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*Strategies for inclusion and social cohesion in Europe from education*

**PRELIMINARY REPORT**

**INTERSECTIONS BETWEEN EDUCATIONAL POLICIES AND OTHER AREAS OF  
SOCIAL POLICY: SUCCESSFUL MIXED INTERVENTIONS**

**EDUCATION AND HEALTH**

Project 5 Work package 18

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## **1. Introduction: Presentation of the focus of the preliminary report**

In this preliminary report we analysed and described three mixed interventions in the fields of education and health. One mixed intervention focused on education, health and employment. This preliminary report is a part of the Project 5 Workpackage 18 of the Included project. The aim of Project 5 is *to analyse the mixed interventions between educational policy and other areas of social policy and to identify which are making steps forward to overcome social exclusion and build social cohesion in Europe (Annex I, p.5)*. The specific objective of Workpackage 18 is to review the intersections between educational policies and other areas of social policy.

Among mixed interventions those were selected that contribute to the improvement of health of people by educating people. The following mixed interventions described below could be considered good practices as they enhance social inclusion:

**Schools for Health in Europe Network** is a European initiative. The aim of SHE network is to deal with health promotion. Health promotion in a school setting could be defined as any activity undertaken to improve and protect the health of all school users. In 1993 Slovenia joined the European Network of Health Promoting Schools as the network was named until 2007. The characteristics of the Slovene network of Health Promoting Schools are the following: - Learning about health, which is integrated into other subjects (health is a crosscurricular topic); - Hidden curriculum (life at school should enhance health – regulations, climate, interpersonal relations, the organisation of school meals, extracurricular activities, and projects etc.); - The cooperation with parents, health and other specialised services and with a community.

**The Programme Mura** is a regional mixed intervention, which is implemented in the Pomurje region. This region is the most deprived region in Slovenia with the highest number of unemployed and low educated. Life expectancy is the lowest in any region. The aim of the programme Mura was to identify, develop, implement and strengthen best practices in the field of socioeconomic and environmental development for achieving better health and quality of life of people in the Pomurje region. The working priorities of the Programme Mura were the following: improving healthy lifestyles, increasing healthy food production and distribution, developing healthy tourism products and programmes, and preserving the natural and cultural heritage and reducing the ecological burden.

**The National Programme of Primary Prevention of Cardiovascular Diseases** is a national intervention. The aim of the programme is to intervene with the persons who have not been ill yet, but for whom one or more risk factors for cardiovascular diseases are characteristic. The Programme of Primary Prevention of Cardiovascular Diseases started to be implemented in Slovenia in 2002. The programme is one of the largest programmes of systematic prevention of chronic non-communicable diseases. Preventive screenings were made of adult population. The important element of the programme is professional counselling for the improvement of life style, which is performed by educated professionals. All the adults who are at risk to get cardiovascular diseases related to atherosclerosis have access to such counselling.

## **2. Methodology and the sources used**

In order to analyse the mixed interventions, the analysis of literature and the analysis of documents were made. We also had personal communications (the use of a telephone) with 2 persons in charge of the mixed intervention and an interview with a person in charge of or acquainted with all three mixed interventions.

The documents have been selected according to the following criteria:

- The descriptions they provide on the aims and actions implemented in the scope of the mixed intervention.
- The presentation of the results of mixed intervention and its success.

Schools for Health in Europe Network	
Documents and articles analysed	Information provided/relevance for the analysis
Pucelj, Vesna (2008). The report on the evaluation on the effectiveness of the Health Promoting Schools Project in individual schools. Ljubljana: National Institute of Public Health.	Results, actions implemented
Pucelj, Vesna (2010). Evaluation of Effectiveness of Health Promoting Schools. Ljubljana: National Institute of Public Health. (unpublished article)	Results, actions implemented
Scagnetti, Nina (2010). The report on the work of Health Promoting Schools 2009/2010. Ljubljana: National Institute of Public Health.	Actions implemented
The website of the Schools for Health in Europe Network	Describes the Schools for Health in Europe Network
The website of the National Institute of Public Health	Aims, actions implemented
2 Telephone conversations with the persons responsible for the programme in Slovenia	Actions implemented
Interview with the person responsible for CINDI Slovenia	Aims, actions implemented
The Programme Mura	
Buzeti, Tatjana in Maučec Zakotnik, Jožica (2008). <i>Investment for Health and Development in Slovenia. Programme Mura</i> . Murska Sobota: Centre for Health and Development.	Aims, actions implemented, areas tackled, results
Interview with the person responsible for the project	Aims, actions implemented, results
National Programme of Primary Prevention of Cardiovascular Diseases	
Various articles in the miscellany: Sanja Vrbovšek, Nedeljka Luzar, Jožica Maučec Zakotnik (ed.) <i>Together we protect and enhance health – what did we achieve in the first eight years?</i> The miscellany of annual meeting of the performers of the National Programme of Primary Prevention of Cardiovascular Diseases 2009. Ljubljana: National Institute of Public Health.	Aims, actions implemented, resources, results
A report on the implementation of health education for the adults in the health education centres in 2009 – The programme Counselling for health	Actions implemented
Interview with the person responsible for CINDI Slovenia	Aims, actions implemented

Website of CINDI Slovenia	Aims, actions implemented
The website of the National Institute of Public Health	Actions implemented

### **3. Main results**

#### **3.1. Mixed intervention I. Schools for Health in Europe Network**

##### **A. Introduction and implementation of the mixed intervention**

SHE network is the Schools for Health in Europe network. SHE network aims to support organisations and professionals to further develop and sustain school health promotion in each country by providing the European platform for school health promotion. The network is coordinated by NIGZ, a WHO Collaborating Centre for School Health Promotion.<sup>1</sup> Until 2007 the project was named the European Network of Health Promoting Schools, which was a project initiated by World Health Organisation (WHO), Council of Europe and European Commission. 43 countries cooperated in this European network with approximately 500 schools, thousands of teachers and more than 400.000 students. In many countries national or regional networks exist, which connect further 5000 schools.

The aim of SHE network is to deal with health promotion. “Health promotion in a school setting could be defined as any activity undertaken to improve and/or protect the health of all school users. It is a broader concept than health education and it includes provision and activities relating to: healthy school policies, the school’s physical and social environment, the curriculum, community links and health services”.<sup>2</sup>

In 1993 Slovenia joined the European Network of Health Promoting Schools with 12 pilot schools. The Slovenian Ministry of Health and the Ministry of Education and Sport support the project, The National Institute of Public Health implements the project, it is a national support centre of Health Promoting Schools.

<sup>1</sup> [www.schoolsforhealth.eu](http://www.schoolsforhealth.eu) (7. 3. 2011)

<sup>2</sup> [http://ws10.e-vision.nl/she\\_network/upload/pubs/Promoting\\_Health\\_In\\_Schools\\_from\\_Evidence\\_To\\_Action.pdf](http://ws10.e-vision.nl/she_network/upload/pubs/Promoting_Health_In_Schools_from_Evidence_To_Action.pdf) (7. 3. 2011)

In 1997 the Slovene network of Health Promoting Schools was enlarged for the first time, in 2008/09 it was enlarged for the 2nd time. In this school year all Slovene primary, secondary schools and secondary school children halls of residence were invited to participate in the project. Those who fulfilled the criteria for participation in the network were accepted. These criteria were: the support of the school government and more than half of the school staff, the formation of the school project team (the representative of school government, pedagogical staff, students, parents, health and dental health service and local community). Another criteria was that a school should devote a part of activities to health promotion (it should organise at least one seminar for all school staff per year and interest activities connected to health for students). In 2010, 268 schools cooperated in the network, which comprised 43% of all Slovene schools (212 primary schools, 49 secondary schools and 7 secondary school children halls of residence).<sup>3</sup>

The characteristics of the Slovene network of Health Promoting Schools:

- Learning about health, which is integrated into other subjects (health is a crosscurricular topic);
- Hidden curriculum (life at school should enhance health – regulations, climate, interpersonal relations, the organisation of school meals, extracurricular activities, and projects etc.);
- The cooperation with parents, health and other specialised services and with a community.

The goals of the Slovene network of Health Promoting Schools are similar to the following goals of the Schools for Health in Europe network. The Health Promoting Schools:

1. Actively support the positive self-image of all students, it will be shown that all students can contribute to the life in school.
2. Take care for the versatile development of good interpersonal relations among teachers and students, among teachers themselves and among students.
3. Make an effort that teachers, students and parents will get acquainted with the social goals of schools.
4. All the students will be encouraged to do various activities so that they will form different initiatives.
5. Improve school environment.
6. Enhance good relations between school, home and a community.

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<sup>3</sup> [www.ivz.si](http://www.ivz.si) (3. 2. 2011)

7. Take care for the development of the relations between primary and secondary school in order to prepare harmonized curriculum of health education.
8. Actively support health and well-being of their teachers.
9. Take into consideration the fact that teachers and school staff are role models for healthy behaviour.
10. Take into consideration the complementary role that school diet has in the curriculum of health education.
11. Cooperate with the specialized services in the community which can advise them and help in health education.
12. Maintain the in-depth relations with the school health and dental health services so that the latter will be able to actively support them regarding the curriculum.

The tasks of the participating schools are to plan the activities in the scope of the project twice a year. The team of the Institute of Public Health of the Republic of Slovenia meets at least three times a year with the leaders of school teams, their collaborators and regional coordinators for health education. Various topics on health are discussed at the meetings, the schools are informed about the events and activities related to health, the initiatives are planned together for the solution of problems at schools. Together with schools a common idea or topic is selected, which is dealt with in-depth every year. The following topics were dealt with in-depth in the previous years:

- Alcohol and youth (2000/01);
- Mental health in school (2001/2002);
- Movement and nutrition (2 years) (2002/03; 2003/2004);
- Quality spare time (2005/06);
- Mental health, nutrition and movement (2006/07);
- Healthy life style (2007/08);
- Healthy under the sun (2008/08)
- Relations.si (2009/10).<sup>4</sup>

Beside the aforementioned selected topics, schools can choose to implement their specific projects in relation with their needs and opportunities.

Since 2007/08 to 2009/10 the gradual transfer of the coordination of the Health Promoting Schools project began to the regional Institutes of Public Health. The Institute

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<sup>4</sup> For more information see [www.ivz.si](http://www.ivz.si) (3. 2. 2011)



of Public Health of the Republic of Slovenia remains the coordinator of the project. 235 primary and secondary schools implemented 2857 activities, each schools 12 on average.<sup>5</sup> Most of the topics focused on mental health, healthy food, enhancement of healthy life-style, physical activity and ecology. Last year the most frequent topics were physical activity, healthy food, ecology, mental health and healthy life-style. These are therefore recurrent topics, however, the level of frequency changes. In 2009/10 the most common goal was to encourage students to versatile initiatives and support their self-image, to enhance good relations among students and teachers, to take care for the development among students and teachers, to take care for the development of good relations between school, home and community and to take care that school staff function as role models. The activities were targeted at children, the method of practical work was most frequently used. More than half of the activities lasted for a whole year.

## **B. Analysis of results and success achieved**

Each year the evaluation is made, the school teams evaluate each activity twice. The assessment of success is based on the criteria which are defined for each activity separately. In the school year 2009/2010 the total number of activities was 2857, 99 (3.5%) of them remained unassessed. In the report on the work of Health Promoting Schools 2009/2010<sup>6</sup> it is written that some activities remain unassessed, because the school teams sometimes encounter difficulties in assessing the implementation of individual tasks, because the subjective assessments of individual members differ. Among the assessed programmes most of the activities (91.3%) were successfully implemented (assessed with 4 or 5 with 5 being the highest grade), and 6.2% of the activities were assessed as successful (assessed with 3). Only 0.4% of the activities were assessed as unsuccessful (assessed with 2 or 1) and 2.2% of the activities were not implemented at all.<sup>7</sup>

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<sup>5</sup> For more information see [www.ivz.si](http://www.ivz.si) (3. 2. 2011)

<sup>6</sup> [www.ivz.si](http://www.ivz.si) (3. 2. 2011)

<sup>7</sup> For more information see [www.ivz.si](http://www.ivz.si) (3. 2. 2011)

In the school year 2006/7 the project was evaluated on two levels: the effectiveness of the project in particular schools was evaluated by a school team, besides, the meaning of health promotion for the pupils was assessed.

The aim of the assessment was to discover the possibilities for including health promotion in the school environment, to determine the effectiveness of the project in specific schools of the National Health Promoting Schools Network, to find out to what extent are the participating schools acquainted with health promotion concepts and to determine the indicators of the effectiveness of the project.

For the teachers to assess the project, the questionnaire was developed with 46 questions and sent to all participating schools. The aim was to assess the level of the inclusion of health promoting principles in the school environment.<sup>8</sup> At the time of the evaluation 130 organizations participated in the project (100 primary schools, 24 secondary schools, 5 secondary school children halls of residence and the School for Deaf and those with Hearing Problems). The questionnaire was submitted to the leaders of the team of Health Promoting School, the response was 63.8%. The results of the evaluation showed that the teachers are satisfied with the activities of the project. The average grade of the successfulness of the project was 3.97% (1-not successful, 5-very successful). The following elements were identified in the questionnaire as contributing to the success of the project: work on interpersonal relations between all who cooperate in the educational process: teachers, students and parents. Other important elements for the success of the project are that it is supported by the leadership of the school and that more than half of the school staff are involved in the project. Besides, systematic planning and evaluations of activities are needed.

In order to implement the evaluation with the students, 49 workshops were organised in 20 schools. The goal of the workshops was that the students answer the question Why is my school a healthy school? The answers of students can be divided into the following topics:

- Nutrition (“we eat more fruit and vegetables...we can always eat fruit...”)
- Physical activity (“we do a lot of exercise...”)
- Interpersonal relations (“friendship, good relations with teachers, teachers are kind, we have a nice time”...)

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<sup>8</sup> For more information see Pucelj (2010).

- Physical environment (fresh air, waste reclamation, ecological attitude...)
- Hygiene (regular washing of hands, clean school and its environment)
- Other

The most frequent answers were about nutrition and physical activity, which is not surprising, because the schools prepared many activities connected to these fields.

The results of the evaluation of the project Health Promoting Schools showed that it is an efficient method of health promotion at schools (Pucelj 2010).

In 1998 the project was awarded by the World Health Organisation (the Regional Office for Europe) as the best project for the health promotion for children and women.

### **C. Conclusion**

The project Schools for Health in Europe Network is related to the fields of education and health. In the scope of this project several initiatives were undertaken in Slovenia, among them the project Health Promoting Schools.

The project Health Promoting Schools recognizes learning as an important factor of health. Its assumption is that in order to take advantage of their full learning potential, children need to be healthy. School is an ideal space for health promotion as it enables the access to the whole population of children at an early age, when the behaviour detrimental to health has not been expressed yet. At the same time school enables the infrastructure for the implementation of health promoting programmes (Pucelj 2008).

Another important element of the project is permanent education of teachers and health workers in the field of health. More than 145 seminars for more than 4000 teachers were organized.<sup>9</sup>

The results of the evaluation of the project Health Promoting Schools showed that it is an efficient method of health promotion at schools (Pucelj 2010). The evaluations were done with the teachers who are included in the project and students. It would also be

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<sup>9</sup> For more information see [www.ivz.si](http://www.ivz.si) (3. 2. 2011)

beneficial, if the evaluation is done also with the parents beside teachers and students. Namely, it would be important to assess if the parents perceive that the students get the habits of healthy way of life at school.

Although there are many schools included in the Health Promoting Schools project, it would be important that all schools in Slovenia get involved in the project. This is also the goal of the project, that it transfers the experience of Health Promoting Schools to the national level. As health promotion is important for each student, it is of utmost importance that the project realizes this goal.

### **3.2. Mixed intervention II. The Programme Mura**

#### **A. Introduction and implementation of the mixed intervention**

The programme Mura<sup>10</sup> is implemented in the Pomurje region of North-Eastern Slovenia, which is among the most deprived areas of Slovenia as regards health, social and economic indicators. Besides, the unemployment in this region is the highest in Slovenia (nearly 20% in certain towns)<sup>11</sup>, there is the highest percentage of long-term unemployed in Slovenia and the GDP is the lowest. “Long-term unemployment is linked to the low level of education. As income, employment and education are determinants of health, with more disadvantaged populations often having higher rates of morbidity and mortality, it is no surprise that the population has relatively poor health. Life expectancy is the lowest of any region, and the number of years of lives lost per 1000 people under 65 is the highest” (Buzeti, Maučec Zakotnik 2008: 11).

The programme Mura is the initiative of the Ministry of Health, it is also called Investment for Health and Development. It “...represents an active integration of health policies into economic development, with an aim to reduce the differences in health and to connect various partners to foster the development of this region” (Mazej Kukovič 2008: 6). The programme Mura is a regional initiative.

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<sup>10</sup> The Programme Mura is named after a river Mura which is the main river of the Prekmurje region of North-Eastern Slovenia. The river Mura is also the border river between Croatia and Slovenia.

<sup>11</sup> [www.stat.si](http://www.stat.si) (30. 3. 2011)

According to Buzeti and Maučec Zakotnik (2008) the country's current and future economic and social development will depend to a significant extent on effective measures to promote and sustain the health of the inhabitants of Slovenia. The Programme Mura is an endeavour in this direction. Similar was also the opinion of WHO Commission which wrote in Macroeconomics and Health (2001) that health improvement is a key factor to help countries to move out of chronic poverty.

The aim of the programme Mura was to identify, develop, implement and strengthen best practices in the field of socioeconomic and environmental development for achieving better health and quality of life of people in the Pomurje region.

Co-ordination mechanisms were organised at the national and regional levels between the governmental project group for health and sustainable development in Pomurje, the Institute of Public Health Murska Sobota, the Centre for Health and Development which was established within the Institute of Public Health Murska Sobota and the Regional Programme Council. In 2008 25 organisations were actively involved in the project. The WHO Regional Office for Europe provided technical support. The Ministry of Health financed the project, however, there were also some EU funds, such as Phare and Interreg.

The Programme Mura's objectives are the following:

1. To spread knowledge on the economic, social and behavioural determinants of health and quality of life;
2. To make people aware of and accountable for their health and to equip them to take adequate actions through health promotion programmes;
3. To improve the regional state of health indicators and the quality of life of the inhabitants of Pomurje;
4. To identify the natural, entrepreneurial and human resources of the region;
5. To identify and to remove main obstacles for better health and socioeconomic development of the region;
6. To improve the network of professional and university colleges in the region;
7. To reduce ecological burdens in the region;
8. To encourage economic and social development by promoting and supporting strategic partnerships and programmes in the region (Buzeti, Maučec Zakotnik 2008: 34).

The working priorities of the Programme Mura were the following:

1. Improving healthy lifestyles;
2. Increasing healthy food production and distribution;
3. Developing healthy tourism products and programmes;
4. Preserving the natural and cultural heritage and reducing the ecological burden.

The book on the Programme Mura by Buzeti and Maučec Zakotnik (2008) describes the activities of the programme Mura between 2001-2007.

In 2001 the “Let’s Live Healthily” health promotion programme was piloted in the municipality Beltinci in eight communities, in 2008 it operated in 50 communities. The “Let’s Live Healthily” health promotion programme focuses on specific risk factors and a reduction in heart disease, cancer, diabetes and hypertension. “The goal of the programme is to improve health and to enable the inhabitants of rural communities to take active role in health promotion and and protection” (Buzeti, Maučec Zakotnik 2008: 13).

In 2004, a consortium, of fruit and vegetable producers was established as well as ecological centres supporting organic farming to strengthen the supply of the Pomurje region. Those activities were supported by awareness-raising programmes in the field of healthy nutrition.

In the field of higher education new programmes were developed as for example Agricultural Management and Biotechnics and Management of Tourism. Besides, new regional Research and Education Centre was developed. The problem of school dropouts was tackled by introducing healthy lifestyle topics. As regards the development of tourism, initiatives were developed to increase the infrastructure of ecotourism, to develop health-promoting and culinary products. The region has developed health spa tourism and at the same time it is developing as a cycling and walking tourist destination. In the field of ecology the efforts focused on supporting and advocating for the construction of a regional drinking water supply system and the education of people on nature preservation and environmental protection.

## B. Analysis of results and success achieved

According to the interview with dr. Jožica Maučec Zakotnik<sup>12</sup> the Programme Mura helped people in the Pomurje region to change their life style into more healthy one. It was emphasised in the interview that in the years following the introduction of the programme, the people of Pomurje started to use more vegetables and to drink less alcohol, besides they started to smoke less.

The activities of the Programme Mura were evaluated with a particular focus on assessing changes in risk factors: unhealthy eating habits and a lack of physical activity.

One of the goals of the Programme Mura was to educate people about healthy life style. Therefore many discussions on the topic of healthy food were organised in which many people participated. The evaluations of “Let’s live healthily” showed increased knowledge, skills and awareness of healthy lifestyles and increased physical activity levels. Besides, the results of the evaluations show sustained nutritional changes among the majority of participants as it is shown in the table below:

Percived change of lifestyle (self-reported)	% Participants
Nutrition (any change)	95%
Consumption of more vegetables	67%
Consumption of more fruit	53%
Consumption of less fat	64%
Consumption of less salt	36%
Increased physical activity	36%
Self-rated increased knowledge about healthy lifestyles	65%

Source: Institute of Public Health Murska Sobota (in Buzeti, Maučec Zakotnik 2008: 44).

Beside sustained nutritional changes, the participants reported on sharing the information about the programme with their friends, family members and neighbours. Additionally, self-support groups for physical activity (exercise, walking, biking) were established in all 50 communitis where the programme was running. Local communities organized other activities as well.

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<sup>12</sup> 3. 2. 2011 at the head office of the CINDI programme, Ljubljana.

The following results of the evaluation of the Programme Mura were described in Buzeti, Maučec Zakotnik (2008). 601 adults aged 25-64 participated in the survey (response rate: 61%) in the CINDI Health Monitor Survey 2001 and 2004. For statistical assessment chi-square test was used. There were considerable improvements in lifestyle habits between the two surveys. Healthier eating habits were recorded in 2004. “Results of the National CINDI Health Monitor Survey carried out in 2001 and 2004 indicate positive changes in lifestyle in the Pomurje region. People increased their consumption of fresh vegetables, used less animal fats and more olive oil in cooking, and consumed fewer fried foods, sweet, beverages, and less added salt” (Buzeti, Maučec Zakotnik 2008: 15).

The following are the changes after 2.5 years of starting the global intervention programme: the results of the CINDI Health Monitor Survey in 2001 and 2004 in the Pomurje region:

	%			
	2001	2004	Difference	p
<b>KIND OF FAT FOR FOOD PREPARATION</b>				
Olive oil	7.1	15.2	8.1	<0.0005
Vegetable oil	59.6	16.4	1.8	
Margarine	1.2	1.3	0.1	
Butter	1.2	0.4	-0.9	
Lard or other animal fat	30.3	20.8	-9.4	
No fat at all	0.6	0.9	0.3	
<b>FREQUENCY OF CONSUMPTION OF FRIED FOOD</b>				
Never	2.7	3.6	0.9	<0.0005
1-3x a month	34.4	50.4	16.0	
1-3x a week	52.0	42.2	-9.8	
4-6x a week	8.9	3.3	-5.6	
Every day	2.1	0.5	-1.6	
<b>FREQUENCY OF CONSUMPTION OF SOFT DRINKS</b>				
Never	8.5	13.19	5.3	<0.0005
1-3x a month	15.5	20.8	5.3	
1-3x a week	17	21.0	3.9	
4-6x a week	16	15.3	-0.7	
Every day	42.9	29.1	-13.8	



Source: Buzeti, Maučec Zakotnik (2008: 52).

In the Municipality Beltinci they piloted the programme “Let’s live healthily” in 2001 and one year later they made a follow up study of a random sample of 303 inhabitants aged 25-64. The results of the study showed significant favourable changes both in lifestyle and biological factors. While 42.4% of the inhabitants of the Municipality Beltinci used lard for food preparation before intervention, only 27.2% of the inhabitants used lard after the intervention. That means that 39,1% of those who were using lard for food preparation before the intervention, changed it for vegetable oils.

The positive results of the Mura programme can also be seen in changed blood pressure, blood sugar and holesterol levels. Namely, the one year follow-up community intervention study in the Municipality Beltinci showed the following results:

	N	Measurement	Mean	St.dev.	% of change in mean value	P
Systolic BP	155	1	138.31	18.85	-4.7%	<0.0005
		2	131.86	15.42		
Diastolic BP	155	1	84.74	10.92	-4.1%	<0.0005
		2	81.23	9.57		
Cholesterol (total)	152	1	5.47	1.16	-4.9%	<0.001
		2	5.20	0.96		
BMI	150	1	28.18	4.09	-3.2%	<0.005
		2	27.27	4.04		
FI	51	1	89.47	21.71	+9.7%	<0.003
		2	98.18	21.78		

Source: Buzeti, Maučec Zakotnik (2008: 53)

We can conclude that the results of the evaluations show that the health promotion programme Mura has been successful as it contributed to more healthy life style of people in the Pomurje region and their social cohesion.

### C. Conclusion

The programme Mura aims at reducing inequalities in health. It is related to the fields of education, health and employment.

The programme Mura was targeted at the most depriveleged region of Slovenia, where unemployment is the highest, the GDP the lowest, health problems the biggest and education of the people is the lowest in Slovenia. Therefore there was an urgent need for

such a programme in the Pomurje region. It was beneficial for the Programme Mura that it involved various sectors in its endeavours to improve the health of the inhabitants of the Pomurje region: the Ministry of Health, Education, Agriculture and Labour. “The greatest challenge was in identifying common interests between the sectors and jointly establishing goals in a way that all partners saw a win-win or win-neutral situation. The health sector (at national and regional levels) needed to increase its intelligence for identifying and communicating potential gains in other policy areas and in using tools for policy scanning for gains in health and other services” (Buzeti, Maučec Zakotnik 2008: 57).

The results of the evaluations of the programme Mura showed that it contributed to a more healthy lifestyle in the Pomurje region. After more than three years of the implementation of the programme people in this region increased their consumption of fresh vegetables, used less animal fats and more olive oil in cooking, and consumed fewer fried foods, sweet, beverages, and less added salt. The study also shows favourable changes in biological risk factors such as systolic blood pressure, diastolic blood pressure, the cholesterol level, BMI etc.

The Programme Mura provides valuable experience as a mixed intervention between education, health and employment also for other regions of Slovenia and other countries, which can learn much from the programme. It is also important that the Programme Mura would continue in the deprived region of Pomurje also in the future.

### **3.3. Mixed intervention III. National Programme of Primary Prevention of Cardiovascular Diseases**

#### **A. Introduction and implementation of the mixed intervention**

The Programme of Primary Prevention of Cardiovascular Diseases is a national programme. It is a result of the research on risk factors for chronic diseases which started in 1991. In 1996/1997 there was another research on biological risk factors connected to cholesterol level etc., and behavioural risk factors pertaining to smoking, stress, alcohol and unhealthy nutrition. It is a recognized fact in medicine that behavioural factors influence biological factors. On the basis of the research in 1994 an integrative

and preventive approach was formed.<sup>13</sup> In 2001 the holistic program of primary prevention of cardiovascular diseases was made. The aim of the programme is to intervene with the persons who have not been ill yet, but for whom one or more risk factors for cardiovascular diseases are characteristic. The Programme of Primary Prevention of Cardiovascular Diseases started to be implemented in 2002. In this programme men who are between 35 years old and 65 years old are included, as well as women who are between 45 years old and 70 years old. Until the end of 2008 nearly 600,000 preventive screenings were made (Fras, Maučec Zakotnik 2009). According to Fras et al. (2009) the data show the wide range of some major independent risk factors for cardiovascular diseases in adult population in Slovenia. Especially those risk factors which are connected to unhealthy life-style (obesity, the lack of physical activity) are extensively spread in the regions of Southeastern Slovenia.

Key goals of health policies in the field of prevention of cardiovascular diseases are the following:

- Prevention, identification and treatment of risk factors for cardiovascular diseases and the improvement of the profile of those at risk in general population;
- early identification and efficient treatment of acute forms of cardiovascular diseases (especially those that are based on atherosclerosis);
- prevention of the repetition of cardiovascular events, which means to assure the best possible quality of life and long-term survival to the people who experienced acute form of cardiovascular disease.

It is envisaged that the Programme of Primary Prevention of Cardiovascular Diseases will have long-term effects, which do not occur over night. The costs of the programme are 1.5 million EUR per year (Fras, Maučec Zakotnik 2009). In the programme 61 health education centres are included around Slovenia, the price of the treatment of those who would get cardiovascular diseases is much higher. The results of the programme show that in order to increase the effectiveness of the measures for the prevention of emerging and developing the complications related to diseases related to atherosclerosis, the whole adult population after 25 years of age should be screened regularly.

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<sup>13</sup> The interview with dr. Jožica Maučec Zakotnik, the head of the CINDI Slovenia, National Institute of Public Health, 3. 2. 2011, Ljubljana.

The important element of the programme is professional counselling for the improvement of life style, which is performed by additionally educated professionals. All the adults who are at risk to get cardiovascular diseases related to atherosclerosis have access to such counselling. The aforementioned counselling is performed in small groups in 61 health educational centres which operate in each community health centres. Until 2008 around 200,000 people participated in these activities of health education (Fras, Maučec Zakotnik 2009).

In the scope of health education 543 workshops were organised in 2002, in the following years their numbers increased. In 2003 2025 workshops were organised, in 2004 27030 workshops, in 2005 2978 workshops, in 2006 3283 workshops, and in 2007 3893 workshops (Fras et al. 2009). Until 2008 the funds were allocated mainly for workshops, since 2008 the financing also included beside workshops the promotion of the programme, health promotion in media, in local communities and other environments.

The coordination and the leadership of the programme is performed by CINDI Slovenia, which operates in the scope of the National Institute of Public Health.

## **B. Analysis of results and success achieved**

The Programme of Primary Prevention of Cardiovascular Diseases is available to all adults in Slovenia. Until 2008 nearly 600,000 preventive screenings were made (Fras, Maučec Zakotnik 2009). Thus the programme is one of the largest programmes of systematic prevention of chronic non-communicable diseases. It is the opinion of Fras and Maučec Zakotnik (2008) that in spite of its large scope of work, the programme is not so well-known in Slovenia as other programmes such as SVIT, DORA and ZORA. Not enough has been done regarding the promotion of the programme. This fact is detrimental to the programme itself. It is estimated for European Union that 10% of the health costs are due to coronary diseases (ibid).

Fras and Maučec Zakotnik (2009) also write about the success of the programme. According to them the improvement of prevention means that there are less new cases of diseases and consequently less deaths. This is important especially for Slovenia, because cardiovascular diseases still represent approximately 38% of all the causes of death (Fras et al. 2009). Besides, the treatment of the patients with acute cardiovascular events has improved, especially the complications with diseases of coronary arteries. In the field of treatment of acute cardiac arrest, Slovenia is on the second to third place in

Europe concerning the number of immediate coronary artery dilatations. The positive results of the programme are also revealed by the study of Euro Consumer Powerhouse which was written in 2008. They researched various aspects of the treatment of cardiovascular diseases: the informing of patients and public, preventive activities, the use of drugs, self-treatment, the level of mortality etc. Among 28 EU countries, Slovenia is on the 8th place. Fras nad Maučec Zakotnik (2008) compare this result to the study on general condition of national health systems where Slovenia was on the 20th place.

“The cooperation of the general physician and his or her team and the professionals of the health education centres in the preventive treatment of persons at risk due to the risk factors and chronic diseases, enables us to achieve effective changes of life style and the improvement of health of the population at risk...” (Fras et al. 2009:13).

### **C. Conclusion**

The Programme of Primary Prevention of Cardiovascular Diseases is a national programme. Its benefits lie in the fact that this preventive programme is universally available to all adults in Slovenia. Other countries also have similar programmes, however, they are usually not available to all adults in a country and the importance of wide accessibility of the programme to all adults is something that other countries can learn from the programme.

The networks of interventional health education centres represent an important resource for the implementation of the Programme of Primary Prevention of Cardiovascular Diseases. This network enables more efficient and more qualitative prevention of cardiovascular diseases (Fras et al. 2009).

Although the results of such a programme of prevention of cardiovascular diseases can not be fully seen in some years, because they are long-term, the research results show that the programme is beneficial as it improves the health of people and reduces the number of deaths. Namely, early prevention of diseases is crucial for reducing diseases and deaths.

The aforementioned national programme envisages accurate recording of data gathered after preventive screenings. This data is gathered in the register, however, according to Fras and Leskošek (2009) this register needs to be upgraded so that it will include a register of all the patients with cardiovascular diseases. Thus labels of risks will be made

which are needed to improve the effectiveness of this prevention programme. The efficient information system thus has an important role in the prevention of cardiovascular diseases.

#### **4. Discussion and conclusion**

All three mixed interventions described in the report: Schools for Health in Europe Network, the Programme Mura and National Programme of Primary Prevention of Cardiovascular Diseases represent efficient mixed interventions between the fields of education and health, which contribute positively to the health promotion and to the improvement of health in Slovenia.

For the first mixed intervention described, local initiatives are characteristic such as Health Promoting Schools, for example. Although the project is spread to many schools in Slovenia, it would be important that the project becomes national and reaches all the Slovene schools. The second mixed intervention described the Programme Mura, which is a regional initiative. Although the Pomurje region where the programme is implemented is a deprived area with the highest number of unemployed and low educated and thus it is important that the programme was piloted and implemented in this region, its results show that it would be beneficial for Slovenia if it is implemented in other Slovene regions as well. The third intervention The Programme of Primary Prevention of Cardiovascular Diseases is a national programme, its benefit beside other things lie in the wide access to the programme – it is available to all adults.

It is evident from the success of the three mixed interventions described that the precondition for efficient preventive health promotion programme is the cooperation of WHO and other crucial international organisations with the national ones together with the involvement of local community and civil society. It is important to create networks of institutions that cooperate and act preventively. Namely, only such efficient networks can guarantee that all people have equal access to preventive activities and health promotion. In this way the inequalities in health are reduced.

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