THE ROLE OF THE PREVENTIVE MEDICINE IN SUSTAINABLE DEVELOPMENT. A STUDY CASE ON THE PRIVATE MEDICINE SECTOR IN ORADEA

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The concerns with respect to healthy life styles, preventive medical approaches, safe environment, and early warning systems represents the Millennium Development Goals, the United Nations Organization's so called Decade for "Education for Sustainable Development", the European Union's sustainability strategy, the Global Environmental Outlook of the United Nations Environment Programme (UNEP) and the ten Principles of the UN Global Compact, all aiming to attain the sustainable global health, which is possible only through collective multilevel efforts for the sake of human wellbeing, equity, livelihood, and worldwide sustainable development and stability.
Romania, as an EU Member States, have to take into consideration the fact that health is a precondition for economic growth and sustainable development, and this way, it has to promote the EU common approaches to health policy. Between these approaches, the prevention plays a key role when addressing to the global health challenges such as the pandemics' control, and the rising tide of non-communicable diseases. For these purposes, preventive strategies need to include promoting polices that foster a healthy environment, healthy life styles and equitable access to health care and information, so, it is necessary to meet the requests towards sustainable global health.
From this perspective, for the empirical research pursued in this paper, we have considered the Global Challenge Index, which focuses on seven global challenges of the new millennium, and on this basis, we have compared Romania with the other EU Member States. Then, we have computed the index for Oradea and its neighbour region, including the framework of a comprehensive analysis of political, economic and social target system.
The key issues we have considered in this context were referring to lifestyles, life care and education for lifelong well-being, partnerships for health, institutions and related policy areas, alternative intercultural preventative medical approaches, and the good governance, policy relevance, and corporate social responsibility, and were analyzed mainly referring to the potential of the Romanian private medicine sector in preventive medicine.
The conclusions of the paper reveal the fact that the region of Oradea is much above the average index of Romania when it comes to preventive medicine, but still behind the other EU Member States. So, the background for meeting the precondition for economic growth

and sustainable development in Oradea was created, but there are still a lots to be done on short term, even because of the features of this area, which situates it at the top of the cancer diseases registered cases in the country.

Key words: sustainable development, preventive medicine, Romanian health care system, private medicine sector, Oradea – Bihor County

JEL Codes: H11, H51, I11, I15, I18

Introduction

The concerns with respect to healthy life styles, preventive medical approaches, safe environment, and early warning systems represents the Millennium Development Goals, the United Nations Organization's so called *Decade for "Education for Sustainable Development"*, the European Union's sustainability strategy, the *Global Environmental Outlook* of the United Nations Environment Programme (UNEP) and the ten Principles of the UN Global Compact, all aiming to attain the sustainable global health, which is possible only through collective multilevel efforts for the sake of human wellbeing, equity, livelihood, and worldwide sustainable development and stability.

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From this perspective, for the empirical research pursued in this paper, we have considered the global challenges of the new millennium, and on this basis, we have compared Romania with the others EU Member States. Then, we have focused on the city of Oradea and the Bihor County.

The key issues we have considered in this context were referring to health care and partnerships for health, institutions and related financing policy areas, and the good governance, policy relevance, and were analyzed referring to the potential of the Oradea private medicine sector in preventive medicine.

The Concept of Preventive Medicine. Definition and Delimitations

John R. Paul, Professor of Preventive Medicine at the Yale University School of Medicine, wrote many books and articles defining and delimiting the concept of preventive medicine and its fundamental science, clinical epidemiology. Dr. Paul believed that "preventive medicine was part of the continuum of clinical medicine, while others believed that it was a separate entity deserving of departmental status" (Viseltear, 1982:167). Summing up the definitions given over the time to the term of preventive medicine, nowadays it is generally agreed that it refers to the measures taken to prevent diseases. The term of preventive medicine is also often used as "preventive care", whose strategies are usually described as taking place at all the prevention levels, from hand washing, to immunizations and similar. Preventive care may also include screening tests,

health examinations, and family genetic heritage. For example, it is recommended that a person with a family genetic heritage (history) of certain cancers or other diseases would begin screening at an earlier age and/or more frequently than those with no such family inheritance. On the other side of preventive medicine, some research institutes use epidemiology for finding out other ways to prevent the diseases. Anyhow, the aim of all these preventive measures has its root and impact in the economic field. Mainly, because of the higher costs of the treatment of a disease: it's better to treat the cause, than the effect. From this perspective, the preventive medicine deals with healthy individuals or populations, the costs and potential harms arising from interventions need even more careful examination than in the treatment of the diseases. For a preventive intervention to be applied widely it generally needs to be affordable and highly cost effective.

The Current Statistics Regarding the Healthcare Expenditures in the EU. The Case of Romania and the City of Oradea – Bihor County

We do consider good to know that the total current healthcare expenditures varies significantly among the EU Member States. As it can be seen in Figure 1, the share of current healthcare expenditure exceeded 10 % of gross domestic product (GDP) in Germany and France (2008 data), which represents almost twice the share recorded in Romania, where it is situated much below 6 % of GDP, and almost 2.5 of the share recorded in the Bihor County (DJS Bihor), where the city of Oradea is located. The disparity is even bigger when we compare the level of healthcare spending per inhabitant, which fluctuates from PPS 608 in Romania (2008 data), to more than PPS 4 280 in Luxembourg. Some notable differences appear also in the way of organising and financing the healthcare systems within the EU Member States, which suggest the fact that individuals living in the Member States registering a higher average level of income per capita, generally spend more on purchasing healthcare goods and services the (Eurostat "Healthcare statistics"), and vice versa.

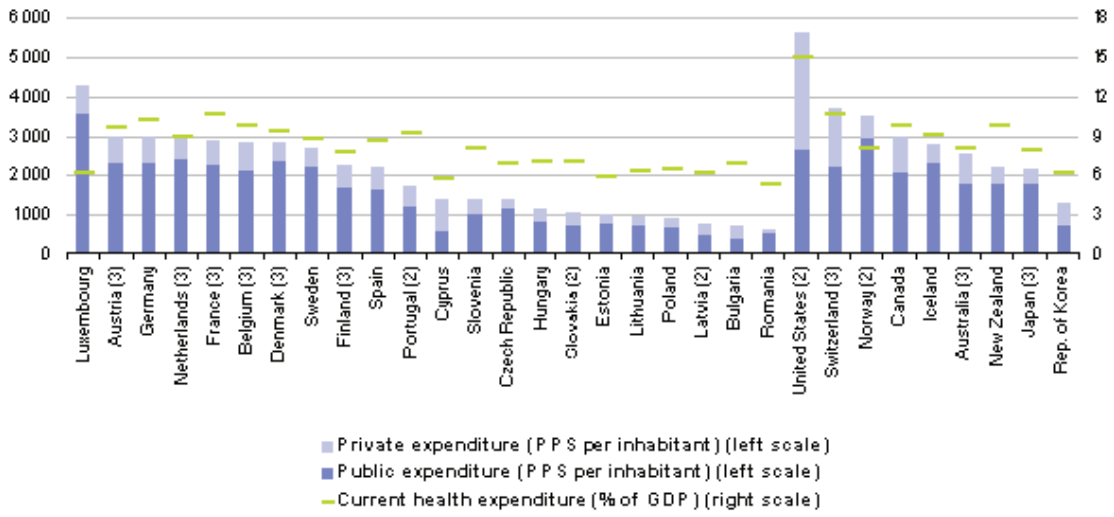

Figure 1: Current healthcare expenditure in the EU Member States

Data source: Eurostat (on-line), "Health care expenditure by financing agent". Accessed on March-April 2011. http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=hlth_sha_hf&lang=en

> Health outcomes across the EU differ from the point of view of the living place, ethnicity, gender and socio-economic status, although the EU promotes the coordination of national healthcare policies through an open method of coordination which give a particular emphasis to the access to the quality and sustainability of healthcare. According to the Eurostat "Healthcare statistics", "the main objectives of the EU in this respect include: shorter waiting times; universal insurance coverage; affordable care; more patient-centred care and a higher use of outpatients; greater use of evidence-based medicine, effective prevention programmes, generic medicines, and simplified administrative procedures; and strengthening health promotion and disease prevention".

In the current economic environment, access to healthcare, the technological progress and greater patient choice is being more and more considered against a background of financial sustainability (Suhrcke, M. et all, 2005). Many of the challenges the governments are facing with across the EU, are well outlined in the European Commission's White paper, entitled "Together for health: a strategic approach for the EU 2008-2013" (COM(2007) 360).

A range of specific arrangements in healthcare financing systems across the EU Member States are well reflected by the mix of public and private funding, presented in Table 1, which provides a breakdown of healthcare expenditure into public and private medical units that incur health expenditure (Eurostat. "Healthcare statistics"). It can be noticed that, during the last years, public funding dominated the healthcare sector in the majority of EU Member States, the share of public funding in current healthcare spending reaching the record in Romania, with more than 80 %, which is quite similar to the countries like Netherlands, the Czech Republic, Sweden, Luxembourg and Denmark. But aside these countries, the quality and the quantity of the Romanian healthcare services are considered by the population to be the worst within the EU Member States.

In the EU practice, public financing of healthcare is conducted through a variety of funding paths, like social security, government financing, and private expenditure on healthcare, the latest one being often used as an indicator to measure the accessibility of healthcare systems. The major source of private funding are the direct household payments, the so called "pocket money", which, according to the Eurostat "Healthcare statistics", range from "less than 7 % of current healthcare expenditure in the Netherlands and France, to over 40 % of overall spending on healthcare in Bulgaria, and to half of all healthcare expenditure in Cyprus". On the other side, private insurance generally represents a small share of healthcare financing among the EU Member States, with a share that exceeds 10 % only in Slovenia and France, while in Romania, the share is lower than 0,2% (Eurostat. "Healthcare statistics").

Table 1. EU Member States Healthcare expenditure by financing agent, 2008 (% of current health expenditure)

	General government excluding social security funds	Social security funds	Private insurance enterprises (including private social insurance)	Private household out-of-pocket expenditure	Non-profit institutions serving households	Corporations (other than health insurance)	Rest of the world
Belgium (1)	12.4	62.8	5.6	19.0	0.3	0.0	0.0
Bulgaria	17.7	38.5	0.5	42.6	0.4	0.3	0.0
Czech Republic	5.0	77.1	0.2	16.1	1.2	0.4	0.0
Denmark (1)	83.8	0.0	1.7	14.4	0.1	0.0	0.0
Germany	7.1	70.2	9.7	12.3	0.4	0.4	0.0
Estonia	10.8	67.6	0.3	20.5	0.0	0.8	0.1
Ireland	:	:	:	:	:	:	:
Greece	:	:	:	:	:	:	:
Spain	67.3	4.8	5.8	21.5	0.6	0.0	0.0
France (1)	5.3	73.5	13.5	6.9	0.1	0.7	0.0
Italy	:	:	:	:	:	:	:
Cyprus	42.0	0.1	5.7	50.2	2.0	0.0	0.0
Latvia (2)	61.5	0.0	2.6	35.6	0.3	0.0	0.0
Lithuania	10.0	61.4	0.5	28.0	0.0	0.1	0.0
Luxembourg	8.5	73.9	3.5	13.7	0.4	0.0	0.0
Hungary	10.0	60.8	2.2	24.5	1.7	0.9	0.0
Malta	:	:	:	:	:	:	:
Netherlands (1)	5.4	76.7	6.2	6.0	3.2	2.5	0.0
Austria (1)	30.5	47.0	4.8	16.3	1.3	0.1	0.0
Poland	7.6	64.5	0.6	24.0	1.1	2.1	0.0
Portugal (2)	70.3	0.9	4.3	23.9	0.3	0.2	0.0
Romania	10.9	70.5	0.1	18.2	0.1	0.2	0.0
Slovenia	1.7	70.9	13.8	12.7	0.0	0.8	0.0
Slovakia (2)	6.4	63.6	0.0	26.6	0.8	2.6	0.0
Finland (1)	59.0	15.4	2.2	20.0	1.2	2.1	0.0
Sweden	82.3	0.0	0.2	16.5	0.2	0.8	0.0
United Kingdom	:	:	:	:	:	:	:
Iceland	54.9	28.3	0.0	15.3	1.4	0.0	0.0
Norway (2)	69.8	13.6	0.0	16.5	0.0	0.2	0.0
Switzerland (1)	16.2	42.9	9.2	30.7	1.0	0.0	0.0
Australia (1)	69.2	0.0	8.3	19.1	0.0	3.4	0.0
Canada	68.1	1.5	13.5	15.5	0.0	1.5	0.0
Japan (1)	15.1	66.5	2.5	14.8	0.0	1.0	0.0
Rep. of Korea	12.2	45.1	4.6	37.2	0.7	0.2	0.0
New Zealand	70.4	10.1	4.8	13.9	0.9	0.0	0.0
United States (2)	46.4	:	36.8	13.1	3.5	0.3	0.0

(1) 2007.
(2) 2006.

Source: Eurostat (on-line). "Healthcare statistics". Accessed on March-April 2011. http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Healthcare_statistics

The functional patterns of healthcare expenditure presented in Table 2 show that the curative and rehabilitative services incur more that 50 % of current healthcare expenditure in the majority of EU Member States, excepting Hungary, Romania and Slovakia.

Table 2: EU Healthcare expenditure by function, 2008 (% of current health expenditure)

	Services of curative & rehab-ilitative care	Services of long-term nursing care	Ancillary services to health-care	Medical goods dispensed to out-patients	Prevention & public health services	Health admin-istration & health insurance	Not specified by kind
Belgium	52.7	19.7	2.4	17.5	2.7	4.9	0.0
Bulgaria (1)	53.6	0.1	3.6	36.9	4.3	1.1	0.6
Czech Republic	60.0	3.5	5.8	23.1	2.7	3.4	1.5
Denmark	55.8	24.5	4.7	11.5	2.2	1.2	0.0
Germany	53.3	12.4	4.7	20.5	3.7	5.5	0.0
Estonia	54.0	4.4	10.1	26.9	2.3	2.4	0.0
Ireland	:	:	:	:	:	:	:
Greece	:	:	:	:	:	:	:
Spain	58.2	9.0	5.3	21.7	2.7	3.2	0.0
France	53.1	11.5	5.2	21.0	2.2	7.0	0.0
Italy	:	:	:	:	:	:	:
Cyprus (1)	59.3	2.5	9.5	23.9	0.7	4.2	0.0
Latvia (1)	55.3	3.9	9.4	24.3	1.6	5.5	0.0
Lithuania	*51.5*	*9.1*	*6.0*	*29.6*	*1.2*	*2.7*	*0.0*
Luxembourg (1)	58.3	19.9	5.9	12.5	1.9	1.7	0.0
Hungary	47.4	3.9	4.4	37.7	4.4	1.3	1.1
Malta	:	:	:	:	:	:	:
Netherlands	51.7	22.6	1.9	14.5	4.3	4.0	0.9
Austria	*60.3*	*14.0*	*2.8*	*17.5*	*1.8*	*3.6*	*0.0*
Poland	58.2	5.4	6.2	26.4	2.3	1.4	0.0
Portugal (1)	58.3	1.1	9.3	25.8	1.9	1.7	0.0
Romania	46.8	13.5	4.0	25.6	8.3	1.8	0.1
Slovenia	*56.5*	*8.7*	*3.0*	*23.7*	*3.8*	*4.3*	*0.0*
Slovakia	46.7	0.3	7.7	37.0	4.9	3.4	0.0
Finland	58.9	12.3	3.2	18.0	5.6	2.1	0.0
Sweden	66.0	7.7	4.5	16.0	3.8	1.4	0.6
United Kingdom	:	:	:	:	:	:	:
Iceland	58.5	18.0	2.3	17.9	1.5	1.9	0.0
Norway (2)	51.4	26.2	6.4	13.2	2.1	0.8	0.0
Switzerland	*57.7*	*19.3*	*3.3*	*12.2*	*2.5*	*4.9*	*0.0*
Australia	69.2	0.4	6.1	18.5	2.1	3.6	0.0
Canada (1)	46.4	14.8	6.3	20.9	7.1	3.8	0.6
Japan (1)	65.4	8.9	0.7	20.8	2.4	1.9	0.0
Rep. of Korea (1)	57.0	10.0	0.9	25.2	3.3	3.6	0.0
New Zealand	56.5	13.9	5.2	10.6	6.7	7.2	0.0
United States	*69.5*	*5.9*	*0.0*	*14.1*	*3.6*	*7.0*	*0.0*

(1) 2008.
(2) 2007.

Source: Eurostat (on-line). "Healthcare statistics". Accessed on March-April 2011. http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Healthcare_statistics

The expenditure related to prevention and public health programmes also reveals large discrepancies between the EU Member States, the expenditure on healthcare administration and health insurance being generally lower in the Member States with centralised social security systems or in the Member States where private insurance plays a relatively restricted role, like the case of Romania is, ranging from less than 1.5 % of total current healthcare expenditure in countries like Bulgaria, Hungary and Sweden, through to 7 % and more of expenditure in countries like France and Belgium. In general, the expenditure associated with collective services reported under preventive programmes and the administration of healthcare systems do not surpass 10 % of overall current healthcare expenditure, excepting the Netherlands and Belgium.

When it comes to the breakdown of current healthcare expenditure by provider, the hospitals generally account for the highest share of expenditure, ranging from 27 % in Slovakia to more than 46 % in Denmark, Estonia, and Sweden. On the contrary, the ambulatory care providers have a share of only approx. 16 % of total healthcare expenditure in Romania, while in Germany, it represents more than 30 % of the total.

The city of Oradea, located in the North-West part of Romania, Bihor County, is an exception for Romania when it comes to the statistics above referred to. The figures might place this region of Romania among the most developed ones of the EU with respect to the preventive medicine potential and results. Although it has a high rate of cancer incidents per capita, which is almost of 1/150, Oradea has a PET (Positron Emission Tomography) Centre (PET Pozitron Centru de diagnostic Oradea), which is the only functional centre like this in the whole country. Widely recognized as one of the most advanced medical functional imaging methods, when combined with CT (computerized tomography), it results in the PET/CT, the most advanced imaging technology today. The PET/CT investigations are financed by the Romanian national budget, subject for prior approval of the Romanian National Health Assurance House, and has a very important role in preventing and treating highly costly diseases.

Conclusions

The region of Oradea is much above the Romanian average when it comes to preventive medicine, but still behind the other EU Member States. So, the background for meeting the precondition for economic growth and sustainable development in Oradea was created, but there still is a lot to be done on short term, even because of the features of this area, which situates it at the top of the cancer diseases registered cases in the country.

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