

PUBLIC HEALTH AND HYGIENE – TEACHING AT FACULTY OF MEDICINE, KOŠICE IN SLOVAK REPUBLIC

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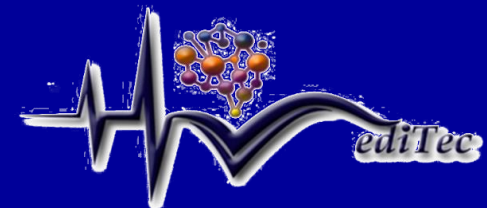
Medical Faculty, UPJŠ

Košice

Slovak Republic



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Health - Definition

□ State of full *physical, mental and social* well-being, not only absence of disease and disability

(WHO, 1948)

□ The reduction in mortality, morbidity and disability due to detectable disease or disorder, and an *increase in the perceived level of health*

(WHO, 1999)

Health Promotion

- ❑ Process enabling individually and collectively increase control over *determinants* of their health, and improve health status. (WHO, 1998)
- ❑ It does not mean only responsibility of the health care system, but also *individual responsibility* for health expressed via *life style*. (Kebza, 2005)

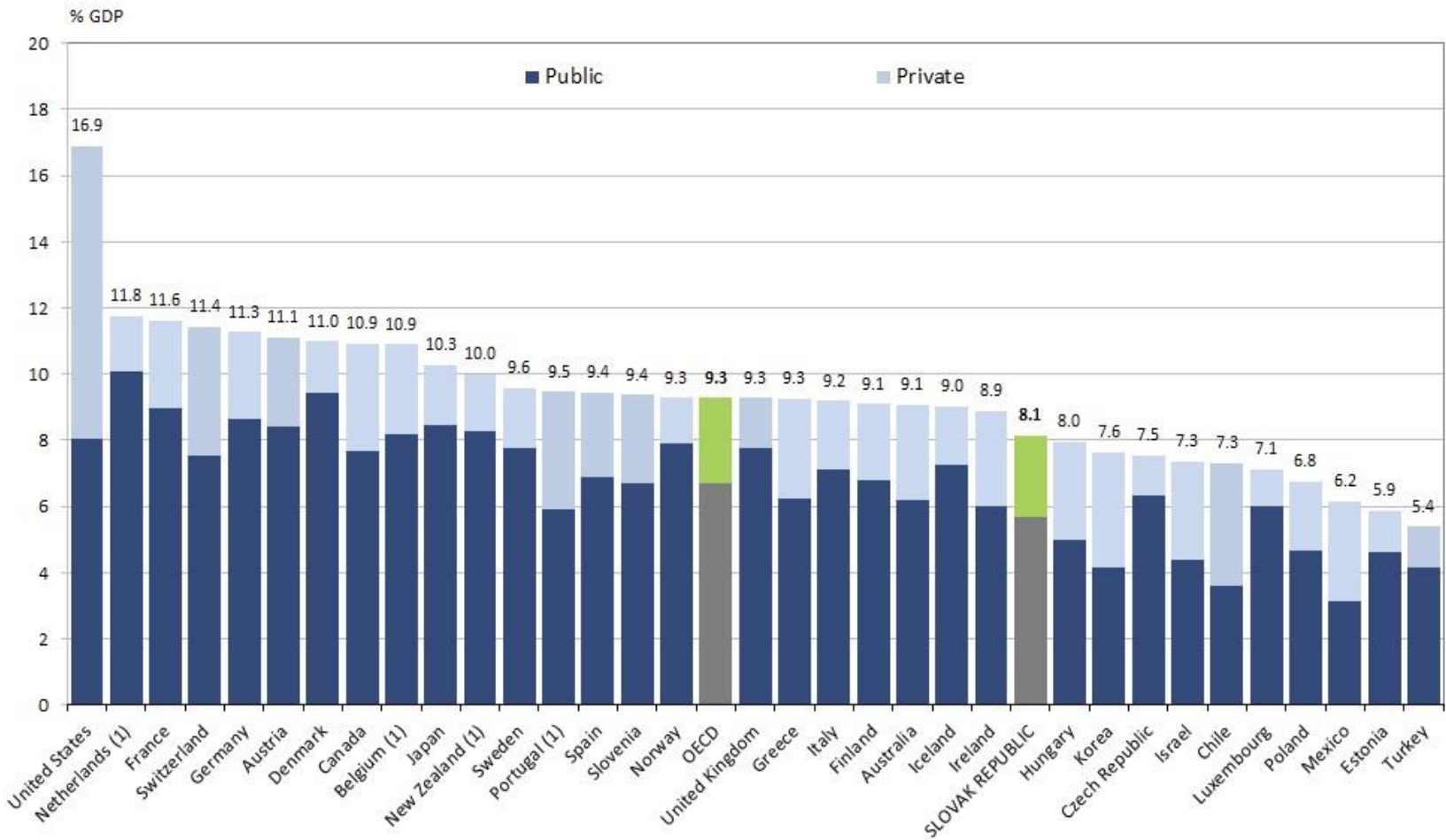
Determinants of Health

- **Life style (50%)**
- **Environment** (cultural, economic, social and physical conditions of life) (20%)
- Genetic background (20%)
- Health care system (10%)

Health 21 in SR

- ❑ Insufficient financial resources
- ❑ Insufficient intersectoral collaboration
- ❑ Lower participation of public
- ❑ Slow regional implementation of Health 21

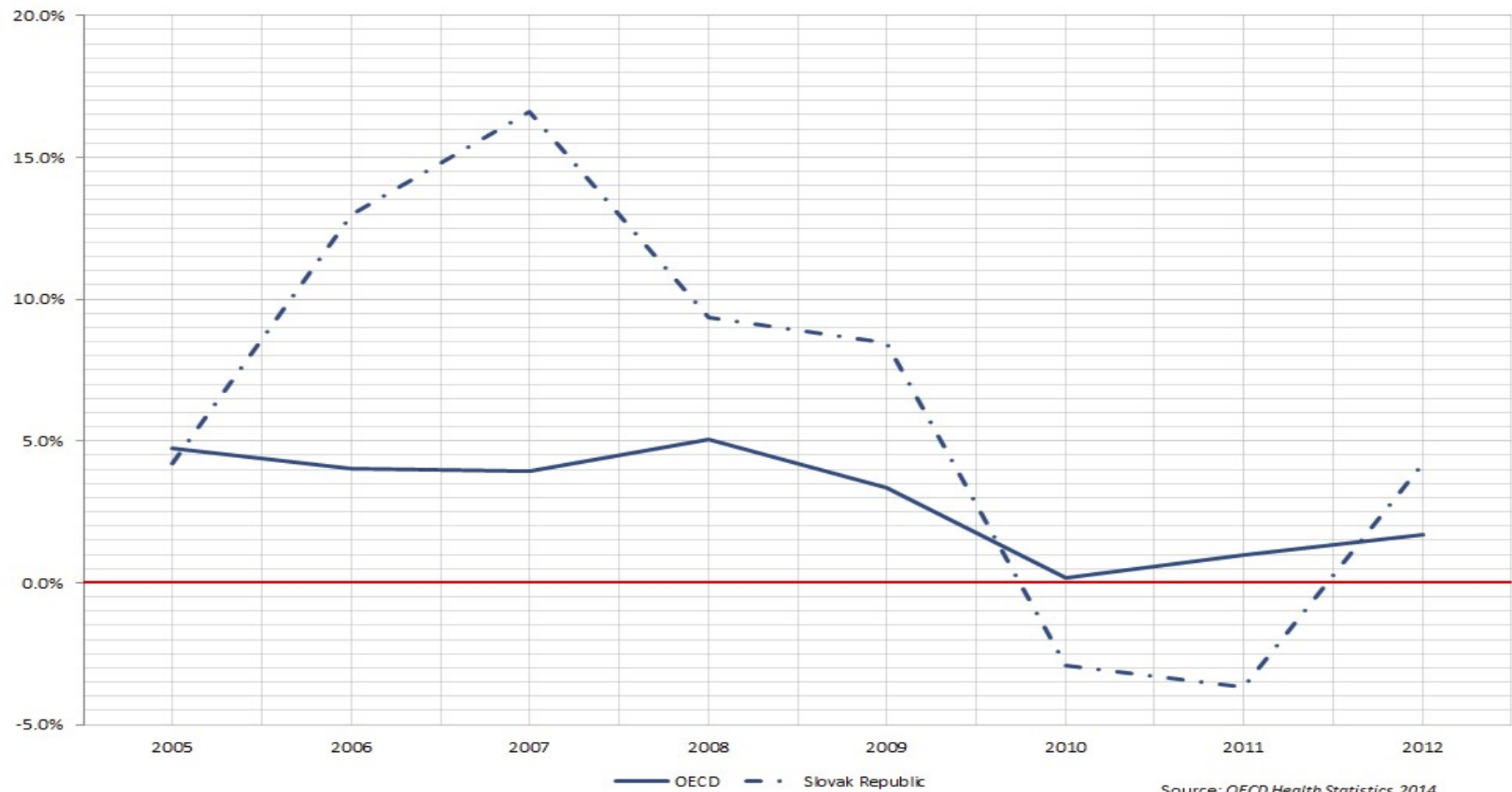
Health expenditure, public and private, as a share of GDP, OECD countries, 2014 or latest year



1. Total expenditure excluding capital expenditure.

Source: OECD Health Statistics 2014.

Health expenditure growth rates (in real terms) since 2005, Slovak Republic and OECD average



Source: OECD Health Statistics 2014

Teaching of Public Health at MF UPJŠ Košice

Strengths:

- **very high level of academic staff**
- **professors and associate professors**
- **4 departments dealing with specialization in public health**
- **teaching connected more to medical science and background**
- **approved curriculum by Accred. Com.**
- **bacalaureate and master degree of Public Health**

Teaching of Public Health at MF UPJŠ Košice

Weaknesses:

- ◆ weak connection to real practice at public health agencies, occupational health agencies
- ◆ no possibility to include student to existing community health programs

Eliminations of weaknesses

- ◆ experts and staff from public health agencies has also teaching hours for students
- ◆ organizing outside excursions
- ◆ students have also summer practice in PHA.

Departments at Faculty of Medicine

- ◆ Department of Public Health and Hygiene
- ◆ Department of Social and Behavioural Medicine
- ◆ Department of Epidemiology
- ◆ Department of Health Psychology

Students

- **General medicine – Slovak more than 150 per year**
- **General medicine – English – more than 150 per year + ERASMUS students**
- **Dental medicine Slovak – students per year**
- **Dental medicine – English – 50 students per year**
- **Nursing students 20 per year**
- **Public health students – 10 – 12 per year , baccalaureate and masters**
- **Physiotherapy – baccalaureate and master 15 – 20 per year**

Research at the departments

Department of Public Health and Hygiene

- ◆ Environmental and social factors effect on reproductive parameters
- ◆ Child growth comparison
- ◆ Roma health communities living as marginalised population
- ◆ Tick born infection and occupational exposure
- ◆ Exposure to heavy metals
- ◆ Cardiovascular prevention among adolescents

Research at the departments

Department of Epidemiology

- ◆ Epidemiological surveillance of selected zoonosis
- ◆ Chlamydial infections
- ◆ Intracellular pathogens
- ◆ Parasitic infections

Research at the departments

Department of Social and Behavioral Medicine

- ◆ **biobehavioural and psychosocial innovations in chronic condition management**
- ◆ **development and implementation of patient-centered, integrated models of care**
- ◆ **behaviours, psychological factors, and societal forces influence on development and progression of chronic diseases.**

Research at the departments

Department of Health Psychology

- ◆ socially and health disadvantaged populations
- ◆ particular emphasis is being put on adolescents
- ◆ inhabitants of marginalized Roma communities
- ◆ health issues of another groups of population who receive special attention, such as migrants, ethnic minorities, groups at risk of poverty and
- ◆ school-aged children with special

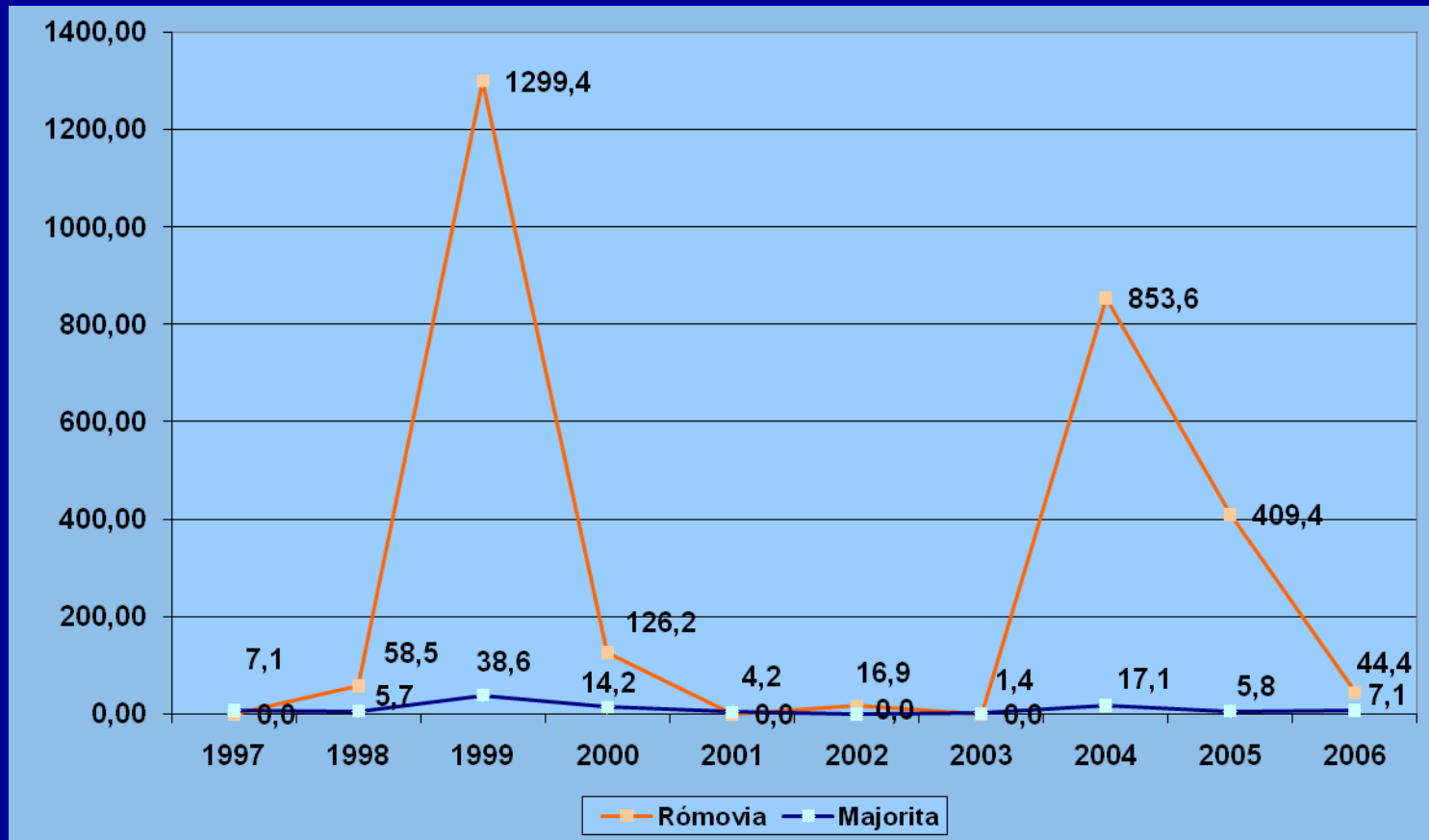
Ethnic height differences in girls Roma versus Slovak national anthropometric survey (Roma, n=710)

	SR - 2001			Roma - 2006					
Age	n	(cm)	s (cm)	n	(cm)	s (cm)	Diff.	P(95%)	Sig.
3	728	100.30	5.96	8	94.38	3.78	5.92	0.0030	**
4	481	107.83	5.91	13	100.08	4.37	7.75	0.0001	***
5	530	114.93	5.83	20	105.35	4.98	9.58	0.0001	***
6	508	122.44	6.46	56	108.08	8.23	14.36	0.0001	***
7	884	126.34	6.18	95	112.45	9.32	13.89	0.0001	***
8	948	132.06	6.42	66	119.19	9.03	12.87	0.0001	***
9	833	137.06	7.17	69	124.24	10.39	12.82	0.0001	***
10	779	143.27	7.47	28	135.55	9.71	7.72	0.0003	***
11	858	150.85	8.41	17	142.41	7.61	8.44	0.0003	***
12	854	156.21	7.64	6	150.08	6.83	6.13	0.0792	n.s.

*p<0.05 ; ** p<0.01 ; *** p<0.001

Hepatitis A among Roma population and majority population

Bardejov, 1997-2006



Priemerná chorobnosť' je u Rómov 27,8-krát väčšia ako u majority ($\chi^2=1277,87$; $p<0,001$).

Newborn parameters differences Roma and Non-Roma

Parameter	Roma (n=947)		Non-Roma (n=2713)		t-test p-hodnota
	Mean	SD	Mean	SD	
Birthweight (g)	2866.9	452.3	3267.5	538.5	<0.001
Birthlength (cm)	48.4	2.3	49.7	2.6	<0.001
Head circumference (cm)	33.0	1.7	34.1	1.6	<0.001
Chest circumference (cm)	32.1	2.1	33.1	2.0	<0.001
Gestational age	37.0	1.5	39.2	1.6	<0.001
Apgar score vitality	9.3	1.4	9.2	1.2	n.s.

Organisation of Public Health services in SR

- ❑ The Public Health Authority is a budgetary organization of the state with competence on the territory of the SR - relations to the budget (DECRESAING) of the Ministry of Health
- ❑ executive agency with great legislative strenhts
- ❑ The Public Health Authority is managed and its activity falls under the responsibility of the Chief Hygienist of the SR
- ❑ Chief hygienist - is also the director of the office. The chief hygienist is appointed and dismissed upon proposal of the Minister of Health of the Slovak Republic

Organisation of Public Health services in SR

- ❑ manages, controls and coordinates the execution of state administration carried out by regional public health agencies**
- ❑ Regional public health agencies - 36 in SR**
- ❑ field of protection, promotion and development of public health**
- ❑ mainly focused for health protection and environmental control and inspection.**

Regional Public Health Authorities

Goals:

- international projects - important participation in solving of national for public health and performing scientific research in this field

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In practise:

- CINDI project, Healthy school, Healthy workplace

Goals:

- ◆ **managing, directing and controlling of epidemiological surveillance of communicable diseases and fulfilment of immunisation program**

- ◆ **In practise:**
 - **report important infectious disease to the system EPIS**
 - **on site epidemiological control**
 - **vaccination support**
 - **vaccinations in the state of community threads - VHA vaccination among Roma communities**

Goals:

control and protection of health in occupational settings

In Practise:

- **control of exposure – concentration, level of noise,**
- **control of worker's health**
- **diagnostic results – audiometry, pulmonary functions,
toxicological blood test**

Goals:

Control and protection of environmental factors

In Practice:

- **drinking water control**
- **air pollution control in another hands**
- **risk of waste disposal**
- **other environmental risk**

Goals:

Ionizing radiation control

In Practice:

- **environmental ionizing radiation**
- **ionizing radiation in occupational settings**

Goals:

Food control, cosmetic control, no textile control

In Practice:

- EU directives about allergens**
- Responsibility of veterinary service for animal products**
- Responsibility of PHA for risk human health**

Food scandals

Goals:

**Hospital infections control, control of sterility
in central sterilisation unit**

In Practice:

**- Control of sterility of tool and environment in
specific department, surgery theaters**

National reference centres

- ◆ a) ensures specialized advanced and final laboratory diagnostics and verification of laboratory results,
- ◆ b) defines reference methods and standards,
- ◆ c) carries out expert, methodical and publication activity,
- ◆ d) secures epidemiological supervision,
- ◆ e) stores samples of biological material or other material which contains the agent of the disease and which was obtained from a confirmed case of disease,
- ◆ f) cooperates with the respective bodies and organizations of the European Union and the World Health Organization,
- ◆ g) secures training in new laboratory methodologies.

List of natural references centers

- ◆ **http://www.uvzsr.sk/en/docs/info/EN_List_NRC_contacts.pdf**