them to have better control over their health
- 9) Raise the level of health literacy of marginalised groups and groups at risk of social exclusion.

##### **Indicators:**

- 1) Number of implemented programmes for health promotion, number of participants and their reactions
- 2) A conducted study on the reasons for leaving the primary and secondary education,
- 3) A conducted study on the lifestyle of the Roma community,
- 4) Improved partnership with the Roma community,
- 5) Improved health literacy of people at risk of social exclusion.



**4.2.1.2. Target 2: Ensure the sustainability of civil society organisations (CSO) that actively support employment of marginalised groups and encourage social entrepreneurship**

**Activities:**

- 1) Support civil initiatives that increase integration and networking of vulnerable groups
- 2) Organise radio and TV programmes on the phenomenon of social exclusion with the aim of raising public awareness and encouraging social solidarity and philanthropy
- 3) Design community programmes through cooperation with civil society organisations that would include vulnerable groups, so as to improve their capacity to cope with unfavourable everyday life and enhance their skills of practical self-help.

**Indicators:**

- 1) Number of reports in the media, on TV and the radio
- 2) Number of civilian initiatives increasing the level of inclusion and networking of vulnerable groups
- 3) Number of designed and conducted community programmes, number of participants and their reactions.

**4.2.1.3. Target 3: Prepare vulnerable groups for the labour market by working with civil society organisations**

**Activities:**

- 1) Implement programmes and projects for the improvement of competencies for better employment of the long-term unemployed at risk of social exclusion
- 2) Create and subsidise programmes of additional educational activities for the children of socially excluded families
- 3) Systematically encourage and invest more into lifelong learning.

**Indicators:**

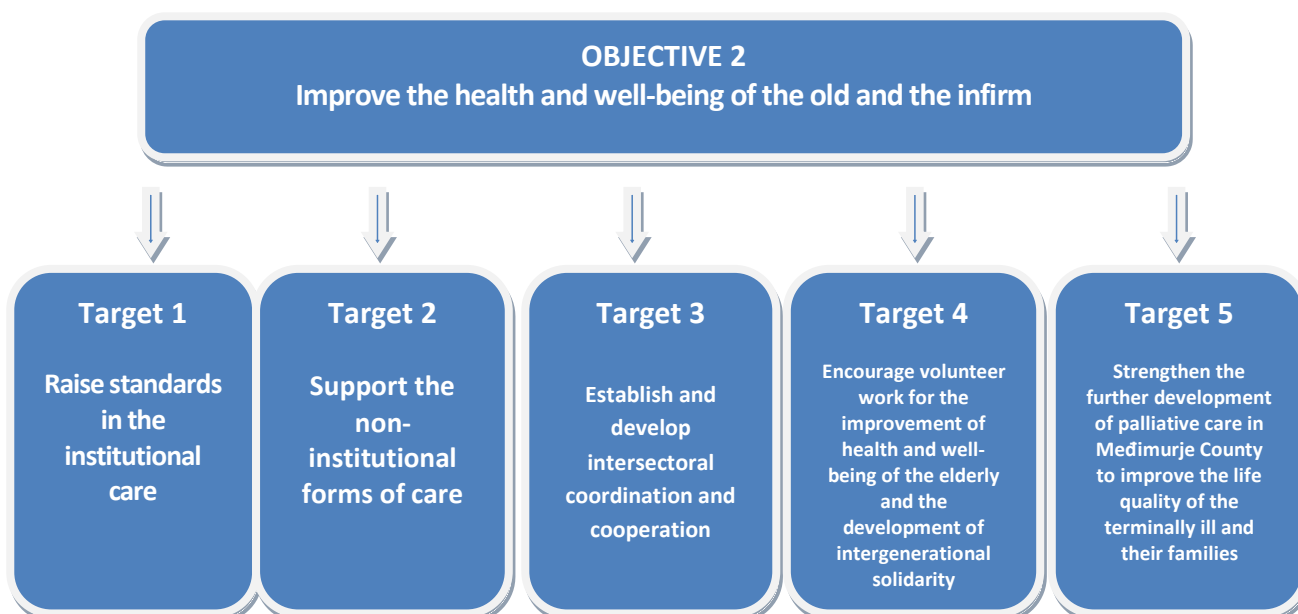
- 1) Number of programmes and projects implemented with the purpose of competency development for improved employment
- 2) Number of subsidised programmes of educational activities for the children of socially excluded families
- 3) Number of programmes and people having finished courses or programmes of lifelong learning.



#### 4.2.2. Objective 2: Improve the health and well-being of the old and the infirm

According to the Population Census of 2001, the share of people older than 65 in Međimurje County was then 13.7%, which rose to 15.6% in 2011. Given that life expectancy is on the rise, there is an evident need for better comprehensiveness of both institutional and non-institutional aid for the elderly.

The data gathered as part of the EU project (IPA IV) the Support for the social welfare system in the process of further deinstitutionalisation of social services, currently being implemented in Međimurje County (2013), show that there are 50 centres for providing accommodation to the elderly outside their family home currently active in the same county (7 centres for the old and infirm, 7 family homes, 2 centres for mentally ill adults and 34 foster families). The total capacity of these centres is 1,074 people, which is concerningly less than necessary. Apart from the mentioned centres, there are also non-institutional forms of elderly care: the Day Centre as part of the Retirement Home Čakovec, which provides accommodation for people suffering from Alzheimer's disease, with the capacity of 10-15 people, and was founded in 2007. Furthermore, there is the Centre for Home Assistance and Care "3D Centre" Čakovec, which was founded in the spring of 2013. Similarly, the Autonomous Centre-ACT Čakovec is about to found a centre for home assistance and care that will start with its work at the beginning of 2014 and will soon organise the training of geronto-housewives. While working on the project, the following problems have been identified: weak multisectoral coordination of different institutions and associations, lack of problem prevention related with old age, isolation of the elderly, the problem of elderly care in the terminal phase, lack of empathy for problems related with old age, insufficiently developed services of home assistance and care, poor use of volunteers' services <sup>(77)</sup>.





#### 4.2.2.1. Target 1 Raise standards in the institutional care

##### **Activities:**

- 1) Take necessary measures for the equal standards of state and private homes/centres
- 2) Lobby for the reconstruction of the existing capacities in terms of ensuring higher share of capacities for immobile and partially immobile persons
- 3) Standardise the quality of institutional service
- 4) Educate institutional workers in terms of user needs, offering support and enrichment of everyday life
- 5) Educate both institutional workers and users about the prevention of falls.

##### **Indicators:**

- 1) Increased capacities of institutional care for the immobile and the partially immobile individuals
- 2) Adopted quality standards of institutional services
- 3) Number of educational programmes carried out and the number of participants.

#### 4.2.2.2. Target 2. Support the non-institutional forms of care

##### **Activities:**

- 1) Broaden the work of social and health services to non-institutional forms of work in which special teams will work with associations and units of local self-government to carry out preventive and other programmes focused on improving the quality of life and health of the elderly
- 2) Carry out programmes of healthy lifestyle promotion for elderly people (especially in terms of a healthy diet, physical activity and reduced alcohol consumption), i.e. facilitate choices for healthy behaviour:
  - create age-appropriate environments
  - organise hiking groups for the elderly together with other interesting content
  - inform the elderly about the meaning and benefit of physical activity and a healthy diet so as to create positive opinions and raise their knowledge
  - support physical activity for the elderly at all levels (especially in their family, neighbourhood and local church, but also with the assistance of health and kinesiology experts)



- ensure a wider range of programmes in accordance with age and physical capabilities in order to make physical activity fun, and not tiresome and 'dangerous'
  - offer free or subsidised access to sports and recreational programmes and venues
  - organise courses on healthy eating based on tradition for the elderly and their caregivers
  - increase the accessibility of healthy diets for the elderly
  - draw attention to the harmful effects of smoking, especially the overconsumption of alcohol among the elderly
- 3) Support the work of counseling centres for alcoholism and clubs of treated alcoholics in order to offer expert guidance in easy access to treatment and maintenance of abstinence
  - 4) Conduct educational programmes and workshops to reduce the risk of falls
  - 5) Encourage the founding of home assistance and care services and ensure their accessibility in the whole county
  - 6) Continue supporting the work of free rentals of orthotics
  - 7) Found and support SOS telephone service in terms of the nonstop assistance and support with the help of an alarm device for the elderly who are alone full-time or most of the day.

**Indicators:**

- 1) Programmes designed and implemented for raising the quality of life and improving health, and the number of participants
- 2) Elderly people empowered for better control over their own health
- 3) Number of subsidised sports and recreational programmes and number of participants
- 4) Improved availability of services for home care and assistance.

**4.2.2.3. Target 3: Establish and develop intersectoral coordination and cooperation**

**Activities:**

- 1) On account of the multidimensional character of the programme and the need to rationalise resources, when making a plan of the social politics the interdisciplinary and intersectoral approach is indispensable (politics, professions, institutions and civil society) and it is necessary to set up successful cooperation and coordination



- 2) Merge programmes and funds that would enable the implementation of activities planned
- 3) Organise courses on the importance and possibilities of raising health literacy of the elderly for health care experts, social workers, volunteers, people included in the institutional and non-institutional elderly care and private providers of elderly care.

**Indicators:**

- 1) Channels of successful cooperation and coordination established
- 2) Number of educational courses and number of participants
- 3) Improved health literacy of elderly people.

**4.2.2.4. Target 4: Encourage volunteer work for the improvement of health and well-being of the elderly and the development of intergenerational solidarity**

**Activities:**

- 1) Include volunteers in the above mentioned activities and organise education for them
- 2) Create empathy in adolescents for the elderly through continuous education, raise awareness about the importance of empathy and offering help to the elderly
- 3) Make the civil associations partners in defining needs and priorities in the community
- 4) Promote the importance of an active approach towards everyday life for the elderly and the importance of active free-time management, recreation, entertainment and socialising.

**Indicators:**

- 1) Number of volunteers
- 2) Bottom-up approach used in defining needs and priorities in the community
- 3) Enhanced intergenerational solidarity.

**4.2.2.5. Target 5: Strengthen the further development of palliative care in Međimurje County to improve the life quality of the terminally ill and their families**

Unfortunately, the mortality of malignant diseases is on the rise, both in Croatia and Međimurje County, thus the need for palliative care is increasing. In 1995 in Međimurje County 254 people died of group II of diseases in ICD (International Classification of Diseases 10), with 19% in the total number of deaths, whereas in 2010 the number of deaths rose to 356 and the share of deaths from neoplasms was 29%<sup>(71)</sup>. As part of the Healthcare Centre Čakovec, a mobile team of palliative care has been active since 1 March 2013. The team





includes a physician and a nurse, who treat 4-5 people outside healthcare centre daily. They are joined by another physician and a nurse from the Intensive Care Unit, County Hospital Čakovec as volunteers. The organisation "Pomoć neizlječivima" ("Helping the incurable"), founded by Renata Marđetko, master of palliative care, is also active in the county. Assistance and visitation by the palliative team focuses mainly on patients suffering from an incurable disease and family doctors (secondary health care), home nursing service or social service, and entails finding a solution and offering possible options to alleviate the symptoms and improve the quality of life of the terminally ill.

**Activities:**

- 1) Work on strengthening the team for palliative care – include social workers, psychologists, priests and experts from different fields as equal team members
- 2) Organise education for health experts (from different sectors of health care)
- 3) Found a county centre for the coordination of palliative care
- 4) Lobby for the forming of a hospital team of palliative care as part of Čakovec County Hospital and a clinic for palliative care
- 5) Install palliative beds for the terminally ill in the County Hospital
- 6) Initiate the process of opening hospices in Međimurje County
- 7) Offer a wide range of orthopedic aids products for rent and inform the public about the availability of orthopedic aids
- 8) Set up a clinic for pain relief as part of palliative care service
- 9) Educate other, non-health experts and volunteers
- 10) Promote palliative care service by means of leaflets, the media, lectures and workshops.

**Indicators:**

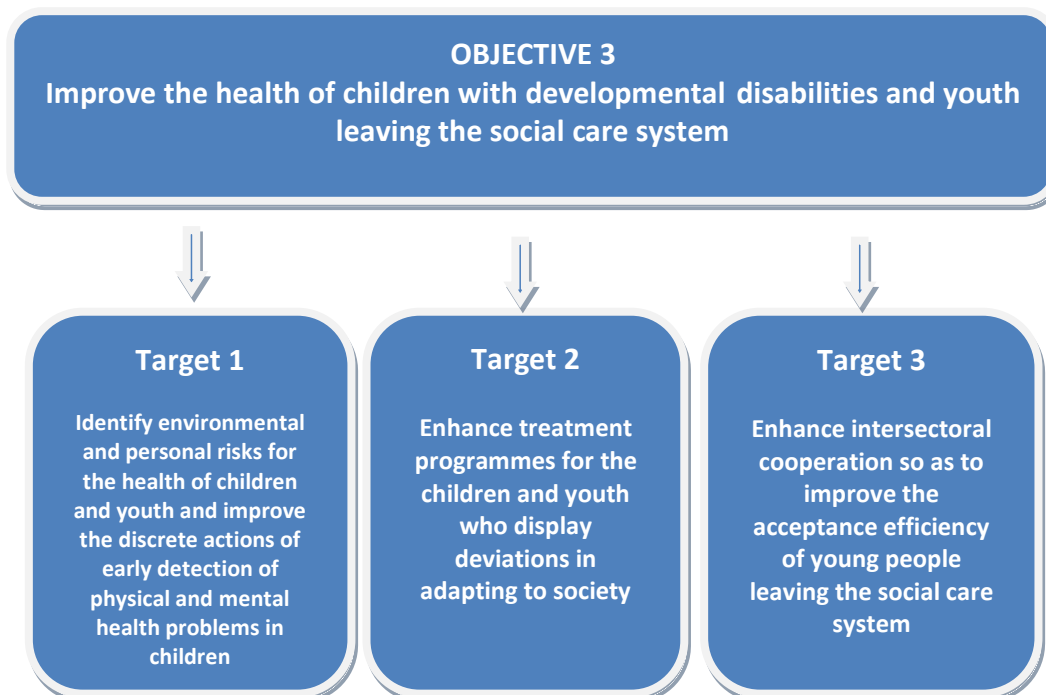
- 1) Defined structure of the basic and extended palliative care team within primary health care
- 2) Founded county centre for the coordination of palliative care
- 3) Formed hospital team for palliative care
- 4) Good cooperation established between different sectors within the health system and between the health and social care systems
- 5) Improved offer of orthopedic aids
- 6) Number of educational seminars, workshops and counseling services held, and number of people informed
- 7) Number of promotional and educational materials produced and distributed.



#### 4.2.3. Objective 3: Improve the health of children with developmental disabilities and youth leaving the social care system

In Međimurje County there are 30 primary schools with 10,000 students, the Centre for Education with 174 students and 7 secondary schools with 4,400 students. In the school year of 2012/2013, Međimurje County together with the units of local self-government financed 23, and the City of Čakovec together with the Employment Service 21 personal teaching assistants. The employment of personal teaching assistants has lasted for the past three years. The County has taken on itself the task of organisation, but there are still no regulations on who is qualified, how to finance and who is responsible for the management of the personal assistance service. The financing is conducted by various means – through the so-called public works for the unemployed organised by the Croatian Employment Service by means of training, etc. The problem lies in the fact that public work tenders are limited to 6 months, whereas the need for assistants lasts for the whole year.

For next year, schools have expressed the need for 68 assistants in 30 different primary schools and 3 assistants in 3 secondary schools – for all these students there are written resolutions proposed by the Office of State Administration that recommend the enrollment in regular school programs with the help of a personal assistant <sup>(71)</sup>.





**4.2.3.1. Target 1: Identify environmental and personal risks for the health of children and youth and improve the discrete actions of early detection of physical and mental health problems in children**

**Activities:**

- 1) Conduct screening for the detection of behavioural disorders and emotional sensitivity in children in secondary schools (especially vocational)
- 2) Periodically conduct research on the attitudes, habits and use of addictive substances of children and adolescents in Međimurje County
- 3) A research conducted with regard to juvenile delinquency in Međimurje County - criminal activities, offenses, educational measures proscribed therefor

**Indicators:**

- 1) Number of classes covered by the screening
- 2) Number of children and adolescents in which risks were recorded
- 3) A conducted study on the attitudes, habits and use of addictive substances and the interpretation of results
- 4) Conducted research and monitoring of juvenile delinquency.

**4.2.3.2. Target 2: Enhance treatment programmes for the children and youth who display deviations in adapting to society**

**Activities:**

- 1) Learn communicational and socialisation skills in small socialisation groups
- 2) Provide assistance in learning
- 3) Enhance programmes for supporting good free time management
- 4) Organise excursions for children and adolescents subjected to labeling ('untalented', 'lacking in interest', 'clumsy'; recidivists, hyperactive children, children with mental disorders)
- 5) Ensure the availability of experts dealing with the treatment of children with disabilities and in this way strengthen the non-institutional forms of treatment
- 6) Support associations of parents and children with disabilities professionally and otherwise, so as to equip parents with the knowledge necessary to become active participants in helping such children
- 7) Health education and counseling work, as well as constant monitoring as part of the Department of School Medicine at the Institute of Public Health, Međimurje County in cooperation with pediatric services
- 8) Constant efforts with children at the Department of Mental Health of the Institute of Public Health, Međimurje County



- 9) Extend projects of primary prevention carried out by the Institute of Public Health to all nurseries and schools (the programmes "*Pričaonica*", "*Procvjetajmo*", etc.)

**Indicators:**

- 1) Number of small socialisation groups in treatment and the number of participants
- 2) Number of implemented programmes for assistance in learning
- 3) Number of schools and nurseries covered by the programmes "*Pričaonica*" and "*Procvjetajmo*"
- 4) Provided maximum professional support through organisations and activities within the Department of School Medicine and the Department of Mental Health of the Institute of Public Health to children and young people showing discrepancies in adapting to society and their parents.



#### 4.2.3.3. Target 3: Enhance intersectoral cooperation so as to improve the acceptance efficiency of young people leaving the social care system

##### Activities:

- 1) Health education and counseling, as part of the Department of School Medicine at the Institute of Public Health, Međimurje County
- 2) Constant efforts with children at the Department of Mental Health of the Institute of Public Health, Međimurje County.

##### Indicators:

- 1) Number of children included in health education and counseling, as part of the Department of School Medicine and the Department of Mental Health at our Institute

#### 4.2.4. Objective 4: Improve the health of people with disabilities

Social Welfare Centre Čakovec, which takes care of children with developmental difficulties and people with disabilities, offers the following forms of rights and services: 794 people receive disability benefit, 2,261 people are users of home care allowance, while 393 people (of which 100 children) show intellectual difficulties (this category does not include people with intellectual difficulties who also demonstrate other difficulties and therefore belong to the category of people with a number of difficulties). Most of these people lives with their families, while 118 adults and 34 children with development disorders live outside their families. The status of a nursing parent is approved to 99 people.

Based on restrictions by the social welfare system, children with development disorders (vision impairment, hearing damage, voice and speech damage, physical impairment, intellectual difficulties, development disorder, multifold development disorder) are all people from the age of birth to 21 years, by which time they may use training programmes for independent life and work.

Social Welfare Centre of Čakovec has under its wing 715 children with development disabilities that are according to age stratification divided into six categories: 95 children are aged 0-3, 109 children are aged 3-7, 240 children are aged 7-14, 73 children are aged 14-16, 66 people are aged 16-18, and 132 children are aged 18-21.

Adults with mental disorders in Međimurje County are accomodated in three different institutions: Centre for Adults with Mental Disorders Orehovica (state institution), Centre for



People with Mental Disorders Kotoriba (private institution), Centre 'Ščavničar' in Selnica (a private institution) and a foster family in Štrigova.

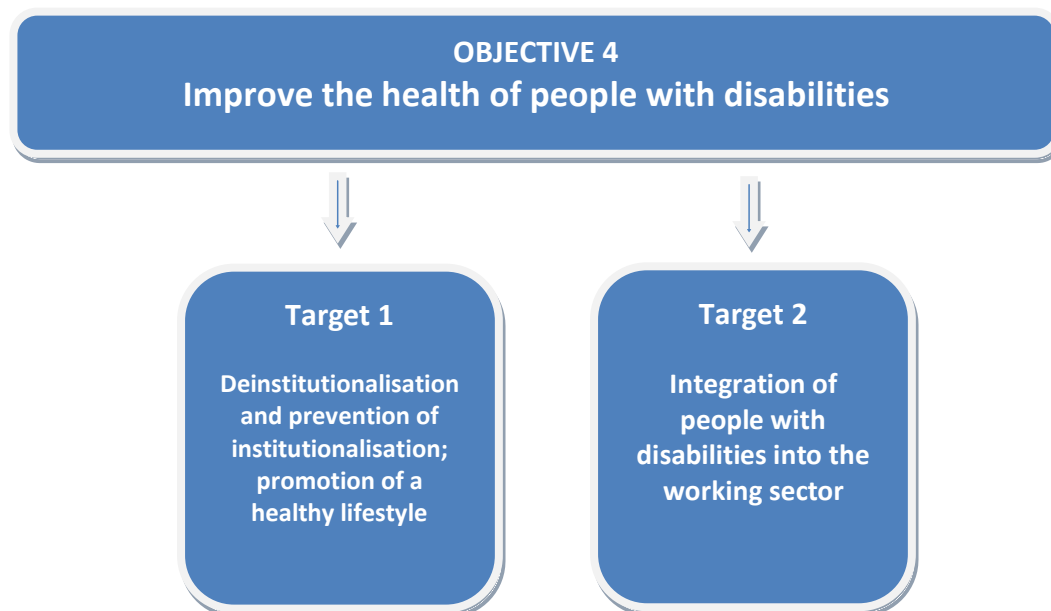
In the local community, apart from the above listed institutions taking care of people with mental difficulties, as well as their families, who also take care of them, there are no other forms of organised support and care. Most of people with mental difficulties are deprived of working obligation and are under constant care (custody), which makes their integration in the society difficult. According to the data of the Social Welfare Centre Čakovec, accomodation services by right are used by 130 people, of which 13 are accomodated in other counties.

Four secondary schools in Međimurje County offer training to people with mental difficulties for the following assisting jobs: florist, seamster, cook, car painter, tinsmith, floor layer and painter. Some classes are small (three people in a single class), and apart from education, socialisation is ensured in accordance with their individual and group age, which is very important. On a more negative note, an estimated one third of those attending training for assisting jobs are not able to apply the acquired knowledge and skills in real life, and are therefore deprived of the chance to find work.

According to the data from the Croatian Employment Service, Regional Office Čakovec, on 31 December 2012 there were registered 177 people with disabilities, of which 85 have mental disabilities and 6 have mental illnesses. In 2012 altogether 68 people with disabilities were employed, of which 43 have mental disabilities.

In the Centre of Education, as ordered by the Social Welfare Centre of Čakovec, there are 20 adults included in production activities as part of half-day stay with the financial support of the Ministry responsible therefor. Children with development disorders have since 1989 systematically been integrated in regular nursery school programmes.

The most comprehensive support to people with disabilities are provided in different associations that have been founded with this goal <sup>(71)</sup>.



#### 4.2.4.1. Target 1: Deinstitutionalisation and prevention of institutionalisation; promotion of a healthy lifestyle

##### Activities:

- 1) Establish a systematic financial support for the work of associations and the carrying out of activities at local level
- 2) Develop and carry out several-week programmes to promote a healthy lifestyle for people with disabilities
- 3) Improve health literacy of people with disabilities as well as family members who take care of them
- 4) For the mentally ill it is necessary to define support teams based on the war veteran model of support
- 5) Establish new channels of cooperation between County Hospital Čakovec and field nurses of the Healthcare Centre Čakovec for the improvement of care for mentally ill after being discharged from the hospital (control of treatment, easier return to everyday life, help in finding other forms of support)
- 6) Define the needs of people with mental disabilities by supporting their own and foster families
- 7) Question the possibility of partial or complete return of working capacity in people with mental difficulties
- 8) Aid deinstitutionalisation programmes by creating support services and the integration into local community, by forming residential communities and different forms of employment in accordance with individual capabilities



- 9) Establish cooperation of the Centre for Adults with Mental Illnesses Orehovica and the Association for Persons with Mental Retardation of Međimurje in order to situate people with intellectual disabilities in residential communities
- 10) In the forthcoming years, provide maximum support to non-institutional care for people with intellectual disabilities, including care in the day centre, through a day-long, half-day, and occasional stay), organised housing, the clubs Mura and Duga and the forming of mobile service provider for people with mental difficulties and their families in Međimurje.

**Indicators:**

- 1) Established systematic financial support for associations' activities
- 2) Number of implemented training programmes and number of participants
- 3) Improved health literacy of persons with disabilities and their family members
- 4) New channels of cooperation established between Čakovec County Hospital and the field nurse service of Čakovec Healthcare Centre
- 5) Number of established residential communities
- 6) Care within the Day Center made available
- 7) Mobile support service established.

**4.2.4.2. Target 2: Integration of people with disabilities into the working sector**

**Activities:**

- 1) Ensure employment with the support of the open economy and sheltered workshops, in the form of work-related activities
- 2) Determine priorities in the employment of people with disabilities, with the motivation and education of potential employers
- 3) Assist independent persons with disabilities in their finding work in the open economy by educating employers
- 4) Offer a good solution for a certain number of people with disabilities who need support at work, e.g. form sheltered workshops
- 5) Lobby for the systematic implementation of the National Strategy for Equal Rights of Persons with Disabilities.

**Indicators:**

- 1) Number of employees with the support of the open economy and sheltered workshops
- 2) Number of sheltered workshops established
- 3) Number of people with disabilities working in sheltered workshops
- 4) Clear priorities established for the employment of people with disabilities





5) Number of educational workshops for employers conducted.

#### 4.2.5. Objective 5: Improve the position of high risk families

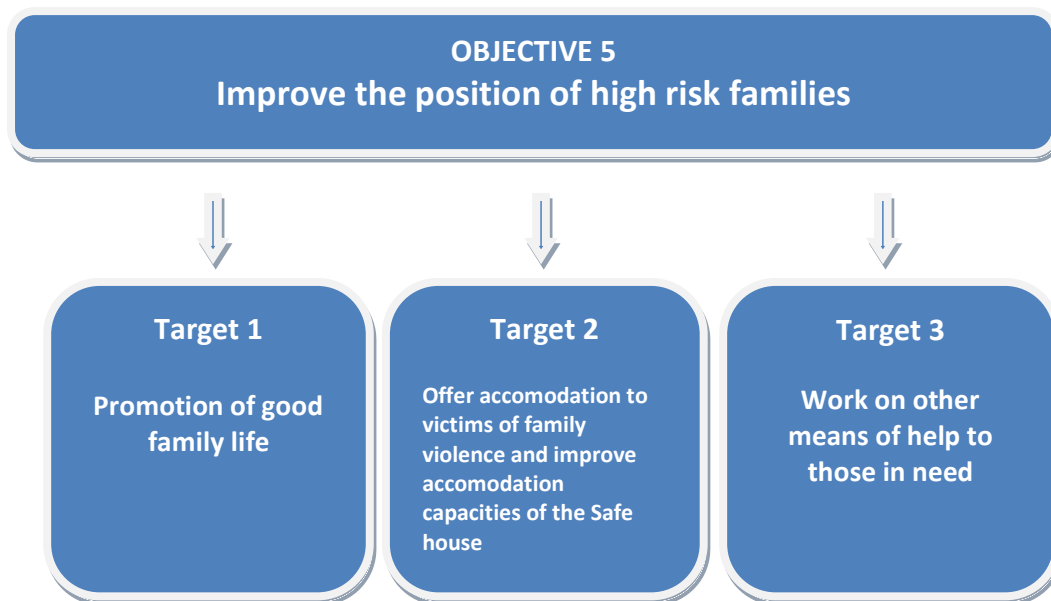
There are many reasons for families to find themselves in a difficult or at-risk situation. For instance, families can experience violence, drug abuse, a member's mental illness, economic issues, loss of a family member etc. A typical risk factor for families is domestic violence. In Međimurje County there is a centre for domestic violence victims or Safe House, which is a social welfare institution. To its users, victims of domestic violence, it offers accommodation, food, personal hygiene and care, but also provides psychosocial treatment. The centre is part of the Register of Social Welfare Institutions since 13 January 2010 and is funded from the county budget. In addition, an agreement was signed with the former Ministry of Health and Social Welfare, today known as the Ministry of Social Politics and Youth, which defined rights, obligations and responsibilities with regard to providing and funding services of temporary accommodation of children and adults who are victims of domestic violence, type, range and quality of services, accommodation price, payment method, breach of contract, liability for damages and the court's jurisdiction. As stated in the contract, the Ministry has been helping meet the costs since 1 June 2010, by providing 3,200.00 HRK monthly for each user, while fully funding only six users. The centre has throughout the years of service partaken in a number of projects whose task is to strengthen and offer support and assistance in the employment of victims of domestic violence.

In February 2010, the Safe House started providing accommodation to women. The first female user was admitted on 3 February 2010, and since then 81 users have been admitted, of which 43 were children. The centre can at the same time admit no more than seven users. Since 2010 until today (30 June 2013), due to lack of capacity a number of people could not be admitted: 260 users altogether, of which 98 women, 161 children and 1 man. The accommodation is realised by means of the resolution on the recognition of the right to use temporary accommodation service of the Centres for social welfare. In Međimurje County the centre is the only institution to accommodate victims of domestic violence, both adults and children. The centre does not only admit users within the county, but also provides shelter for users from other counties.

In Međimurje County family counseling was non-existent until 2011, when the Family Centre of Međimurje County was founded. Although founded in 2011, it began with its work no sooner than 2012. That year a director was appointed, while first top professionals (a lawyer and a psychologist) were recruited in June 2013. As part of Family Centre activities, individual work with users and counseling for families are conducted, the users are given support on personal level, assistance in terms of change or situation acceptance is provided, they are



encouraged and their personal development strengthened. Also, the centre works with bigger groups of users by means of lectures and workshops.



#### 4.2.5.1. Target 1: Promotion of good family life

##### Activities:

- 1) Identify high risk families by means of intersectoral cooperation: to provide education on good parenting, preserving health of the family and improvement of communication among family members
- 2) Identify high risk families by means of intersectoral approach and improve the dynamics of family relations on individual level, focusing on specific features of the family
- 3) In terms of universal prevention, celebrate important dates and other promotional activities by means of public discussions and workshops, to promote the basic values necessary for the adjustment of future generations
- 4) Employ the media in the promotion of the importance of family values
- 5) Come up with a plan for further action by means of research activities

##### Indicators:

- 1) Improved intersectoral cooperation with an effective system of identifying families at risk created
- 2) Number of training programmes and the number of families participating
- 3) Number of discussions and workshops held
- 4) Scope of media coverage for promoting the importance of family values.



#### 4.2.5.2. Target 2: Offer accommodation to victims of family violence and improve accommodation capacities of the Safe House

##### **Activities:**

- 1) Lobby for the Ministry of Social Politics and Youth to provide more financial resources when it comes to placing people in the safe house
- 2) Find other sources of financing – through EU and other projects.

##### **Indicators:**

- 1) Ministry of Social Policy and Youth has provided funding to increase accommodation capacity in the safe house
- 2) Secured funding from other sources (EU and other projects or donations).

#### 4.2.5.3. Target 3: Work on other means of help to those in need

##### **Activities:**

- 1) by means of public actions, emphasise the importance of tolerating differences and particularities, emphasising the struggle against prejudice, reducing the distorted perceptions of social relationships with people in need
- 2) generally improve the social attitude towards vulnerable population groups by means of interventions targeted at key persons in the community, including the media
- 3) come up with new activities in the area of violence prevention through cooperation of different sectors
- 4) design intervention programmes which would focus on groups such as victims of violence, court witnesses, people with disabilities, long-term unemployed, single parents, etc. through support programmes, social or economic inclusion in the community etc.

##### **Indicators:**

- 1) Number of public actions carried out
- 2) Number of new activities in the field of violence prevention
- 3) Number of intervention programmes designed.



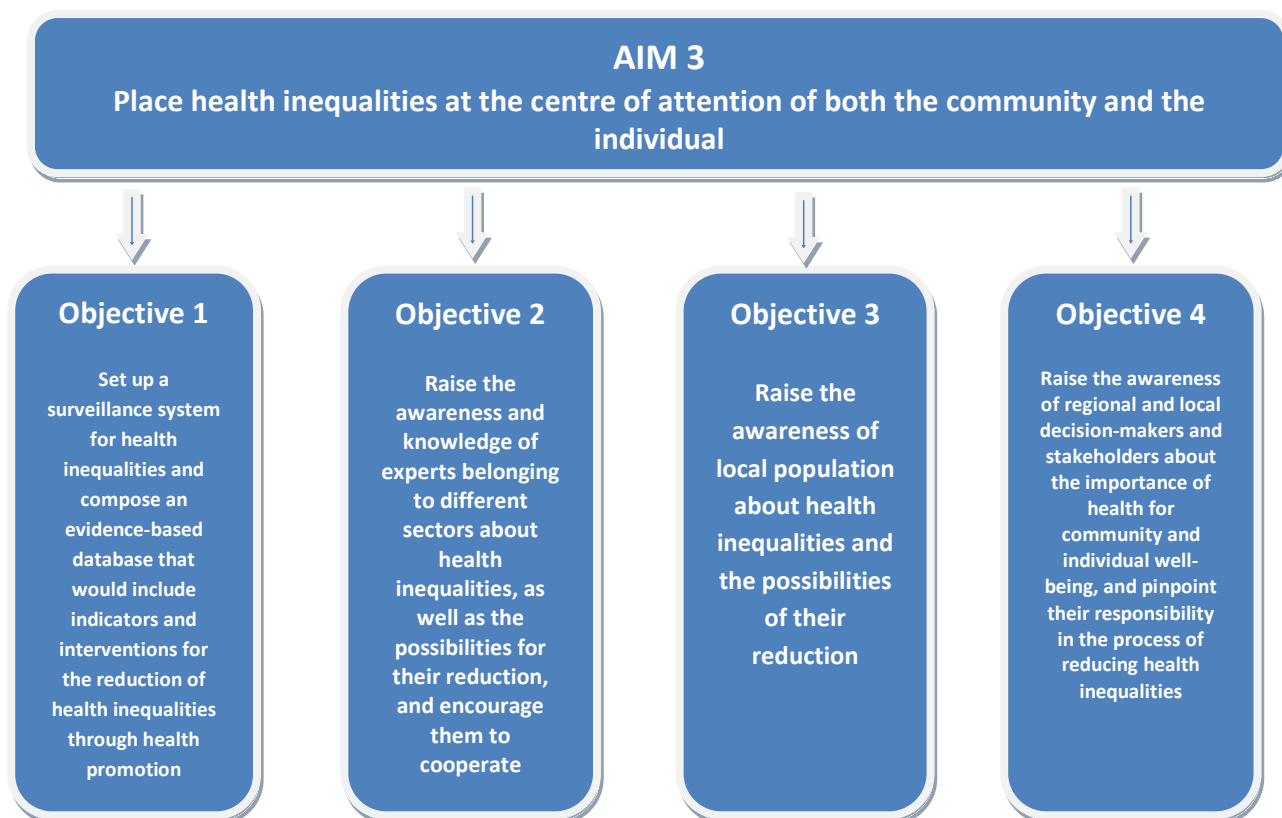
#### 4.3. Aim 3: Place health inequalities at the centre of attention of both the community and the individual

Health being the basic human right, the state needs to ensure equal opportunities for all its citizens to use that right. Good health increases working productivity, workforce supply, success in education and overall savings; therefore, it is essential for the economic growth and development of a country. Poor health, on the other hand, brings high economic and social costs and can lead to poverty. Every individual as well as society as a whole should, thus, show interest in the improvement of their own health and the health of the general population. Health responsibility should be observed in the context of the main determinants of health. Health system, as organised and developed as it may be, is no more than one link of the chain on which depends our lifespan, how long we shall live without illness or disablement, shall we live a fulfilled life or the life filled with despair and helplessness. Social determinants of health, i.e. the social conditions in which people live, can have a reverberating effect on their chances to remain healthy or become ill. Poverty, social exclusion and discrimination, poor housing, unhealthy conditions during the earliest phases of a child's development and low occupational status are important determinants of most illnesses, deaths and health inequalities between and within countries (WHO, 2004). The World Health Organisation therefore emphasises that certain factors contribute to the disease burden in Europe – apart from the 'classic' 10 factors of risky behaviour, such as smoking, high blood pressure, high cholesterol level, obesity, diets lacking in fruits and vegetables, physical inactivity, addictions, irresponsible sexual behaviour and iron deficiency, there are other more general health risks that are not covered by any precise quantitative analysis (global neoliberal trade policies, income inequality, poverty, workplace health hazards and lack of social cohesion <sup>(5)</sup>). The above stated leads us to conclude that state options (together with regional and local communities) when it comes to the reduction of health inequalities and prevention of social deprivation lie in numerous fields – tax policies, employment and work policies, housing policies, social and family policies, education and health policies, and finally environmental policies <sup>(5,6)</sup>. Therefore, in order to reduce health inequalities it is essential to form partnerships between different sectors and social groups, and to strengthen the community as well as the individuals in the field of health promotion and thereby the reduction of health inequalities <sup>(5,6,79,80)</sup>.

Through the programme County Public Health Capacity Building Programme – "A Healthy County", carried out in Međimurje County since 2004, we have helped raise awareness of decision-makers, experts and the general public on health as the basic principle of well-being, individual and community development. However, in the forthcoming period additional efforts are required to further strengthen awareness of decision-makers on the importance of creating positive health policies. This is due to the fact that every four years



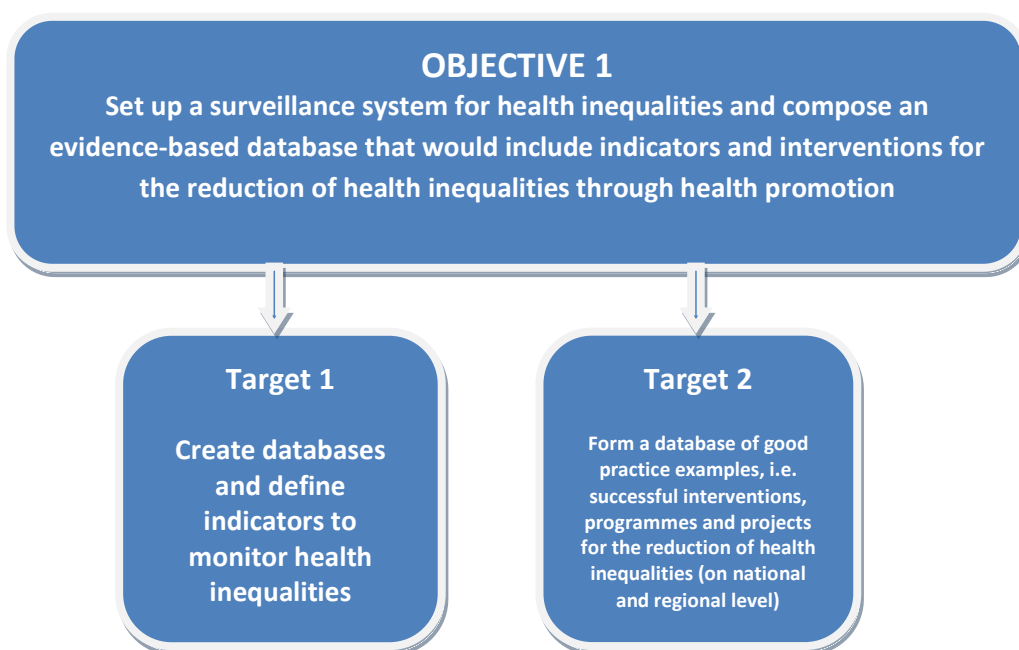
local and national elections are held, this resulting in frequent changes in organisation and politics and turnover of people, which makes continuity harder. There is also experience in drafting strategic health documents, chosen by the participative method and in accordance with the views of political leaders, expert staff and direct users of the community. Through education as part of the programme "A Healthy County", drafting of county's strategic documents for health and implementation of different projects and activities related with the Health Plan of Međimurje County, communication and cooperation between and within individual sectors of regional and local self-government, political leaders, health and social sector, education, non-governmental organisations and the media. Extra efforts are needed to create infrastructure for this network and to more successfully define protocols for the functioning of the network and contribution of each member to the network <sup>(81)</sup>.





**4.3.1. Objective 1: Set up a surveillance system for health inequalities and compose an evidence-based database that would include indicators and interventions for the reduction of health inequalities through health promotion**

In order to monitor and assess the situation in connection with health inequalities and evaluate interventions for reducing health inequalities, it is necessary to form databases and define indicators that would be monitored. Given that resources are usually restricted, it is necessary to focus on interventions whose efficiency has been proven. It is also necessary to form a database of policies, programmes, interventions, etc. to reduce health inequalities. Therefore it is recommendable to create a database of successful interventions as a means of encouragement, guidance and coordination of prevention activities in the community. A few years ago, the need to manage prevention activities has been identified on national level and work on forming a system for management of prevention activities began. This year the Croatian Institute of Public Health formed the Department for the Management of Prevention Activities<sup>(82,83)</sup>.





#### 4.3.1.1. Target 1: Create databases and define indicators to monitor health inequalities

##### Activities:

- 1) Lobby at national, regional and local levels for collection and processing of data on health determinants (representative on county level) important in the assessment of health inequalities
- 2) Lobby for the publication of data on health inequalities in health and other yearbooks, also at county level (National Bureau of Statistics, Croatian Employment Service, Croatian Institute of Public Health, etc.)
- 3) Carry out research continuously and periodically so as to determine, monitor, control and reduce health inequalities
- 4) Lobby for research on health of the nation that would be representative at county level to open the possibility of comparison and evaluation of county projects and programmes (next year the European Health Survey of 2014 will be carried out (EHIS 2))
- 5) Carry out research on healthy lifestyles and health needs of persons in a socially unfavourable position in order to create the most needed programmes of health promotion and their evaluation.

##### Indicators:

- 1) Research on lifestyles, health needs and health inequalities at local and regional levels conducted
- 2) Databases formed and indicators to be collected defined
- 3) Continuous assessment system of health inequalities.

#### 4.3.1.2. Target 2: Form a database of good practice examples, i.e. successful interventions, programmes and projects for the reduction of health inequalities (at national and regional levels)

##### Activities:

- 1) Lobby at national level for a clear definition of criteria for evaluating the efficiency and quality of certain measures, policies, programmes, projects and interventions
- 2) Lobby at national level for a catalogue of successful interventions (certain steps have already been made therefor)
- 3) Based on clearly defined criteria, create a county catalogue of successful interventions, programmes and projects



- 4) Inform representatives of all stakeholders on the existence of international sources of good practice examples in interventions, programmes and projects in the field of tackling health inequalities
- 5) Once a year, organise conferences where good practice examples would be shown (at national and/or local levels), in the field of the reduction of health inequalities.

**Indicators:**

- 1) Defined and accepted national criteria for the evaluation of efficiency and quality of certain measures, policies, programmes, projects and interventions
- 2) Complete national and county catalogue of successful interventions created
- 3) Regular and occasional conferences at county and national levels with good practice examples in the field of reducing health inequalities.

**4.3.2. Objective 2: Raise the awareness and knowledge of experts belonging to different sectors about health inequalities, as well as the possibilities for their reduction, and encourage them to cooperate**

If we recall the health determinants as represented by Dahlgren and Whitehead, it is clear that multidisciplinary and multisectoral cooperation is imperative in the reduction of health inequalities. Unfortunately, the general opinion that health sector is the (only) crucial factor in the process remains. A true challenge is how to include and motivate experts from different sectors to participate. For a successful cooperation it is required that one find one's interest, i.e. it is necessary to ensure a win-win situation. Given that most health determinants are socially and economically conditioned, the "Health in All Policies" approach is of crucial value to in solving the problem of health inequality <sup>(5,6,84,85)</sup>.







- 2) Number of distributed promotional and educational materials
- 3) Number of workshops, lectures and round tables held and the number of participants
- 4) Number of interventions included in the intervention catalogue
- 5) Number of adopted policies and strategies for the reduction of health inequalities within and outside the health sector.

#### 4.3.2.2. Target 2: Motivate and enhance cooperation of experts from different social sectors to reduce health inequalities through health promotion

To be as effective as possible in the implementation of the Strategic Plan for Tackling Health Inequalities in Međimurje County, it is important to create successful partnerships between different social sectors, as well as between different disciplines within these sectors. Different strategies can be used – such as networking, coordination, cooperation and collaboration – with the aim of strengthening partner capacities. Close cooperation is needed between politicians, health experts and professionals from other sectors, the civil society organisations, the media and even the private sector. Only such cooperation allows the balance between the general social interest in promoting health and interests of the private sector (a variety of industries - from food to tobacco industry), which thus become partners rather than opposing sides. Such cooperation is a great challenge but also the key to success.

#### **Activities:**

- 1) Present the Strategic Plan for Tackling Health Inequalities in Međimurje County through Health Promotion
- 2) Identify key stakeholders, partners in health promotion programmes
- 3) Motivate partners to take part in the programmes – explain to them the advantages of cooperation (at personal as well as community level)
- 4) Define criteria, ways and levels of cooperation – create a form and send invitations to participate in the programmes (the invitation is not for one time only, but is of continuous nature)
- 5) Define the procedure for information flow
- 6) Organise different activities (seminars, counsels, conferences) to increase capacities for working on the reduction of health inequalities through methods of health promotion and by using structural and other funds
- 7) Lobby different social sectors for the inclusion of interventions from their sectors in the catalogue of successful national/local interventions in the field of reducing health inequalities, as well as the use of experiences acquired from good practice examples in their work



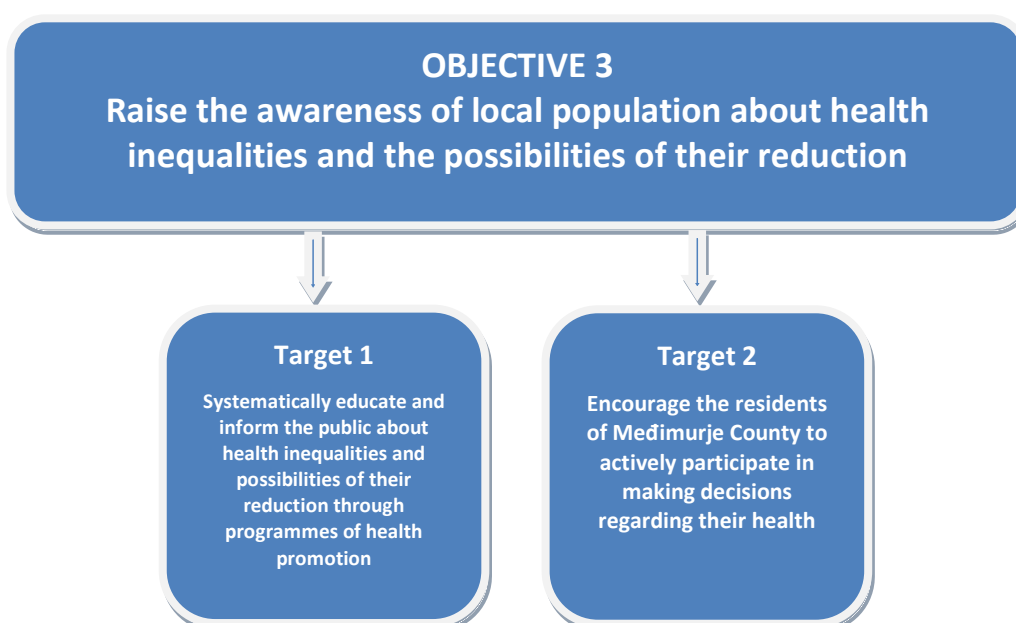
8) Different activities jointly organised.

**Indicators:**

- 1) Key stakeholders identified and motivated to participate
- 2) Criteria of cooperation and procedures for information flow defined
- 3) Number of partners in the network and their reactions
- 4) Number of partners informed
- 5) Number of realised campaigns, activities, programmes and projects.

**4.3.3. Objective 3: Raise the awareness of local population about health inequalities and the possibilities of their reduction**

We may assume that people of Međimurje are not sufficiently aware of what affects their health and lifestyle. Therefore it is very important to inform the public about the social determinants of health. People should become aware of the fact that the level of their health is determined by their income, whether they are employed or not and the working conditions. Apart from that, the possibilities of acquiring education as well as the level of education, and social networks within the community – family support, friends, working environment and the community as a whole. Our health also relies on the type and quality of health and social services, diet and housing, as well as a number of other factors (i.e. the functioning of different social sectors). Thus people should be encouraged and informed so as to become aware of political, social and personal responsibility for their own health and to take part in making choices that are good for their health <sup>(5,6,84,85)</sup>.





4.3.3.1. **Target 1: Systematically educate and inform the public about health inequalities and possibilities of their reduction through programmes of health promotion**

**Activities:**

- 1) Organise a media campaign so as to raise awareness about social determinants of health
- 2) Inform about and encourage the healthy life choices – regular physical activity, healthy diet, life free of smoking, alcohol and psychoactive drugs, acquired methods to better cope with stress (as presented by the media, printed materials, workshops, discussions and lectures)
- 3) Lobby, especially within health and education system, for keeping the public informed about the social determinants of health and encourage their participation in the programmes of health promotion
- 4) Encourage the public to take responsibility of their own health – it is important to stress the fact that it is much easier to prevent a disease than to cure it, to point to the importance of preventive examinations and the possibility of the early detection of diseases by taking part in the programmes for early detection of malignant, cardiovascular and other diseases
- 5) Inform the public through different sectors about services, programmes and projects offered by certain institutions and organisations aiming at the reduction of health inequalities
- 6) Inform the public, especially parents, about the importance of investing in their children's education and the importance of life-long learning, given that the education system and health literacy greatly affect health
- 7) Encourage the public to fully engage into finding jobs, to fight for their working rights, to be included in the process of lobbying for a better working environment (if employed), to ask for employers' full engagement and cooperation when it comes to health promotion in the working environment.

**Indicators:**

- 1) Number of campaigns organised
- 2) Number of designed, printed and distributed educational and informative materials
- 3) Number of reports in the media
- 4) Response to programmes of early detection of chronic diseases
- 5) The public informed about the services (that affect the reduction of health inequalities) offered by health, social and non-governmental sectors.



#### 4.3.3.2. Target 2: Encourage the residents of Međimurje County to actively participate in making decisions regarding their health

##### Activities:

- 1) Teach residents how to identify negative factors in the environment and pinpoint them with relevant organisations and institutions
- 2) Encourage residents (i.e. interest groups) to actively participate in shaping different plans of regarding the physical environment
- 3) To encourage residents to participate in the work of non-governmental organisations and other forms of coming together based on common interests (from different sectors: sports and recreation, women's, youth and pensioner associations, patient groups and political parties) and in this way take part in shaping health policies on local and regional level
- 4) Inform residents about the importance of social support for individual and community health – encourage volunteer work, good neighbourly relations, participation in different programmes organised by the local community, etc.
- 5) Help the solidarity for those close to us or in need become prized in society
- 6) encourage the local community to lobby with those responsible to take into consideration the impacts of different policies on population health when adopting them
- 7) Lobby the members of parliament for the adoption of laws, programmes and regulations that would help reduce health inequalities.

##### Indicators:

- 1) The residents' level of involvement in adopting plans, projects and programmes
- 2) Number of non-governmental organisations active at county level and their members and activities
- 3) Number of volunteers and participation in different programmes
- 4) Adopted laws that help reduce health inequalities.

#### 4.3.4. Objective 4 Raise the awareness of regional and local decision-makers and stakeholders about the importance of health for community and individual well-being, and stress their responsibility in the process of reducing health inequalities

As already stated, each individual needs to be supported in their efforts to increase control over their own health and enhance it through methods of health promotion, which is a process that brings about health and well-being, reduces costs and enables healthy aging. At national level, health promotion results in the reduction of disease burden, control of health

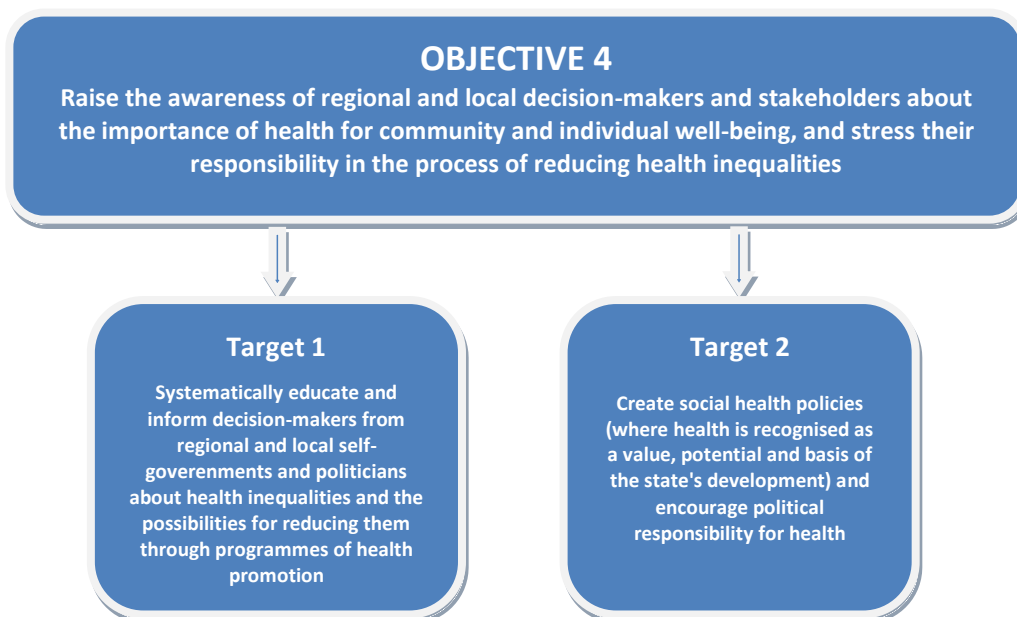


care costs, increased productivity and socio-economic development which is both sustainable and affordable. However, health is determined by a number of social, economic and ecological factors and the cultural norms of the community, which is often beyond the control of individual. These determinants of health are associated with a number of lifestyle factors (physical activity, dietary habits, alcohol, drugs and other addictive substances, stress and one's reaction to stress). One's lifestyle is thus influenced by policies and activities of different social sectors. It is therefore very important for decision-makers to be well informed (at national, regional and local levels) in order to take consideration of health in the decisions of various sectors at all levels, and to improve decision-making based on scientific evidence (and good information). In Croatia and Međimurje County there are numerous strategies, programmes and laws that help reduce health inequalities and through which mortality and morbidity of cardiovascular and other chronic diseases are being reduced. However, in the following period, it is necessary to ensure, in particular with regard to this objective, the reshaping of political will, in the form of national or regional policies, into appropriate resources to achieve goals. This is the responsibility of decision-makers and the public sector. Additional resources can and should be looked for in other sectors, but the leading role has to remain within the public sector. Apart from that, politicians and political leaders at national, regional and local levels should be aware of the slow and small effects of interventions, as well as of the time needed to conduct a clear evaluation. Therefore, interventions should be protected from rash expectations and short time intended for political programme plans. In spite of that, both the public and politicians should be given clear, timely and comprehensive information with regard to different indicators and interventions when it comes to reducing health inequalities <sup>(5,6,49,68,84,85)</sup>.

In the following text listed are some measures that can be taken at population level and are quite efficient in reducing health inequalities, primarily for cardiovascular but also for other chronic non-communicable diseases. These are: higher tax rates on unhealthy food, adopting regulations on the reduction of salt intakes in bread and other food, more efficient regulations when it comes to listing ingredients on the labels of food and drink products, offering healthy food in restaurants, workplaces and public cafeterias, and dietary guidelines in schools and faculties. The measures should also include affordability of public transport, incentives for coming to work on foot or by bicycle, construction of pedestrian paths and cycling tracks, parks and playgrounds. Also, taxes on cigarettes should be significantly higher and a law on obligatory pictorial warnings on cigarette packs adopted, while smoking in public places as well as in all workplaces should be completely forbidden (including restaurants and cafes), and a better control and surveillance established with regard to following regulations for the reduction of cigarette and alcohol accessibility to adolescents. Similarly, tax on alcohol should be higher, thus making it less accessible to both adolescents and adults, advertising of alcoholic drinks should be forbidden and all types of shops selling



alcohol restricted, age level for buying alcoholic beverages should be raised with high fines for those who ignore them, etc. <sup>(72,73)</sup> .



**4.3.4.1. Target 1: Systematically educate and inform decision-makers from regional and local self-governments and politicians about health inequalities and the possibilities for reducing them through programmes of health promotion**

**Activities:**

- 1) Raise the awareness of decision-makers from regional and local self-governments and politicians about health inequalities by presenting them with the results of situation analysis and needs assessment conducted in Međimurje County (at national level, as well) and the Strategy for improving health and reducing health inequalities in Međimurje County (by organising conferences, lectures, workshops, lobbying, etc.)
- 2) Organise different means of continual informing and education of the responsible individuals from regional and local self-governments and politicians about health inequalities and the possibilities of reducing them through programmes of health promotion and the use of Structural Funds, e.g. printed promotional and educational materials, organisation of lectures, workshops, round tables, etc.
- 3) Inform decision-makers from regional and local self-governments and politicians about the results of continuous and periodic research to determine, monitor, control and reduce health inequalities



- 4) Stress the importance of conducting research on health of the nation that would be representative at county level in order to enable the comparison and evaluation of county programmes and projects
- 5) Stress the importance of conducting research on the lifestyle and health needs of persons in a socially unfavourable position in order to create the most needed programmes of health promotion and evaluate them.

**Indicators:**

- 1) Decision-makers from regional and local self-governments and politicians familiar with health inequalities in Međimurje County and Croatia
- 2) Number of distributed promotional and educational materials
- 3) Number of workshops, lectures, round tables held and the number of participants
- 4) Decision-makers informed about the results of continuous and periodic research.

**4.3.4.2. Target 2: Create social health policies (where health is recognised as a value, potential and basis of the state's development) and encourage political responsibility for health**

**Activities:**

- 1) Lobby the Assembly of Međimurje County to adopt the Strategy for Reducing Health Inequalities in Međimurje County
- 2) Stress the importance of ensuring the necessary resources to implement the Strategy
- 3) Lobby at national, regional and local levels for balanced investment, i.e. a fair allocation of resources for health promotion, and preventive and curative health care
- 4) Encourage the responsible individuals from regional and local self-governments and politicians to take into consideration the effects adopted laws, programmes and regulations have on the population's health ("Health in All Policies")
- 5) Include health inequalities into the Development Strategy of Međimurje County.

**Indicators:**

- 1) Recognition of the Strategic Plan for Tackling Health Inequalities by the Assembly of Međimurje County
- 2) The question of health inequalities included in the Development Strategy of Međimurje County
- 3) Resources provided for implementing the Strategic Plan
- 4) Number of adopted laws, regulations and measures for tackling health inequalities.

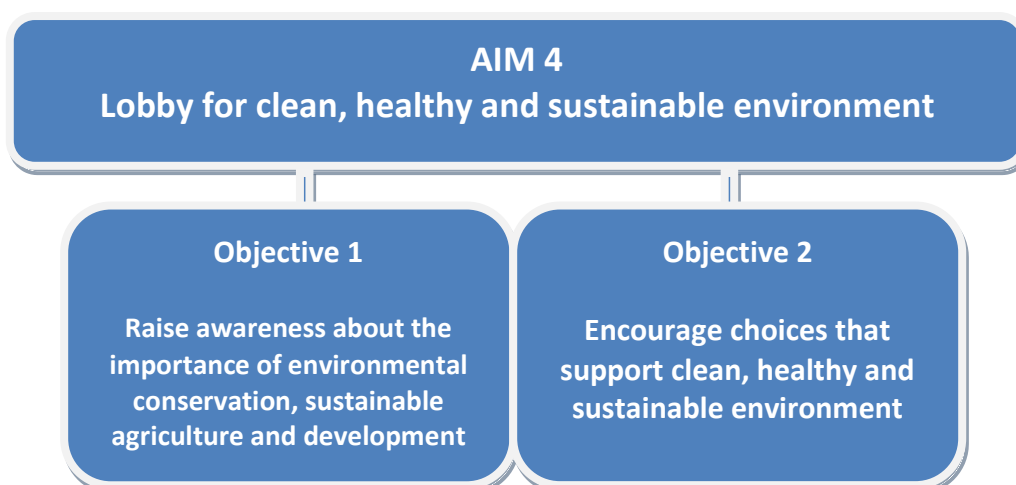




#### 4.4. Aim 4: Lobby for clean, healthy and sustainable environment

There are immense differences as to the extent of exposure to environmental factors throughout Europe, which is reflected in the differences in health and life expectancy. These differences are evident in Croatia, as well as the County of Međimurje. People of lower social status usually live in a less agreeable environment, which has negative impact on their health. Exposure to pollution of all types, including noise and bad traffic infrastructure to say the least, is associated with a number of negative health incomes (cardiovascular diseases, respiratory diseases, cancer, injuries, traffic accidents, insufficient physical activity).

Public water supply system of Međimurje covers 99.2% of the county, although it has only 76.7% households connected, and almost all economic entities and public institutions. In Parag, the largest Roma settlement in Međimurje, no more than 16% of households are connected to the public water supply system. Even though Međimurje County has been investing in the drainage system for a number of years now, even greater investments are needed (as well as the equipment for wastewater treatment) in order to eliminate the negative impact of wastewater on the environment. In order to reduce the negative effect of environment risk factors on health and quality of life, constant monitoring, assessment, prevention and adjustment are applied so as to reduce pollution and health risks. Apart from that, it is very important to promote a healthy lifestyle and the use of technologies that do not represent risk for health and the environment <sup>(86,87)</sup>.





#### 4.4.1. **Objective 1: Raise awareness about the importance of environmental conservation, sustainable agriculture and development in general**

##### **Activities:**

- 1) Raise the public awareness about the importance of high-quality drinking water, thereby increasing the number of private households within the network of public water supply system, by organising campaigns in the media, workshops etc.
- 2) Educate members of the Romani population about the importance of hygienic/ecological waste treatment and the impact of environment on health in general
- 3) Organise workshops for agricultural workers on the importance of sustainable agriculture.
- 4) Encourage farmers to embrace organic farming methods through repurchase liability from community facilities through the system of public procurement (with the specified minimum percentage of organic food in procurement).

##### **Indicators:**

- 1) Number of media campaigns carried out and the number of participants
- 2) Percentage of private households connected to public water supply system
- 3) Situation regarding the disposal of solid and liquid waste in Romani settlements
- 4) Number of organic farms in the county.

#### 4.4.2. **Objective 2: Encourage choices that support clean, healthy and sustainable environment**

##### **Activities:**

- 1) Lobby for the construction of the system for wastewater drainage and treatment, especially in rural areas and Romani settlements
- 2) Lobby for the development of traffic infrastructure
  - a. construct pedestrian paths and cycling tracks to increase safety level in road traffic and to increase the number of physically active people (making easier the choice for a healthy way of transport – walking, cycling, and free time physical activity)
  - b. construct footpaths so as to increase the safety level in road traffic and encourage physical activity
- 3) Lobby for the enhancement of public transport in all parts of the county
- 4) Lobby for the construction, expansion and equipping of infrastructure to be used for sports and recreation, especially in rural areas



- 5) Build infrastructure for the ill, old and infirm
- 6) Build infrastructure for children and youth care.

**Indicators:**

- 1) Monitor the situation regarding the drainage system and wastewater treatment
- 2) Length of pedestrian paths and/or bicycle tracks constructed
- 3) Monitor the situation regarding public transport enhancement
- 4) Number of sports and recreation facilities constructed or renovated and the status of sports equipment.

## 5. Communication strategy and partners in the implementation of the Strategic Plan for Tackling Health Inequalities in Međimurje County through Health Promotion

**Communication strategy** is an inherent part of the Strategic Plan for Tackling health Inequalities in Međimurje County through Health Promotion. Aim 3 – Place health inequalities at the centre of attention of both the individual and the community – places special emphasis on the necessity of forming partnerships between different services and sectors, and social groups, at the same time strengthening both the community and individuals when it comes to health promotion and reduction of health inequalities. Through objectives and targets of Aim 3, partners have been selected to be motivated for cooperation in the forthcoming period. Finally, activities within the targets of Aim 3 define the special tasks that need to be carried out in order to create the methods and tools of a successful communication strategy.

Communication strategy plays an extremely important part in the identity of the Strategic Plan for Tackling Health Inequalities through Health Promotion as well as the realisation of the strategy goals. In order to succeed in that, it is necessary to ensure transparency and participation, both in drafting the strategy as well as implementing and evaluating it (monitoring development). Therefore, before adopting the final document, one more process of consulting the stakeholders from the public, private and non-governmental sectors, so that the proposed strategy is accepted by all. The Strategic Plan for Tackling Health Inequalities in Međimurje County through Health Promotion will thus be presented to a great number of stakeholders with a request for suggestions and comments that will also be included in the final draft of the document.



The document will be available on the official website of the Institute of Public Health of Međimurje County as well as the websites of Međimurje County and ACTION-FOR-HEALTH project. The final draft will be presented on the closing conference to all stakeholders. Apart from that, a press conference will be held for our press release, accompanied by other ways of presenting the strategic plan to stakeholders and the general public.

**The partners** anticipated to partake in the implementation of the Strategic Plan for Tackling Health Inequalities in Međimurje County through Health Promotion are the following:

According to the new law on health care adopted at the end of 2008, forming one- and three-year health plans is legally binding for the county, and therefore **Međimurje County** is interested in adopting this strategic plan. The Strategic Plan receives its full legitimacy after being approved by the **Međimurje County Assembly**. Thus, as part of Aim 3 (Place health inequalities at the centre of attention of both the individual and the community), Objective 4 (Raise the awareness of regional and local decision-makers and stakeholders about the importance of health for community and individual well-being) and Target 2 (Create social health policies and encourage political responsibility for health, certain activities have been proposed. For example, lobby for accepting the Strategic Plan by the Međimurje County Assembly, stress the importance of ensuring the necessary resources to implement the strategy, lobby at national, regional and local levels for balanced investment, i.e. a fair allocation of resources for health promotion, and preventive and curative health care, etc.

Međimurje County has been partaking in the project “Public Health Capacity Building Programme - Healthy Counties” since 2004, and three of its officials from the **Department of Social Services** have completed training as part of the programme. In the forthcoming period it is necessary to be more successful in motivating other divisions from Međimurje County to participate in the Healthy Counties programme and the implementation of the Strategic Plan.

According to its statutory powers, Međimurje County cooperates with all **units of local self-government (towns and municipalities)**. In fact, it has its **Council of Mayors**, a body which discusses and makes decisions regarding all important aspects of the population's life and health.

The Međimurje County multidisciplinary team of professionals (**members of the Health Team and the implementation of the Health Plan for the Population of Međimurje County**) completed two phases of training as part of the Healthy Counties programme. In phase I of the training (“Health - Plan for It” County Public Health Capacity Building Programme), the goal was to support the county administrative bodies and self-governments in the decentralisation process, and to emphasize the necessity of inter-sectoral approach to



solving complex public health issues. Phase II, on the other hand, was intended to prepare a team for a successful implementation of the county Health Plan (with a mentoring team, professors from the School of Public Health "Andrija Štampar", School of Medicine, University of Zagreb, classes were in Phase II conducted by coaches from the consulting firm ADIZEZ Southeast Europe). In Phase II of the training, key internal weaknesses of the team were identified (insufficient number of people, the lack of clearly defined forms of cooperation with partners, insufficient number of professionals, the lack of time available to work in a team, the lack of financial resources), which need to be eliminated so that the team might continue to work well and participate in the implementation of the Strategic Plan.

In December 2008 a new Law on Health Care (NN150/08) was adopted, thanks to the positive achievements in the work of the counties participating in the County Public Health Capacity Building Programme. By new laws, the local (regional) self-government has to adopt a health care plan for the local (regional) self-government and one-year and three-year plans of health promotion, prevention and early detection of diseases, and organise and conduct public health measures in accordance with these plans. In order to achieve the rights, obligations, tasks and objectives in the field of health care, the local (regional) self-government formed the **Health Council**, represented by a group of independent experts in the fields of health and social welfare as well as representatives of different interest groups in the field of population's health care.

Through training as part of the Healthy County programme, drafting county strategic documents for health, the work of the Health Council of Međimurje County and implementation of a number of projects and activities associated with the Health Plan for Međimurje County, communication and cooperation within and between individual sectors has been enhanced. This applies to **regional and local self-government, decision-makers, social sectors, education, civil society organisations and the media**. A successful cooperation has been accomplished at county, as well as national and international levels (**Croatian Institute of Public Health, Croatian Healthy Cities Network, Faculty of Kinesiology, University of Zagreb, National Institute of Public Health, Regional Unit Murska Sobota, International Sport and Culture Association**).

In the forthcoming period we will continue to motivate the stakeholders from both **public** and **civil sector** (with the aim of exchanging knowledge, resources and experience), so that we are more successful in implementing the Strategic Plan for Tackling Health Inequalities in Međimurje County through Health Promotion (**primary and secondary schools and other public institutions, all health institutions, including private practices at the primary**



**healthcare level, Croatian Medical Association and Croatian Medical Chamber – the Čakovec Branch, civil society organisations, food industries, the media).**

Apart from that of the public and civil sector, the motivation of the **private sector** is also very important, especially if we bear in mind the broader health risks as highlighted by the World Health Organisation, i.e. the global neo-liberal economic policies, income inequality, poverty, health hazards associated with the workplace and the lack of social cohesion. It is important to pinpoint the need to support social entrepreneurship or the concept of eco-social economy in which each individual is equally entitled to access the available information, knowledge and resources. In addition, **the private profit sector should be interested in health and satisfaction of its employees** because this plays a part in the prosperity of private companies. Moreover, the technology used should not be directly harmful when it comes to the employees' health or the environment. After all, the private sector is crucial in creating new workplaces and thereby prosperity in general.

## 6. Funding of the Strategic Plan

Securing funding for the implementation of the Strategic Plan for Tackling Health Inequalities in Međimurje County is very important and necessary but also extremely complex, given its comprehensiveness. In its implementation will be (and/or already are) involved various public institutions with defined sources of funding for their regular work. But these funds are certainly not sufficient and it is therefore necessary to secure funds from other sources (and not only for public institutions but also for civil society organisations whose role in the implementation of the Strategic Plan is very important). The proposed sources of funds for the Strategic Plan are **the state budget, or the budgets of line ministries, county budget, local, private and other sources**. Croatia is planning to establish a **Health Promotion Fund/Foundation**, which could in the forthcoming period become a significant source of financing health promotion activities at both national and county level. Given that the Strategic Plan is primarily a framework for action and will certainly be a topic of interest in the long run, in the forthcoming period it is necessary to prepare annual operational plans with clearly defined funding.

A partial funding for the implementation of the Strategic Plan for Tackling Health Inequalities has already been ensured as part of the ACTION-FOR-HEALTH project, under whose wing the plan has been created. The implementation of the ACTION-FOR-HEALTH project and dissemination of the project results will increase the capacity of our experts in the field of reducing health inequalities and will give way to new knowledge and skills as well as the exchange of experiences and good practice examples. Experts from various sectors and



other interested parties from Međimurje County and beyond will have access to publications as part of the project: Situation Analysis and Needs Assessment in Seven EU Countries and Regions - ACTION-FOR-HEALTH, Reducing Inequalities in Health, A Strategic Approach to Inequalities in Health in the Region Pomurje and Slovenia and Reducing Health Inequalities through Health Promotion and Structural Funds. Finally, it is very important to introduce the content and gain access to Structural Funds, as they are expected to be a significant source of funds for the Strategic Plan for Tackling Health Inequalities through Health Promotion.

The Republic of Croatia is in the process of developing the Strategic Framework for Programming and Partnership Agreement with the EU in connection with the use of ESI funds for the period 2014 - 2020. The proposed investment strategy in the Partnership Agreement of the Ministry of Regional Development of the Republic of Croatia and EU, all investment priorities, measures and activities should contribute to achieving three main objectives: 1) increase the competitiveness of economy and the employment, and ensure growth by engaging local knowledge and skills, 2) reduce poverty and strengthen social inclusion, 3) reduce regional disparities and ensure quality living conditions.

As part of the ACTION-FOR-HEALTH project, the implementation of one of the objectives from the Strategic Plan for Tackling Health Inequalities in Međimurje County through Health Promotion is planned, for which funds have been provided. The implementation of the activities is planned during the first 3-4 months of 2014.



## 7. References

1. Preamble to the Constitution of the World Health Organization as adopted by the International Health Conference, New York, 19-22 June, 1946; signed on 22 July 1946 by the representatives of 61 States (Official Records of the World Health Organization, no. 2, p. 100) and entered into force on 7 April 1948.
2. Breslow L. Health Measurement in the Third Era of Health. *Am J Public Health*.2006 January; 96(1):17-19
3. Diagram by Whitehead M and Dahlgren C, in "What can be done about inequities and health?". *The Lancet*, 338, 8774, 26 October 1991, 1059-1063.
4. Newell KW, ed. *Health by the people*. Geneva, World Health Organization, 1975. *Ottawa Charter for Health Promotion*. First International Conference on Health Promotion, Ottawa, Canada, 17–21 November 1986. Geneva, World Health Organization, 1986 (WHO/HPR/HEP/95.1; <http://www.who.int/healthpromotion/conferences/previous/ottawa/en/>, accessed 10 October 2013)
5. Dahlgren, D. and Whitehead, M., World Health Organization (WHO). (2007) *European Strategies for Tackling Social Inequalities in Health: Levelling Up Part 2* [Online]. Available from: <http://www.thehealthwell.info/node/91930> [Accessed: 2nd November 2013].
6. *Health 21: health for all in the 21st century*. Copenhagen, WHO Regional Office for Europe, 1999
7. Šučur Z, Zrinščak S. Differences that Hurt: Self-Perceived Health Inequalities in Croatia and European Union. *Croat Med J*.2007 October;48(5)653-666
8. *The national health care development strategy 2012-2020 (Nacionalna strategija razvoja zdravstva 2012.-2020.)*; Government of the Republic of Croatia, Ministry of Health of the Republic of Croatia, September 2012, Zagreb.
9. The Croatian Bureau of Statistics (2011), *Census of Population, Households and Dwellings 2011*, available at <http://www.dzs.hr/default.htm>
10. Sorensen K et al., Health literacy and public health: A systematic review and integration of definitions and models. *BMC Public Health* 2012, 12:80
11. *Croatian Health Service Yearbook 2011*, the Croatian National Institute of Public Health, Zagreb, 2012.
12. Croatian National Institute of Public Health, Croatian Central Bureau of Statistics. *Deaths, by cause of death, age and sex, 2010*
13. *Joint Memorandum on Social Inclusion of the Republic of Croatia (Zajednički memorandum o socijalnom uključivanju)*. Government of the Republic of Croatia, 2007
14. *National Strategy of Welfare Development in the Republic of Croatia 2011-2016 (Strategija razvoja sustava socijalne skrbi u Republici Hrvatskoj od 2011.-2016. godine)*, Government of the Republic of Croatia, 2011





15. The Croatian Strategic Development Plan of Public Health, 2012-2015 (Strateški plan razvoja javnog zdravstva od 2013.-2015. godine), 2013
16. Rural development strategy of the Republic of Croatia, 2008-2013 (Strategija ruralnog razvoja Republike Hrvatske, 2008. – 2013.), Ministry of Agriculture, Fisheries and Rural Development, 2008
17. Hrvatski zavod za javno zdravstvo. Izvještaj o osobama s invaliditetom, 2013
18. The Croatian Bureau of Statistics. Employment and Wages 2011. Statistical reports, Zagreb, 2012, available at [http://www.dzs.hr/Hrv\\_Eng/publication/2012/SI-1476](http://www.dzs.hr/Hrv_Eng/publication/2012/SI-1476)
19. The Croatian Bureau of Statistics. Poverty indicators, 2011-Final Results, February, 2013, available at [http://www.dzs.hr/Hrv\\_Eng/publication/2012/14-01-03\\_01\\_2012.htm](http://www.dzs.hr/Hrv_Eng/publication/2012/14-01-03_01_2012.htm)
20. Rubil I. Accounting for regional poverty differences in Croatia: Exploring the role of disparities in average income and inequality. Munich Personal RePEc Archive (MPRA), 2013
21. The Croatian Employment Service, The branch of Čakovec, 2012, unpublished data
22. Šlezak H. The Role of the Roma in the Demographic Resources of Međimurje County (Uloga Roma u demografskim resursima Međimurske županije). Sociologija i prostor, 51 (2013) 195 (1): 21-43
23. The Croatian Employment Service. Monthly Statistics Bulletin, 2012, available at: [http://www.hzz.hr/DocSlike/stat\\_bilten\\_10\\_2012.pdf](http://www.hzz.hr/DocSlike/stat_bilten_10_2012.pdf) (the Croatian Employment Service, 2012)
24. Life expectancy at birth, 1980-2011 (years).png, EUROSTAT, available at [http://epp.eurostat.ec.europa.eu/statistics\\_explained/index.php?title=File:Life\\_expectancy\\_at\\_birth,\\_1980-2011\\_\(years\).png&filetimestamp=20130129120827](http://epp.eurostat.ec.europa.eu/statistics_explained/index.php?title=File:Life_expectancy_at_birth,_1980-2011_(years).png&filetimestamp=20130129120827)
25. The Croatian Bureau of Statistics. Population projections of the Republic of Croatia, 2010-2061 (Projekcije stanovništva Republike Hrvatske od 2010.-2061.), Zagreb, 2011
26. Institute of Public Health of Međimurje County, 2012, unpublished data
27. Doko Jelinić J, Pucarinić-Cvetković J, Nola A I, Senta A, Milosević M, Kern J. Regional differences in Dietary Habits of Adult Croatian Population. Coll. Antropol. 33(2009) Suppl.1:31-34.
28. Fišter K., Kolčić I., Musić Milanović S., Kern J. The prevalence of Overweight, Obesity and Central Obesity in Six Regions of Croatia: Results from the Croatian Adult Health Survey. Coll. Antropol. 33(2009) Suppl.1:25-29.
29. Erceg M., Kern J., Babić-Erceg A. Regional Differences in the Prevalence of Arterial Hypertension in Croatia. Coll. Antropol. 33(2009) Suppl.1:19-23.
30. Milosević M, Golubić R, Mustajbegović J, Doko Jelinić J i sur. Regional Pattern of Physical Inactivity in Croatia. Coll. Antropol. 33(2009) Suppl.1:33-38.
31. Bencević-Striehl H, Malatestinić Dj., Vuletić S. Samardžić S, Vuletić Marvinac G, Prlić A. Regional differences in Alcohol Consumptions in Croatia. Coll. Antropol. 33(2009) Suppl.1:39-41.
32. Samardžić S, Vuletić Marvinac G, Prlić A. Regional Patterns of Smoking in Croatia. Coll. Antropol. 33(2009) Suppl.1:43-46.



33. Kern J., Polašek O., Musić Milanović S et al. Regional Pattern of Cardiovascular Risk Burden in Croatia. CollAntropol.33 (2009)Suppl.11-17.
34. Kutnjak Kiš R., Najman Hižman E. Qualia javnog zdravstva, Kvalitativno istraživanje zdravstvenih potreba stanovnika Međimurske županije u procesu izrade Županijske slike zdravlja te odabira prioriteta i izrade Strateškog okvira županijskog Plana za zdravlje, str. 45-56, Medicinski fakultet Sveučilišta u Zagrebu, Škola narodnog zdravlja «Andrija Štampar», Zagreb, 2013.
35. Barić H. Institute of Public Health of Međimurje County, 2012, unpublished data
36. Šikić Vagić J., Psihosocijalne karakteristike kao čimbenici rizika u hospitaliziranih koronarnih bolesnika u Hrvatskoj, PhD thesis, Medicinski fakultet Sveučilišta u Zagrebu, Zagreb, 2010.
37. Uvodić Đurić D. Qualia javnog zdravstva. Mladi i alkohol - prikaz rezultata kvalitativnog istraživanja pijenja alkohola među djecom i mladima Međimurske županije, str. 57-72, Medicinski fakultet Sveučilišta u Zagrebu, Škola narodnog zdravlja «Andrija Štampar», Zagreb, 2013.
38. A.Kaic-Rak.I.Kulier, J.Pucarin-Cvetkovic. Prehrambene navike. Prostorna distribucija kardiovaskularnih rizika u Hrvatskoj, znanstveni simpozij. Knjiga sažetaka,2005.
39. Bergman Markovic B, Vrdoljak D., Kranjcevic K et sur. Continental-Mediterranean and rural-urban differences in cardiovascular risk factors in Croatian population. Croat Med J.2011 August;52(4):566-575.
40. Stipešević Rakamaric I (2011). Nejednakosti mortaliteta u urbanim i ruralnim sredinama Hrvatske, master thesis. University of Zagreb, Prosinac 2011.
41. Pristaš Iv., Bilić M., Pristaš Ir., Voncina L. and collaborators. Health Care Needs Utilization and Barriers in Croatia – Regional and Urban-Rural Differences. Coll.Antropol.33 (2009) Suppl. 1:121-130.
42. Međimurje County. Long-term County Health Plan 2008-2012, 2008, available at [http://www.medjimurska-zupanija.hr/images/zdravstvo/Plan\\_zdravlja\\_MZ.pdf](http://www.medjimurska-zupanija.hr/images/zdravstvo/Plan_zdravlja_MZ.pdf)
43. Međimurje County. County Health Care Plan, 2010, available at [http://www.medjimurska-zupanija.hr/images/stories/Zdravstvo/Plan\\_zdravstvene\\_zastite\\_za\\_MZ\\_2010.pdf](http://www.medjimurska-zupanija.hr/images/stories/Zdravstvo/Plan_zdravstvene_zastite_za_MZ_2010.pdf)
44. Regional Development Agency (REDEA).Development Strategy of Međimurje County 2011-2013, available at <http://www.redea.hr/images/stories/razno/5-2012/razvojna-strategija-medimurske-zupanije-2011-2013.pdf>
45. Međimurje County. The Social Map of Međimurje County, 2012, available at [http://www.medjimurska-zupanija.hr/images/stories/Zdravstvo/socijalna\\_karta\\_medjimurske\\_zupanije\\_3\\_2012.pdf](http://www.medjimurska-zupanija.hr/images/stories/Zdravstvo/socijalna_karta_medjimurske_zupanije_3_2012.pdf)
46. Regional Development Agency (REDEA). Rural Development Strategy of Međimurje County, 2009, available at <http://www.redea.hr/images/stories/razno/strategija-ruralnog-razvoja-medjimurske-zupanije.pdf>



47. Regional Council of Aquitaine, Addressing Inequalities Interventions in Regions (the AIR project) , available at <http://healthinequalities.eu/sites/default/files/AIR-Anglais.pdf>
48. National Action Plan to reduce Health Inequalities 2008-2011.Helsinki 2008.79pp., available at <http://pre20090115.stm.fi/pr1227003636140/passthru.pdf>
49. CSDH (2008). Closing the gap in a generation: health equity through action on the social determinants of health. Final Report of the Commission on Social Determinants of Health. Geneva, World Health Organisation.
50. The National Strategy of mental health protection for 2011-2016, available at [http://www.mzss.hr/layout/set/print/ministarstvo/strategije\\_i\\_planovi/nacionalna\\_strategija\\_zastite\\_mentalnog\\_zdravlja\\_za\\_razdoblje\\_od\\_2011\\_2016\\_godine](http://www.mzss.hr/layout/set/print/ministarstvo/strategije_i_planovi/nacionalna_strategija_zastite_mentalnog_zdravlja_za_razdoblje_od_2011_2016_godine)
51. Kregar, K. (2001.): Zdravi gradovi: primjer lokalnog razvoja i organiziranja zajednice, Ljetopis Studijskog centra socijalnog rada, 8 (1), 51-69
52. Božičević, V., Brlas, S., Gulin, M. (ur.) (2011.): Psihologija u zaštiti mentalnog zdravlja, Prijedlog smjernica za psihološku djelatnost u zaštiti i promicanju mentalnog zdravlja, ZZJZ "Sveti Rok" Virovitičko-podravske županije, Virovitica
53. Brlas, S., Gulin, M. (ur.) (2010.): Psihologija u zaštiti mentalnog zdravlja, ZZJZ "Sveti Rok" Virovitičko-podravske županije, Virovitica
54. Sakoman, S., (2012). Koncept zaštite mentalnog zdravlja, u: Božičević, V., Brlas, S., Gulin, M. (ur.): Psihologija u zaštiti mentalnog zdravlja, Priručnik za psihološku djelatnost u zaštiti i promicanju mentalnog zdravlja, ZZJZ "Sveti Rok" Virovitičko-podravske županije, Virovitica
55. Brlas, S., Pleša, M. (2013): Psihologija u zaštiti mentalnog zdravlja, Proaktivna skrb psihologa o mentalnom zdravlju psihički bolesnih odraslih osoba, ZZJZ "Sveti Rok" Virovitičko-podravske županije, Virovitica
56. Bijedić, M. (2010.): Čimbenici učinkovitosti izvaninstitucionalnih intervencija usmjerenih djeci i mladima rizičnog ponašanja, Odgojne znanosti, 12, 1, 131-149
57. Brajša-Žganec A. i sur. (2011.), Analiza stanja prava djece i žena u Hrvatskoj, Zagreb, Unicef
58. National Youth Program for 2009-2013 (Nacionalni program za mlade od 2009. do 2013. godine, available at [http://narodne-novine.nn.hr/clanci/sluzbeni/2009\\_07\\_82\\_1988.html](http://narodne-novine.nn.hr/clanci/sluzbeni/2009_07_82_1988.html)
59. Guidelines for planning, implementation and evaluation of prevention and treatment programmes for the protection of children from violence (Smjernice za planiranje, provedbu i evaluaciju preventivskih i tretmanskih programa zaštite djece od nasilja), 2010, available at <http://www.google.hr/url?sa=t&rct=j&q=&esrc=s&frm=1&source=web&cd=2&ved=0CC4QFjAB&url=http%3A%2F%2Fwww.mspm.hr%2Fcontent%2Fdownload%2F7694%2F60918%2Ffile%2FSmjernice.pdf&ei=08ydUoS4FcjnygP474KIDA&usq=AFQjCNFI0o96L FJFnLuFpxy7VhMaeFGTcQ>
60. Janković. J., Bašić. J. (ur.)(2001): Prevencija poremećaja u ponašanju djece i mladih u lokalnoj zajednici, Povjerenstvo Vlade RH za prevenciju poremećaja u ponašanju djece i mladeži i zaštitu djece s poremećajima u ponašanju, Zagreb
61. WHO.Global Action Plan for the prevention and control of noncommunicable diseases 2013-2020.World Health Organization,2013



62. WHO. Global Strategy on diet, physical activity and health. Resolution WHA 55.23., World Health Organization, 2004
63. Cavill N, Kahlmeier S, Racioppi F. Physical activity and health in Europe: evidence for action. Copenhagen, World Health Organization, 2006.
64. Steps to health A European framework to promote Physical activity for Health. Copenhagen, World health Organization, 2007.
65. Kutnjak Kiš R, Bijelić L., Najman Hižman E. Promoting physical activity and active living in the local community through project "Public Health Capacity Building Programme- Healthy Counties"-the example of Međimurje County (Croatia), Bled, Sport Citizens Forum, ISCA, 18-21 Nov 2010
66. G W Heath and others. Evidence-based intervention in physical activity: lessons from around the world. The Lancet. Physical Activity. July, 2012
67. Musić Milanović, Sanja (2010) Demografske, bihevioralne i socioekonomske odrednice debljine odraslih u Hrvatskoj. Doctoral dissertation, University of Zagreb
68. WHO. Equity, social determinants and public health programmes, World Health Organization, 2010
69. WHO. Global Status Report on Alcohol and Health, World Health Organization, 2011
70. National Strategy on Combating Drugs Abuse 2010-2014 (Nacionalni program prevencije ovisnosti za djecu i mlade u odgojno-obrazovnom sustavu, te djecu i mlade u sustavu socijalne skrbi od 2010.-2014. godine). Government of the Republic of Croatia, 2010
71. Kutnjak Kiš R. Promjene u strukturi smrtnosti od kroničnih nezaraznih bolesti u Međimurskoj županiji te mjere promicanja zdravlja, prevencije i ranog otkrivanja koje provodi Zavod za javno zdravstvo Međimurske županije sa suradnicima. Croatian Journal of Public Health (electronic journal), vol.7, broj 28, 2011, available at <http://www.hcjz.hr/old/clanak.php?id=14539>
72. Kralj V. Kardiovaskularne bolesti. Croatian Journal of Public Health, vol.7, broj 28, 2011
73. Rainer Z. Actions to be taken at the level of the population to reduce the risk of CVD. *Cardiol Croat.* 2012;7(9-10):234-239)
74. Working in Health Promoting Ways. A strategic framework for DHHS 2009.-2012., Tasmanian Government, 2010.
75. WHO. Physical Activity Promotion in Socially Disadvantaged Groups: Principles for Action. World Health Organisation, 2013
76. Siromaštvo, nezaposlenost i socijalna isključenost. Zagreb: UNDP, 2006.
77. Podrška sustavu socijalne skrbi u procesu daljnje deinstitucionalizacije socijalnih usluga, Ministarstvo socijalne politike i mladih, available at [http://www.mspm.hr/fondovi\\_eu/ipa\\_iv\\_razvoj\\_ljudskih\\_potencijala/projekti/usluge/projekti\\_u\\_tijeku/projekt\\_podrska\\_sustavu\\_socijalne\\_skrbi\\_u\\_procesu\\_daljnje\\_deinstitucionalizacije\\_socijalnih\\_usluga](http://www.mspm.hr/fondovi_eu/ipa_iv_razvoj_ljudskih_potencijala/projekti/usluge/projekti_u_tijeku/projekt_podrska_sustavu_socijalne_skrbi_u_procesu_daljnje_deinstitucionalizacije_socijalnih_usluga), unpublished date
78. Herbig B, Dragano N, Angerer P: Health in the long-term unemployed. *Dtsch Arztebl Int* 2013; 110(23–24): 413–9. DOI: 10.3238/arztebl.2013.0413



79. WHO. World Conference on Social Determinants of Health. Summary Report-All for Equity, Brazil, 2012
  80. WHO. Intersectoral Governance for Health in All Policies. Structures, actions and experiences. World Health Organization, on behalf of the European Observatory on Health Systems and Policies, 2012
  81. Kutnjak Kiš R, Najman Hižman E. Međimurska županija-zdrava županija, Programa "Rukovođenje i upravljanje za zdravlje u lokalnoj zajednici". Croatian Journal of Public Health (electronic journal), vol.7, number 23, 2010, available at <http://www.hcjz.hr/old/clanak.php?id=14296>
  82. WHO. Developing indicators for the Health 2020 targets. First meeting of the expert group Utrecht, the Netherlands, World Health Organization, 2012
  83. Kern J., Erceg M, Poljičanin T. Učinkovitost javnozdravstvenih nadzornih sustava. Acta Med Croatica, 64 (2010) 415-423
  84. Allen M at al. Working for Health Equity: The Role of Health Professionals. UCL Institute of Health Equity, 2013
  85. WHO. How health systems can address health inequities through improved use of Structural Funds. Copenhagen, WHO Regional Office for Europe, 2010
  86. Agencija za zaštitu okoliša. Odabrani pokazatelji stanja okoliša u Republici Hrvatskoj, 2012
  87. European Environment Agency. Environment and Human Health. Joint EEA-JRC report No5/2013. European Environment Agency, 2013, European Union, 2013
  88. Belović B., Buzeti T., Kranjc Nikolić T et al. Health promotion strategy and action plan for tackling health inequalities in the Pomurje region. Murska Sobotica: Zavod za zdravstveno varstvo; Brussels: Flemish Institute for Health Promotion, 2005
- References later added:
89. Znaor, D., 2009 Organic fruit and vegetables sector in Croatia: the way forward. Study commissioned by the German international cooperation organisation for sustainable development (GTZ).
  90. Kristiansen, P., Taji, A., Reganold, J. (2006): Organic Agriculture, A Global Perspective, CSIRO Publishing, Australia, CABI Publishing, Wallingford, UK
  91. S.Wright, D. McCrea (2000): Handbook of Organic Food Processing and Production, Second Edition (S.Wright, D. McCrea, Eds), CRC Press, New York



## 8. Partners in the ACTION-FOR-HEALTH Needs Assessment and other important steps in the creation of the Strategic Plan

We would like to thank the following partners for their contribution in the implementation of the situation analysis and the creation of the strategic plan: Verica Kralj, primarius MD, Tanja Ćorić, MD, Iva Pejnović-Franelić, MD, PhD, and Sandra Mihel, MD, from the Croatian Institute of Public Health; Ana Kralj, dipl. oec., from REDEA – Regional Development Agency Međimurje; Rusalka Majer, project manager from the Autonomous Centre – ACT Čakovec; Damir Kregar, dipl. ing., from Čakovečki mlinovi d.d. Čakovec; and Marina Kodba, dipl. soc., from the Croatian Employment Service – Regional Office of Čakovec.

For their enormous help and support in the development of the Strategic Plan and the organisation of the pilot implementation we thank Branislava Belović, MD prim.mag., Tatjana Kranjc-Nikolić, MD and asist.mag., as well as other experts from the project team of the National Institute of Public Health – the Regional Unit of Murska Sobota. Their experience in the development and implementation of the Health Promotion Strategy and Action Plan for Tackling Health Inequalities in the Pomurje Region, which they had made in 2005<sup>(88)</sup>, was of great help to us, for which we are indebted to them.

A big thank you to Međimurje County, its towns and municipalities, as well as a number of partners who have participated in the assessment of needs and possibilities in connection with the implementation of the Strategic Plan:

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CROATIAN EMPLOYMENT SERVICE, REGIONAL OFFICE OF ČAKOVEC. In a group meeting for the unemployed a short presentation of the project "ACTION-FOR-HEALTH" was given, followed by a brief summary of needs assessment. After a short discussion, those present filled out a semi-structured questionnaire (26 participants).