HEALTH PROMOTION AND DISEASE PREVENTION A Handbook for Teachers, Researchers, Health Professionals and Decision Makers						
Title	Implementation of the New Public Health Principles: Case Study of Montenegro					
Module: 1.9.5	ECTS: 0.25					
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Key words	public health, Montenegro, health indicators, health care system, health promotion, healthy life style, health policy					
Learning objectives	 Presenting situation in the field of public health in Montenegro. Description of health policy development in the future Basic problems in population health status related to life styles 					

Abstract Image: Constraint of the second s	 According to the survey in 2003, 617,749 of inhabitants live in the Republic of Montenegro, and 62% of them live in urban area. Since 1950, changes have been marked in rates of demographic indicators especially significant for the presentation of getting population older, on the territory of Montenegro. The tendency of the rate decrease of born alive, of vital index and increase of expected life's length are evident, as well as the average age of the population and the index of getting older of the population. Development of the new public health is priority in health policy in Montenegro and Institute of Public Health is the base for the implementation of principles in new public health as an ethical issue which is related to health expenditures, priorities and social philosophy. Development of the public health policy in Montenegro has the next priorities: primary health care reform process and developing the new doctor's model; health promotion and disease prevention; modification of the life style: Increasing physical activity, good eating habits and safe food, reducing tobacco smoking, harmful alcohol consumption, drug use prevention; improving social security and reduction poverty; political power, influence and participation - democratic rights for all groups in society, participation in the political decisionmaking process; creating secure and good conditions for health care of children and young people; creating secure and good conditions for health care of women; healthy environment and the provision of safe products; reducing the spread of infectious diseases and promoting safe sexual behaviour; reducing the spread of infectious diseases and promoting safe sexual behaviour; reducing and processing of data about health status of population.
Teaching methods	Methods of interactive education.
Specific recommendations for teachers	 work under teacher supervision/individual students' work proportion: 30%/70%; facilities: a computer room; equipment: computers (1 computer on 2-3 students), LCD projection equipment, internet connection; target audience: master degree students.
Assessment of students	Assessment is based on oral exam

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Theoretical background

For accomplishing this module properly, it is necessary first to recapitulate what the main characteristics of the new public health are (1-4), especially the health promotion characteristics (5).

New public health

The main characteristics of the new public health are:

- health promotion with a key objective to improve health and social welfare;
- primary and secondary prevention with a key objective to reduce specific determinants of diseases and risk factors;
- tertiary prevention with a key objective to set targets based on the size of the problem, the feasibility of successful intervention in a cost-effective way.

Health promotion

Health promotion is the process of enabling people to exert control over the determinants of health and thereby improve their health and practical implementation of new public health. Main focus in health promotion is related to the determinants of health, especially to the non-health factors associated with life styles. Health promotion characteristics are:

- responsibility for all;
- focus on the global population;
- emphasis of the prevention, especially the primary prevention;
- aimed to the most important socio-economic determinants and risk factors;
- multidisplinarity;
- partnership with population;
- creating the mechanisms for rapid response on great health threats.

Health promotion is conceptually based on the Ottawa Charter (6) which consists of 5 key strategies:

- building healthy public policy,
- creating supportive environments,
- strengthening community action,
- · developing personal skills,
- reorienting health services

This approach has so far showed extremely good results, one of them being North Karelia, Finland project (7).

Case study – Implementation of the New Public Health Principles: the Case of Montenegro

The Government of the Republic of Montenegro together with public health experts from this country, and with the help of international public health experts, is implementing in the present time the new public health principles in the country (8-14), since the demographic trends and trends of health indicators were worrying (15-18).

General country profile

The Republic of Montenegro is located in the south of the Balkan Peninsula and has the area of 13.812 km². There is the contact to the Adriatic-Mediterranean geographic area on one side, and on the other side it is connected over the Pannonian basin to the Middle Europe and the world.

Although Montenegro belongs to the Mediterranean group of countries, it could be described as a mountainous country, since mountains over 1000m² of height above sea-level take even 60.5% of its territory.

The Montenegro relief has its own characteristics, and three zones can be easily noticed (Montenegro has no administrative division into regions), that is to say:

- the south part or the Montenegro coast;
- the middle part, and
- the north part or the Mountain area.

Demographic characteristics of Montenegro

According to the survey in 2003, 617.749 of inhabitants live in the Republic of Montenegro, and 62% of them live in urban area. The data from the previous survey in 1991 showed that 591.269 of inhabitants lived in the Republic of Montenegro in 1991, that is to say, that the population growth by the rate of 104,5 was registered in this 10-year period. The most significant index of population growth compared to the previous period in 1991 was registered in municipalities of Budva (135.8), Herceg-Novi (122.2), Tivat (120.9), Podgorica (115.9), Bar (115.8) while municipalities in the north of the Republic of Montenegro register mostly a negative growth index.

More than 27% of the whole population of the Republic of Montenegro lives in Podgorica that is the cultural and administrative centre of the country.

According to the official data from the survey in 2003, speaking of total number of inhabitants who live in Montenegro, the most numerous are the Montenegrins, who participate in general population structure with 41%, then the Serbs with 30%, then the Moslems with 4%, the Bosnians with 9%, the Albanians with 5%, the Croats with 1%, and the rest with 1.25%. According to these data, the Romas are represented with 0.43% (the researches of the Roma centre for strategy, development and democracy from Podgorica, state that around 3% of people of the Romany ethnic community live in Montenegro).

According to the data of the Commissariat of displaced people, 31,288 of displaced people and refugees have lived in Montenegro since September 2003, which is 4, 65% of the total number of inhabitants of the Republic (Table 1).

 Table 1. Basic indicators of the natural moving of population of Montenegro in 1991, 2001 and 2002

	YEAR							
INDICATOR	1991		2001		2002			
	NUMBER	RATE	NUMBER	RATE	NUMBER	RATE		
Natality	9606	15.6	8829	13.3	8499	12.8		
Mortality	3970	6.4	5431	8.2	5513	8.3		
Infant mortality	108	11.2	129	14.6	92	10.8		
Natural growth	5636	9.1	3398	5.1	2986	4.5		
Vital index	9606/3970	241.7	8829/5431	162.6	8499/2986	154.2		

Since 1950, changes have been marked in rates of demographic indicators, especially significant for the presentation of getting population older, on the territory of Montenegro. The tendency of the rate decrease of born alive, of vital index and increase of expected life's length are evident, as well as the average age of the population and the index of getting older of the population.

Organisation of health care system in Montenegro

Health Care System in Montenegro is organised as follows:

- Parliament;
- Government;
- Ministry of Health;
- Health Insurance Fund;
- Medical Chamber, Dentistry Chamber, Pharmaceutical Chamber;
- Medical Association:
 - Primary level of health care: health centres, health stations, private health organizations and pharmacies which are in the process of reform (new model of chosen doctor).
 - Secondary level of health care: general hospitals, special hospital
 - Tertiary level of health care: Clinical Centre, Institute of Public Health and other institutes.

Development of the new Public Health is priority in health policy in Montenegro and Institute of Public Health is the base for the implementation of principals in new public health as an ethical issue which is related to health expenditures, priorities and social philosophy.

Institute of Public Health

Institute of Public Health of the Republic of Montenegro is the public health institution of the highest rank in the country. It is organized in several units:

- Centre for Health Promotion;
- Centre for Development of Health System;
- Centre for Disease Control and Prevention;
- Centre for Health Ecology;
- Centre for Microbiology, and
- common services, which consist of Centre for Continuous Education and informative communication technology and administration.

It is concerned with monitoring, researching, and perusing of:

- health status and culture of population;
- quality of the environment;
- impact of ecological factors on health status;
- causes, spreading and prevention of communicable diseases;
- risk factors of chronic non-communicable diseases and other diseases of high sociomedical significance, as well as
- health service development, and
- proposes and lays out appropriate measures in order to prevent and improve health status of population.

It also performs preventive, diagnostic and other health care activities and professional activities in the field of preventive medicine.

Institute of Public Health presents the teaching base of the Faculty of Medicine and performs scientific-research, educative and teaching activity in the fields it deals with. In the process of reorientation of public health of The republic of Montenegro to the new public health, Institute of Public Health of the Republic of Montenegro has a special position. It endeavours to strengthen the new public health methods in the country.

Development of the public health policy in Montenegro

Development of the public health policy in Montenegro has the next priorities:

- primary health care reform process and developing the model of "new doctor";
- health promotion and disease prevention;
- modification of the life style: Increasing physical activity, good eating habits and safe food, reducing tobacco smoking, harmful alcohol consumption, drug use prevention;
- improving social security and reduction poverty;
- political power, influence and participation democratic rights for all groups in society, participation in the political decision-making process;
- creating secure and good conditions for health care of children and young people;
- creating secure and good conditions for health care of women;
- healthy workplaces and an improved level of occupational health;
- a healthy environment and the provision of safe products,
- reducing the spread of infectious diseases and promoting safe sexual behaviour;
- reducing injures and violence;
- improving oral health;
- improving mental health;
- collecting and processing of data about health status of population

The public health areas implemented in Montenegro

There exist several different priority public health areas on which the development was or should be intensified

Smoking prevention

The studies that would examine the range of smoking in all categories of population in Montenegro have not been done so far. When we speak about the surrounding countries, the fact is that having the similar attitudes and civilisation level, the prevalence of smoking in adult male population is about 50%, while in adult about female population is about 30%. Also, it is estimated that currently between 200,000 and 250,000 of inhabitants are smoking in Montenegro (according to the judgement of the experts from non-governmental sector - The Report of the Montenegrin Association for the Struggle Against Cancer).

The study according to the unique methodology of the World Health Organization and the Canadian Association of Public Health was done during 2003 in the territory of the Republic of Montenegro, as well as in about 120 other countries of the world.

In terms of the received results from more than 2000 respondents (children of elementary schools) between 12 and 15 years, and slightly above 2000 respondents in high schools between 15 and 19 years, the problem of smoking is significantly present in this part of the population. Every third student of elementary school and more than half of students of high schools experimented with smoking. There are around 4 % of constant smokers among students of elementary schools, and around 20 % among students of high schools,

what corresponds to the results received from the research done on the same population groups in Montenegro, in 1999. The study done on children population between 12 and 18 years in 1999, showed the same number of smokers between girls and boys. There are interesting results of the study on tobacco consumption among the young (GYTS - Global Youth Tobacco Survey, performed in 2003 on population of students from elementary and high schools, that there were more constant smokers among boys in elementary schools than girls, and on the other side, more constant smokers among girls in high schools. These data indicate that girls start smoking when they are older, but they use cigarettes more often than boys do, when they are in high school.

Beside that, study results indicate that almost all children are constantly exposed to the influence of cigarette smoke, because of their parents' smoking, friends' smoking, or smoking of other people who visit their homes and families. These data show that children in Montenegro are under serious risk of getting diseases related to smoking.

Noxious effects of smoking are rarely discussed in schools, and there is no link between educational programmes and health-education curricula. More than half of the respondents did not know that smoking has bad influence on their health. Consecutively, it is necessary to create educational activities that are to be incorporated into educational programmes with the aim of promotion of non-smoking and prevention of the diseases caused by smoking because of the fact that the schools are places of children's biggest gathering.

At the time, when this study was done, the Law for the Restriction of tobacco products' usage was not adopted, and access to cigarettes was simple to all users regardless to their age. Children could buy freely cigarettes before the Law was adopted. Beside that, cigarettes' prices are very low; cigarettes' purchase is very easy especially if it is known that between 70-90% of cigarettes' distribution is done on the street by illegal trade's mechanisms. Cigarettes are easy to reach for children in almost each house as a result of smoking of bigger number of their family members.

Before the Law was adopted, the ban of tobacco products' advertising had not been regulated and it is completely understandable that the respondents stated that they had been "bombed" by cigarettes' advertisements everywhere.

National Action plan for prevention of drugs use

National Action plan for prevention of drugs use, treating prevention at national level, was adopted by Government.

The Centre for prevention of addiction diseases was established in Podgorica, which organized forming of units for drug prevention in the schools.

Poverty Reduction Strategy Paper for Montenegro

In November 2003, the Government of Montenegro adopted Poverty Reduction Strategy Paper for Montenegro. The main strengths of Poverty Reduction Strategy Paper in Montenegro include:

- a broad participatory process;
- a comprehensive diagnosis of poverty, which explores poverty in its many dimensions;
- a commitment to a sound macroeconomic framework and implementation of marketoriented reforms; and
- emphasize that the most critical poverty is in rural areas (northern Montenegro), and

among excluded groups (Roma, IDPs, refugees, disabled). In terms of poverty profile, Poverty Reduction Strategy Paper in Montenegro has shown that:

- 12.2% of the population of Montenegro is absolutely poor, and 34 % is classified as economically vulnerable (the absolute poverty line is defined at €116.2 and the line of economically vulnerable population is set 50% above the poverty line, €173.4);
- the poverty rate is highest with Roma, Ashkalia and Egyptians (52.3%), than Refugees and Internally Displayed Persons (40%), and smallest with local population (9.6%);
- 45% of the poor live in northern part of Montenegro; around 35% live in the central region, and 19% in southern part of the country;
- poverty gap index is 3.6%. The consumption of the poor person is about 29.9% below the poverty line. With a poverty line of 116.2 € per month, this implies an income gap of 37.4 million €, or 2.7% of GDP;
- in terms of the income sources, the majority of households acquire income through employment (75.7%), in the second place are pensions (45.5%), and third are private transfers received from relatives in-country and abroad (19.3%).

In order to avoid these factors it is especially important to address or strengthen the following areas during PRSP implementation, and its subsequent updates:

- continuous efforts to strengthen, participatory mechanisms and ownership, focusing on capacity for implementation and building up the proposed institutional framework for monitoring and evaluation;
- clear prioritisation of the most pressing poverty reduction needs by sequencing reforms consistent with medium-term fiscal consolidation and with realistic assumptions on foreign assistance; develop alternative financing scenarios that would be pursued in the event that external financing projections do not materialize; and
- strengthen the proposed set of indicators by adding regional indicators and better alignment of Poverty Reduction Strategy Paper, European Partnership, and Millennium Development Goals (19).

The basic aim of the PRSP is protection and improvement of population health status and reduction of inequality in health through the process of improvement the health status in vulnerable groups. PRSP in the field of health is aimed to regulation of the health care system in lines with real possibilities, providing rational and efficient functioning of the health care system. This could be obtained through health promotion and diseases prevention as a base of health care system.

Maternal and Child health, Reproductive health

Reproductive health means compatibility and normal functioning of physical, mental and social processes connected to reproductive system and its functions. Mainly it regards to normal sexual development, normal fulfilling of reproductive function to healthy and desired way and prevention of diseases and injuries related to sexuality and reproduction, and it means sexual fulfilment, as well as development of healthy, equality and reasonable relationships especially regarding reproductive health of adolescents.

Education of young people in order to create proper attitudes on family planning and taking responsibilities for sexual behaviour, as well as knowledge about prevention and

improving of reproductive health, and especially knowledge about possible consequences of unreasonable sexual behaviour, unwanted pregnancy and sexually transmitted infections.

- Global Monitoring 2004: Child and Adolescent Health;
- action plan for children;
- programme for immunization.

Decade of Roma Inclusion

National Action plan for Roma inclusion is very comprehensive plan aimed to improvement of life conditions in Roma population.

Many diseases occurring in Roma population, especially among women are caused by unacceptable behaviour and could be prevented.

Health protection and improvement and disease prevention in Roma population - in order to protect and improve health status in Roma, as vulnerable population, it is necessary to design the National programme for this population. Health sector prepared action plan with following goals:

- better inclusion of the Roma population in healthcare system inclusion of possible suggestions of the National council of Roma population as well as the young Roma population groups in the process of preparation of new law regulation particularly for the Health insurance fund costs.
- improvement of health protection for the whole Roma population, particularly vulnerable groups establishment of health promotion programmes for all groups, particularly for vulnerable population.
- definition of morbidity as well as mortality and clear dates for health status of Roma population better health indicators and data for the Roma population
- decrease in mortality as well as morbidity of Roma population development of programme of s food and nutrition safety, permanent immunization reproductive health, alcoholism, smoking and drug abuse, epidemiological supervision of unhygienic Roma settlements, systematic control of children and other vulnerable groups, raising awareness with healthcare professionals about specific needs of Roma population.

Reducing the spread of infectious disease and promoting safe sexual behaviour -National Strategy for prevention of HIV/AIDS

Prevention of HIV transmission in the all population particularly young people, sex workers, tourist workers, drug users, Roma population and the other vulnerable groups, access the quality of HIV counselling, testing and treating, improvement of HIV/AIDS surveillance and forecasting to strengthen planning of national response, provision of health care and mental support and global support for people living with HIV/AIDS and capacity building and coordination for all sectors.

The Voluntary Counselling and Testing (VCT) Centre is established in the Institute of Public Health of Montenegro.

Reducing injures and violence-National Strategy for violence prevention and Action plan Project "Violence and Health" out of which the "Project Protection of children against abusing and neglecting" was implemented. This is educative project, which involved all professionals who work with children.

Other public health areas

Other areas of implementation of new public health principles are:

- lifestyle other than smoking;
- international cooperation: Public health capacity building for strengthening tobacco control in south east Europe;
- Improving mental health: National Strategy for mental health, and establishing of Mental health centres.

Development of public health in the future

The intention of The Government of the Republic of Montenegro is to adopt the Strategy and Action Plan for Food and Nutrition of the Republic soon, while the Law for food safety has already been adopted by the Parliament of Montenegro. Other important public health laws/projects to be adopted/ implemented are:

- Law on evidences in public health;
- Law and the Strategy for protection against noise;
- Project for improvement of health status in elderly;
- Project of improvement health status in invalids;
- Project investigation of the impact ecological factors for health population.

Exercise

Task 1:

Read the following documents:

Lalonde M. A new perspective on the Health of Canadians. A working document. Ottawa: Government of Canada, 1974. Available from: URL: <u>http://www.hc-sc.gc.ca/hcs-sss/alt_formats/hpb-dgps/pdf/pubs/1974-lalonde/lalonde_e.pdf</u> (Accessed: September 14, 2007). and

Puska P. Successful Prevention of Non-Communicable Diseases: 25 Years Experiences with North Karelia Project in Finland. Public Health Med 2002;4:5-7. Available from: URL: <u>http://www.who.int/chp/media/en/north_karelia_successful_ncd_prevention.pdf</u> (Accessed: September 14, 2007).

You can supplement your knowledge with other recommended readings.

Task 2:

Discuss the new public health characteristics with other students. Also discuss the effectiveness of comprehensive approach to solving the major public health problems on the case of North Karelia case.

Task 3:

Carefully read the content of this module.

Task 4:

Discuss with other students the progress of the process of implementation of new public health principles in Montenegro.

References

1. Frenk J. The new public health. Ann Rev Public Health. 1993;14:469-90.

 Lalonde M. A new perspective on the Health of Canadians. A working document. Ottawa: Government of Canada, 1974. Available from: <u>http://www.hc-sc.gc.ca/hcs-sss/alt_formats/hpb-dgps/pdf/pubs/1974-lalonde/ lalonde_e.pdf</u> (Accessed: September 14, 2007).

- World Health Organization, Regional Office for Europe. Health 21: the health for all policy framework for the WHO European Region. Copenhagen: WHO, Regional Office for Europe; 1999. Available from: <u>http:// www.euro.who.int/document/health21/wa540ga199heeng.pdf</u> (Accessed: September 14, 2007).
- World Health Organization. World Health Report 2003. Shaping a future. Geneva: World Health Organization; 2003. Available from:<u>http://www.who.int/whr/2003/en/</u> (Accessed: September 14, 2007).
- 5. World Health Organization. Health promotion glossary. Geneva: World Health Organization; 1998. Available from: http://www.who.int/hpr/NPH/docs/hp_glossary_en.pdf (Accessed: September 14, 2007).
- World Health Organization. Ottawa Charter for Health Promotion. First international conference on health promotion: The move towards a new public health, November 17-21, 1986 Ottawa, Ontario, Canada. Ottawa: World Health Organization, 1986. Available from: <u>http://www.who.int/hpr/NPH/docs/ottawa_charter_hp.pdf</u> (Accessed: September 14, 2007).
- Puska P. Successful Prevention of Non-Communicable Diseases: 25 Years Experiences with North Karelia Project in Finland. Public Health Med 2002;4:5-7. Available from: <u>http://www.who.int/chp/media/en/north_karelia_successful_ncd_prevention.pdf</u> (Accessed: September 14, 2007).
- Government of the Republic of Montenegro, Ministry of Health. Strategy of health system development. Podgorica: Ministry of Health; 2003.
- 9. Institute for Strategic Studies and projects, UNDP. Report on human development in Montenegro. Podgorica, 2005.
- 10. Government of the Republic of Montenegro, Ministry of Health. National Commission for tobacco control. Podgorica: Ministry of Health; 2003.
- Government of the Republic of Montenegro, Ministry of Health. National Strategy for tobacco control. Podgorica: Ministry of Health; 2005.
- 12. Government of the Republic of Montenegro. Ministry of Foreign Affairs. Report on achievements in the Millennium Development Goals in Montenegro. Podgorica: Ministry of Foreign Affairs; 2006.
- 13. Government of the Republic of Montenegro, Ministry of Health. Republic Commission for Reproductive Health. Strategy of protection and improvement of reproductive health. Podgorica: Ministry of Health; 2005.
- 14. Government of the Republic of Montenegro, Ministry of Health. Strategy of blood safety. Podgorica: Ministry of Health; 2006.
- 15. Statistical Office of the Republic of Montenegro. Statistical Yearbooks 1950-2005 Podgorica: Statistical Office of the Republic of Montenegro; 1950-2005.
- 16. World Health Organization, Regional Office for Europe. The Health for All Statistical Database. Copenhagen: WHO, Regional Office for Europe; 2006.
- 17. Institute of Public Health of the Republic of Montenegro. Health Statistical Yearbook 1996-2005. Podgorica: Institute of Public Health of the Republic of Montenegro; 1997-2006.
- Ljaljević A. Changes in mortality of population of Montenegro in economic crisis and sanctions UN Council for Safety. Specialistic work. Podgorica: Ministry of Health, 1995.
- World Health Organization. Health and the Millennium Development Goals. Available from: <u>http://www.who.int/mdg/en/</u> (Accessed: September 14, 2007).

Recommended readings

- 1. Frenk J. The new public health. Ann Rev Public Health. 1993;14:469-90.
- Lalonde M. A new perspective on the Health of Canadians. A working document. Ottawa: Government of Canada, 1974. Available from: <u>http://www.hc-sc.gc.ca/hcs-sss/alt_formats/hpb-dgps/pdf/pubs/1974-lalonde/ lalonde_e.pdf</u> (Accessed: September 14, 2007).
- Puska P. Successful Prevention of Non-Communicable Diseases: 25 Years Experiences with North Karelia Project in Finland. Public Health Med 2002;4:5-7. Available from: <u>http://www.who.int/chp/media/en/north_karelia_successful_ncd_prevention.pdf</u> (Accessed: September 14, 2007).
- World Health Organization, Regional Office for Europe. Health 21: the health for all policy framework for the WHO European Region. Copenhagen: WHO, Regional Office for Europe; 1999. Available from: <u>http:// www.euro.who.int/document/health21/wa540ga199heeng.pdf</u> (Accessed: September 14, 2007).
- World Health Organization. Ottawa Charter for Health Promotion. First international conference on health promotion: The move towards a new public health, November 17-21, 1986 Ottawa, Ontario, Canada. Ottawa: World Health Organization, 1986. Available from: <u>http://www.who.int/hpr/NPH/docs/ottawa_charter_hp.pdf</u>(Accessed: September 14, 2007).
- World Health Organization. World Health Report 2003. Shaping a future. Geneva: World Health Organization; 2003. Available from: URL: <u>http://www.who.int/whr/2003/en/(</u>Accessed: September 14, 2007).