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Strategic orientation of public health in transition: challenges in Serbia

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Abstract

Strategic Management, Public Health Information, Public Health Legislation, as well as Public Health Training and Research are considered essential elements of a coherent public health strategy for Serbia, a republic of the former Yugoslavia.

Whereas the strategic framework in Serbia is outlined in detail, which includes an action plan that is linked with local pilot initiatives, the information base is well developed but not yet sufficiently related to the strategic objectives. The transformation of strategic considerations and information into meaningful legislative acts stands at halfway and has to cope with a heritage of unrelated and dysfunctional laws. A big step forward was made with the establishment of a modern School of Public Health in Belgrade in 2004, which acts as a brain-trust for the New Public Health in Serbia.

The multi-professionalism at the Institutes of Public Health and the corresponding inter-disciplinarity at the academic Schools of Public Health provide an adequate institutional environment if the resources of skills, knowledge and experience are adequately managed – in a participatory and supportive system representing a flat hierarchy.

Key words: public health strategy, legislation, information, school of public health, Serbia

The public health setting in Serbia

"Nowadays, the entire spectrum of public health is enormously complex and public health activities are oriented to many challenges related to health. Evidence from countries in which public health is well developed suggests that it can make an important contribution to the health status of the population. In fact, the health gain of public health activities is far greater than the impact of curative services, although the latter usually consumes over 90% of the funds available for health care. However, in the eye of the public and also of many physicians, public health does not hold the position it deserves, because it is less "visible": keeping healthy people healthy is less spectacular than treating the sick" [1]. Nevertheless the link between the modern practices of public health, democracy and sustainable health development is real and based on four principles of equity, participation, subsidiarity and good governance [2].

Looking at Serbia, public health experienced many social and economic threats during the 1990s. Years of life under severe stress and a trauma-ridden environment have brought depression and hopelessness, followed by general negligence towards health and increased risk behaviour. During the last decade of the 20th century, the health status of the population of Serbia was harmfully influenced by numerous factors, but especially by the general situation in the country: the long lasting economic crisis, the consequences of war in the surrounding countries and in Serbia as well, and the wide range of economic and diplomatic sanctions [3].

Nowadays the total population of Serbia is according to the 2002 census 7.875.380 [4]. The population of Central Serbia has declined by approximately 25.000 over the last decade, while the population of Vojvodina has increased by more than 77.000. Literacy rates of 15-24 years olds is 99.4%, which is similar to that of other SEE countries, while the percentage of population living below poverty line was 10.6 in 2003. Serbia entered the crisis of the 1990s with the overall population profile of a developed country. The

economic crisis led to a smaller number of births, increased emigration of young people and increased immigration of the elderly (among refugees and internally displaced persons). Today the major trend is a rapid ageing of the population. According to the data from 2002, somewhat over 16.5% of residents are aged 65 years or more, thus the dominance of chronic cardiovascular and malignant diseases is as expected [5]. The life expectancy at birth for males born in 1997/98 is 67.69 in Vojvodina and 69,96 in Central Serbia, while for females it is higher: 73,24 and 75,00 respectively. The mortality rate of children under 5 years decreased from 18.3 in 1990 to 9,2 in 2005 [6]. The exposure to risky lifestyles (smoking, alcohol use, inadequate nutrition, the lack of physical activity) is widespread, as well as the exposure to environmental risk factors [7].

Serbia benefits from the well developed health system in the former Yugoslavia which was nevertheless based on the traditional hygienic approach to public health as in all former communist countries. It is astonishing how Serbia managed, in spite of the heavy burden of civil war, with a severe deterioration of the public health infrastructure, to maintain its level of health from the eighties and even to improve it, e.g. infant mortality from almost 22 in 1992 to just over 10 per 1000 life births one decade later and then to 8 in 2005. Slovenia however - ranking best –came down to less than 4 exemplifying, that increasingly neighbouring countries leave Serbia behind [8]. By now the former merits have turned into drawbacks in Serbia when, for example, more than half of the staff in the 23 institutes of public health is working in the laboratories and in administration and only a few in health promotion and health management [9]. There are several needs for reforming the system of public health in Serbia:

1. *Performance*. The current specialist oriented system is not able to address the growing health problems related to living environment and life styles of the population. The spectrum of the "Old Public Health" still exists with only a moderate orientation towards epidemiology of chronic diseases, health promotion, health system research, management and health policy ("New Public Health").

2. *Financing*. Within the current situation, the importance of public health is still not recognized, and the Public Health Institutes suffer from the consequences of inadequate and scarce financing throughout the years, which – in line with the biomedical orientation – led to the excessive development of laboratories and microbiological services as an additional source of financing.

3. *Training*. Specialist knowledge is still contained within different specialist branches that communicate little among themselves (Epidemiology, Hygiene, Social Medicine, and Occupational Medicine). The entire field of public health is strongly medically driven with very little input from other professions. The appropriate institutional format common in Europe, as independent university-based "School of Public Health" has only recently been established.

In this paper we discuss elements necessary for the successful implementation of a new public health system in Serbia drawing on the experience of other countries in SEE [10] but also with the intention to consider the Serbian case as an exemplification of some key issues of general relevance. To this aim we adopt the methodology of strategic planning [11]. Summarizing our experience since the Serbian democratic changes in 2000 we identified the following strategic elements of transition whose interplay as a system we shall analyze at the end: Strategic Management,

I) Public Health information,

II) Public health legislation,

III) Public health training and research.

Strategic management

In Serbia the development of a strategic orientation for the reform of the health system began with a document entitled "Health Policy of Serbia" [12] which was adopted by the government early in 2002. In the document strong support is expressed for the implementation of health promotion, partnerships for health, preventive activities, and health education. Also in a subsequent strategy paper on health care reform [12-13] the public health is highly recognized. As due to the instability of the political situation the adoption of this strategy was repeatedly postponed; a modified second draft was finalized in June 2005 [14]. Following the meanwhile adopted Health Care Law of the Republic of Serbia [15-16], the revised version is re-structured in line with the Essential Public Health Functions as published by the Pan American Health Organization together with the Center of Disease Control in Atlanta and WHO [17]. Reference is made to the following strategic framework of public health:

1) Reduction f the Burden of Disease and Injury
2) Control of Social Determinants
3) Action upon Lifestyle Related Factors
4) Integrated Strategic Approaches
5) Strategic Activities

Whereas items 1, 2 and 3 deal with the standard issues of specific disease categories, social inequalities and health behaviours, items 4 and 5 focus on population risk reduction, individual risk reduction, empowering primary health care and support of the referral system as integrated strategic approaches (item 4) and on the development of public health policy, support to the environment and to the community, enhancement of individual skills and reorientation of health services as strategic activities of public health (item 5). Ten goals with several sub-objectives are finally listed and are meant to be specific, measurable, achievable, relevant and time framed [14].

As the fourth goal related to "Promotion, Development and Support to Public Health Policy" is of greater interest here, it is discussed in detail including its sub-objectives:

a) Development of a new public health policy, its implementation and the evaluation of impact on the health of the population.
b) Providing sustainable funding and fiscal stimuli for public health activities.
c) Development of a public health information system and improvement of information and knowledge.
d) Development of capacities and establishment of partnership between research centres and academic institutions for research work within and out of the health sector.

The systematic hierarchy of goals, objectives and actions is exemplified in the actions to be taken for the accomplishment of the firs sub-objective until 2015 (Table 1).

An example of local strategy development is the project on "Community Health – Development and Implementation of Local Public Health Strategies". It is managed by the Centre - School of Public Health and the Institute of Social Medicine within the School of Medicine in Belgrade for the benefit of 4 districts in Serbia, funded through the Open Society Institute, coordinated by the Center of Disease Control, Atlanta, USA [18] and has been awarded for its excellence in applied public health management learning.

These developments in Serbia correspond to the regional framework. In August 2004 more than 40 public health professionals from all countries of South Eastern Europe convened in Belgrade, capital of Serbia to discuss their national public health strategies and a common regional framework for them. The results are published in the format of a teaching book to enter them into the regular public health training programmes in the region [18- 19]. The main methodic approach was SWOT analysis in combination with the nominal group technique. Given the severe weaknesses identified and overwhelming threats persisting in the region a strategic option of 'Comparative advantage maximizing Strengths and Opportunities' turned out to be the preferred

Table 1. Action Plan 2005-2015: Objective 4.1 "Development of a new public health policy, its implementation and evaluation of impact on the health of the population".

Objectives	Activities	Results	Relevant institution for Implementation with Partners	Source of Funding	Timeframe
4.1 Development of a new public health policy, its implementation and evaluation of impact on the health of the population	⁀ Form the National Commission for Public Health and relevant bodies at the regional and local level	Formed National Commission, regional and local bodies	Ministry of health with the local community	Republic budget – Ministry of Health; local budget;	2005 -2006
	⁀ To draft a law on the public health service	Law	Ministry of health with institutes of public health and donors	Donations	2005
	⁀ Improvement of the existing, relevant legislation by bringing it into conformity with that of the EU	Harmonized regulations	Ministry of health with institutes of public health and all relevant ministries	Republic budget – Ministry of Health;	2006 -2015
	⁀ Estimate and evaluate effects of the health policy and policies of other public sectors on the health of the population, with the emphasis on inequality	Report	Institutes of public health with the National Commission for Public Health, regional and local bodies and relevant institutions of the government and non-government sector	Republic budget – Ministry of Health; local budget	2010 and 2015

Table 2. Suggested strategic goals for Regional Public Health Strategy in South Eastern Europe.

Goals	*Objectives*
1. Reducing inequalities in health	1.1. Targeting vulnerable groups 1.2. Ensuring adequate and safe living conditions
2. Strengthening social participation	2.1. Mapping social participation opportunities and initiatives 2.2. Awareness rising and empowerment of the public 2.3. Developing mechanisms to involve civil society in decision making process
3. Strengthening human resources in public health	3.1. Ensuring sustainable development of human resources 3.2. Enhancing regional professional collaboration
4. Improving regional public health collaboration and knowledge	4.1. Establishing a regional public health information system 4.2. Developing mechanisms for reporting and analysis at regional level 4.3. Improving the level of public health knowledge among three key groups: the professionals, the decision-makers and the public
5. Establishing intersectoral cooperation	5.1. Establishing involvement in programmes of non-health sector 5.2. Introducing intersectoral research

choice. The goals were identified as common priorities (Table 2).

The regional strategy as described still lacks adoption of the action plan as it is available for some national strategies notably the Serbian one. In its present form it shares a common weakness of policy proposals: an overall guidance to implementation, monitoring and evaluation. The process of adoption may take at least as long as the national one, however, what is most important is the development of a common language and personal familiarity of the public health professionals, scientists and decision makers in the neighbouring countries of the region. To this aim the support provided by the institutions and programmes of the European Union has been essential in terms of financial support but also in providing a harmonizing framework.

Public health information

Two information bases have been instrumental for the strategy development described above: The Serbian Burden of Disease Study, SBDS (4) and the comparative analysis of the Minimum Health Indicator Set, MHIS (28) assembled in the Stability Pact framework. Whereas the SBDS indicates the highest burdens as measured by Disability Adjusted Life Years (Figure 1) the indicators of the MHIS allows for a comparison with the other countries in the region (Figure 2). Recently Serbia decided to adopt the health monitoring system developed with EUROSTAT [20] but functional implementation will not be achieved for some years to come.

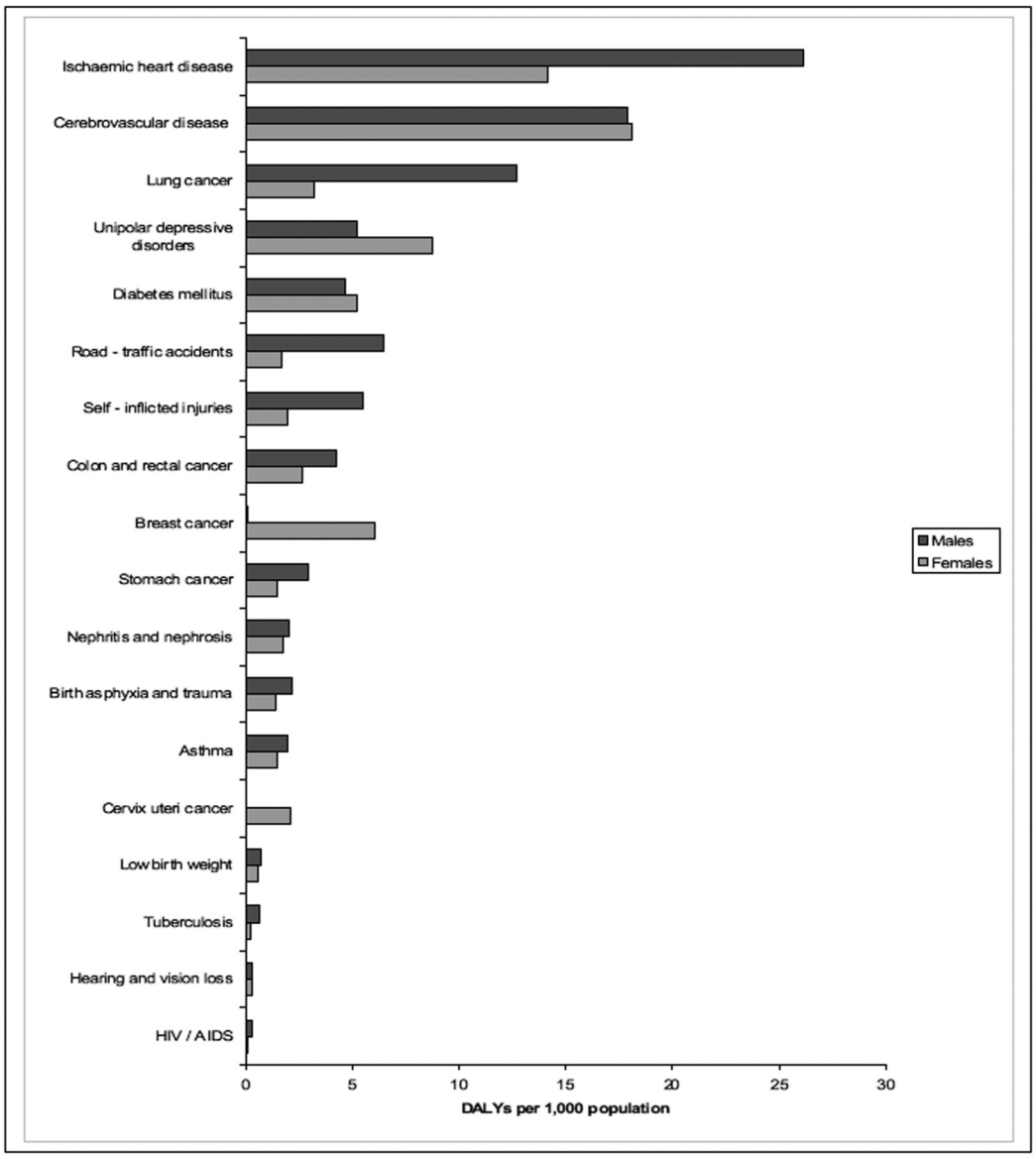
The public health management has to be modernized by improving information systems which can timely monitor health service utilization, changes in population health and control of all the financial input and output. One of the crucial factors for implementation of such reform projects is the development and application of an integrated information system based on indicators for management support.

Today increasing attention is focusing on evidence based public health management and the benchmark approach as a new tool for policy analysis [21]. Delegating the responsibility for the recognition of the needs for health of specific populations and their satisfaction at lower referential levels also requires that managers are educated in public health, including statistics and epidemiology. They should be acquainted with the methodology of assessing the health status, in programming for health, and in the techniques of monitoring and evaluation. Hence, the efficiency of the management itself, beside theoretical knowledge and training, mainly depends upon the existing evidence on possibilities of acting upon health care performance. A "complete manager" in an evidence based health system should possess, apart from general managerial skills, evidence based decision making skills, as well [22].

Public health legislation

In Serbia, the most important institutions of public health are the Institutes of Public Health (IPHs), with a long tradition in former Yugoslavia. They were developed from the specialised institutions for preventive medicine known as Institutes of Hygiene. Today there are 23 IPHs. Beside these there are a large number of institutions working in the field of public health,

Figure 1. Burden of selected diseases, by sex (DALYs per 1.000 population), Serbia without Kosovo and Metohia.



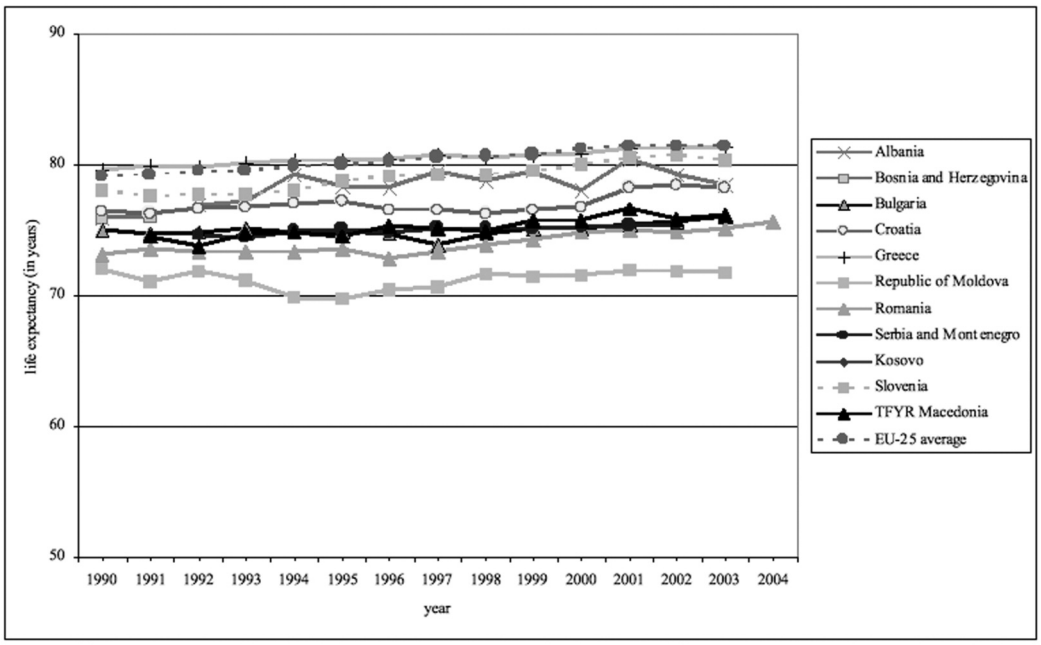
Source: Atanasković-Marković Z et al. [5]

such as primary health care, training, and research institutions.

According to the Health Care Law, the IPHs monitor, investigate and study the health status and health culture of the population, status and quality of the environment, incidence and prevalence of diseases of socio-medical significance, the influence of ecological factors on health, and also the organization, work and development of the health services with the purpose to undertake the corresponding measures related to the health protection and promotion. Dom Zdravlja (Health Centres) play an important role in the health promotion and disease prevention. They cover the area of one or more municipalities (the total number of municipalities in Serbia, without Kosovo is 161). In primary health care, they cooperate with the regional IPH.

Keeping in mind that health has been included by WHO in the "Hexagon of Natural Rights", together with the right to freedom, property, intellectual products, justice, and the lawful state, and that health itself is determined by many factors, it is understandable that legislative regulations related to Public Health can be found in many other legislative areas [23]. A separate law on Public Health doesn't exist yet as of today in Serbia, unlike to some other countries. Despite the field is regulated indirectly in many ways, starting from the highest legislative act "The Republic Constitution", the regulations regarding Public

Figure 2. Life expectancy at birth, in years, female, SEE-countries, 1990-2004.



Source: Bardehle D. [48]

Health and health promotion are mainly codified as social rights of the citizens, and therefore can be found even more often in the legislative areas that regulate the protection of the external environment, food, and the sectors outside the health system in general (work legislation, education legislation, drug sales, industrial production and consumption). In addition to republic laws concerning the health system, there are numerous legislative acts containing regulations applicable to the Public Health [24].

According to the current register of the Republic Legislation in Serbia, the total number of legislative acts that are related to the Public Health (laws, decrees, decisions, regulation book, orders, by-laws) is more than 170 [25]. The number of existing legislative acts does not say much about their implementation in practice. On the contrary, the numerous violations of these acts are obvious, with just incidental sanctioning often classified in the civil legislation and not the criminal one.

The structural characteristics and the functioning of the Institutes of Public Health in Serbia are not yet regulated by a separate law or legislative act, but they are regulated by the basic laws and their amendments (the Health Care Law and the Health Insurance Law) [26] and also by a set of about 32 legislative acts primarily relating to other areas. The IPHs are financed from the governmental budget i.e. tax money and by the Health Insurance Fund (HIF) i.e. from insurance fees. The state's interest in the activities of the Institutes is not defined. Therefore, there is regular confusion on how big the shares from the government i.e. the Ministry of Health and from the HIF should be. It should be noted that the public health service is mainly, if not exclusively, financed from taxation even in countries with a Bismarckian system like Croatia or Germany [27-28].

The agreement on a new strategic orientation made it clear that the public health service and its institutions - firstly the 22 regional and local Institutes of Public Health (IPH) in Serbia and especially the Republic Institute of Public Health "Milan Jovanovic Batut" (RIPH) in its national lead role - need to reorganize in order to manage the new tasks [29-30]. This followed along two lines: (a) the drafting of a new public health legislation and (b) the elaboration of a detailed proposal for change management [31].

Public health training and research

It is widely accepted that education of public health professionals should include "not only the long recognized five core components of public health (i.e. epidemiology, biostatistics, environmental health, health services administration, and social & behavioural sciences) but that it also encompasses eight critical new areas: informatics, genomics, communication,

cultural competence, community-based participatory research, policy and law, global health, and ethics" [32]. The ethical basis of the New Public Health approach and professional education are equity, solidarity, subsidiarity, sustainability, participation, efficiency, justice and peace [33]. At the same time, these values provide a cornerstone of the framework for the strategic orientation of Public Health in Serbia.

In such environment the School of Public Health was founded in the summer of 2004 - with support from the European Union and its European Agency for Reconstruction (EAR) through one of the components of their project "Support to the Public Health Development in Serbia (SPHDS)"- as a functional unit of the School of Medicine and under the umbrella of the University of Belgrade. At the macro level the most important step was a Health Policy Document adopted in 2002, with a definition of the main directions for sustainable development, being a continuous process within the transition of the entire socio-economic system. It presupposes the "Improvement of the human resources for health development" [11]. In the same year of 2002 a comprehensive assessment of public health training needs was performed in Serbia [12]. The main obstacles for change identified by the Directors of the Institutes of Public Health were: inappropriate legislation (100%), the lack of financial resources (85%), and the lack of properly trained staff (50%). Also the need was noticed for more communication and collaboration between the Institutes of Public Health and sometimes even between the departments of the same institute.

The "School of Public Health" was therefore established in Serbia to support postgraduate as well as continuing education in public health, health policy and the management of health services [34]. Starting from the results of this situation analysis regarding training needs, a position paper on the establishment of a Centre – School of Public Health was agreed [35] outlining the following operational objectives:

- Education of capable experts in the field of public health,
- Improvement of knowledge in the health sciences,
- Health promotion in cooperation with the local communities,
- Training of competent researchers in the field of public health,
- Improvement of the process of decision-making and policy formulation.

The organizational structure is set up to provide a base for the provision of a postgraduate master of public health and for continuing education adopting the basic modules contained in the programme for a degree of a European Master of Public Health [36- 38]. The list of those modules includes the following five key areas of education in the domain of public health:

- Public health in Europe,
- Epidemiology and biostatistics,
- Health policy and management,
- Health promotion, health education and social sciences,
- Environment and health.

Programmes of continuing education intended for public health workers of different professions, coming from different institutions, are organised on the basis of previously developed modules. During a two period more than 550 public health professionals passed through a programme of 3 to 5 days of continuing education. The Public Health Summer Campus 2005 in Belgrade started as a pilot dedicated to five important and future-oriented Public Health topics, coordinated by international experts:

- The Health Policy of the European Union
- Public Health Genetics
- Working with the Private Sector
- Quality Management of the Health Services
- Public Health Pharmacotherapy and Public Health Nutrition.

Development of partnerships and joining the network of health institutions are significant elements of the School of Public Health's success [39]. The Centre – School of Public Health in Belgrade is a model for new structures in training and research. The format described here we believe can together with the other new schools in South Eastern Europe serve as a model of how to establish new structures in a rigid inherited system.

Conclusions

Today the public health systems are far too complex to be managed only centrally. The more it is essential to establish an ongoing public debate and a responsive political process that is grounded on evidence based information and training. However, as financial and intellectual resources are limited everywhere it is mandatory to set strategic priorities and give direction to this process. This is the task of strategy formulation and consensus building among all stakeholders. The main infrastructure for this permanent process, i.e. the Institutes of Public Health and Schools of Public Health, their rights and duties, have to be formalized and confirmed through

appropriate and specific legislation in terms of a public health law. Serbia has assembled all of the necessary elements, but fails to connect them in a Framework for Public Health Development. The regional collaboration is supported by The Dubrovnik Pledge of 2001 [40]. Many of the transitional changes in the country have the potential to facilitate the harmonization with EU standards and other international public health policies [41].

However, Serbia and the region of South Eastern Europe share a number of common features that continue to be barriers towards attracting trade and investment. These include visa regimes, trade barriers, poor legal enforcement, organized crime and corruption, political instability, poor transportation networks, and the yet unresolved final status of Kosovo. Weaknesses constraining the development of public health are identified in the fields of organization of the public health system, its financing, human resources management, public health information system, legislation and ethical issues. The organizational framework of public health in Serbia and political as well as economic instability are aggravating and perpetuating the inadequacy of resources. Frequent changes in political orientation result in lack of a proper formulation of operational plans. Furthermore, misunderstanding the regional needs by international donors and the insufficient external funding might also constrain the overall sustainability of public health development. Strategic planning and stability of strategic decision making is necessary at all levels of government and should include the non-governmental sector in that process. In particular, planning should assess local public health strengths and weaknesses, set goals and establish priorities, and identify resources and organize actions to meet those goals. Local public health professionals need to enact policies to promote public health sustainability and development. Hence, building on current potentials does not mean to walk in the clouds with reality out of sight: maximizing the strengths implies overcoming the weaknesses for a stronger position to take opportunities offered by the external environment.

The four elements (strategic management, public health information, public health legislation and public health training and research) identified here as essential for a successful and systematic improvement of public health in transition, are usually considered separately, very likely because different skills and professional backgrounds are involved. However, it is the essence of the health sciences – as the scientific dimension of public health - to cope with different paradigms developed and firmly established over decades. In this paper we argue for an integrated approach in spite of all conceptual and practical difficulties. The multi-professionality at the Institutes of Public Health and the corresponding inter-disciplinarity at the academic Schools of Public Health provides the institutional environment if the resources of skills, knowledge and experience are adequately managed – in a participatory and supportive system representing a flat hierarchy ("Horizontal Management" [42- 44].

The federal state of Northrhine-Westphalia in Germany has been especially successful in implementing a supportive structure for horizontal consensus management in health care: In the new health legislation of 1997 [45-47] health conferences are established as well at the state level, chaired by the Ministry of Health itself as at the communal level, chaired by the head of the local health office which also has to organize its proceedings. Members to be invited are among others: Medical Chambers, Pharmacists' Chambers, Hospital Association, Health Insurances, Social Insurances, State Board of Counties & Cities, Employers' Association, Trade Unions, Occupational Hazard Insurances, Social Welfare Association, Self Help Associations, Regional Administrations, and Regional Boards.

It is obvious that this outline applies only to open societies where an inter-play can develop between the people and the administration. However, undemocratic closed societies do not seem to have a competitive potential for dynamic development, at least not in the long run.

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