

Public health research needs and challenges in transitional countries of South Eastern Europe

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Abstract

The former communist countries of Southeastern Europe (SEE) are undergoing a rapid process of transformation from state-enforced rigid economies to market-oriented societies. Compared with European Union, SEE countries are characterized by higher death rates including not only infant mortality and maternal death, but also cardiovascular mortality and injuries. Yet, there is no sufficient research in SEE countries directed towards gaining a clear understanding of the health effects of transition and the fluctuations in health outcomes. A general characteristic in almost all SEE countries relates to the comparable problems they face for engaging in research work which include: (i) lack of funds; (ii) lack of expertise, and; (iii) lack of “good data”. Nevertheless, there is an emergent need to improve research capacities in order to address and analyze on a scientific basis the health problems and challenges in SEE countries. From this point of view, the Forum for Public Health in South Eastern Europe (FPH-SEE: www.snz.hr/fph-see) seems a suitable network to promote, provide guidance and support different research activities and research projects in SEE countries. To increase the visibility of FPH-SEE network and to enhance its collaboration and active communication with European academic institutions and donors, it was decided to establish an office near the Department of International Health, Faculty of Health, Medicine and Life Sciences, Maastricht University, which will be responsible for the coordination of the research network for SEE countries. This will help to promote research funding and to develop and strengthen research capacities in the SEE region.

Key words: policy making, public health, research, southeast Europe

Health status in southeastern Europe vis-à-vis western countries

The former communist countries of Southeastern Europe (SEE) are undergoing a rapid process of transformation from state-enforced rigid economies to market-oriented societies [1]. Life expectancy in the transitional countries of Eastern Europe (Table 1) is considerably lower than in the Western European countries, particularly so for Moldova [2-4]. Notwithstanding the higher infant and child mortality, as well as maternal mortality, most of the east-west gap is explained by the higher death rates from cardiovascular diseases and injuries in Eastern countries including SEE populations [2,3,5-7]. Thus, in SEE countries, the magnitude and trends of ischemic heart disease mortality strongly parallels adult mortality trends and life expectancies.

Stroke mortality in the transitional SEE countries tends to be far higher than in the European Union countries too [4]. Therefore, changes in mortality attributed to cardiovascular diseases and injuries largely account for changes in overall mortality. The exceptionally high rates of smoking [1], excessive alcohol consumption and binge drinking [1-3], unhealthy dietary habits including low intake of fresh fruits and vegetables [6,7], as well as unfavorable socio-economic and psychosocial conditions [8-11] are believed to contribute to the high levels of chronic diseases in SEE countries including cardiovascular morbidity, diabetes and other chronic diseases [1-3]. Nevertheless, in many of the SEE countries, which were somehow characterized by traditional societies, the change has differentially affected different segments of the population—some

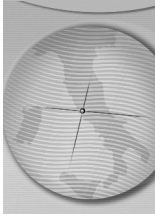


Table 1. Life expectancy at birth in countries of Southeast Europe (SEE).

Country	Life expectancy at birth (in years)	
	Year	Estimate
Albania	2004	71.00
Bosnia-Herzegovina	1991	72.73
Bulgaria	2004	72.60
Croatia	2006	76.01
Macedonia	2003	73.54
Moldova	2006	68.50
Montenegro	2005	74.15
Romania	2007	73.27
Serbia	2006	73.48
Slovenia	2006	78.35
EU-25 average	2006	78.73
Germany*	2006	79.86
Greece†	2006	79.79

Source: World Health Organization, Regional Office for Europe (2008). *European health for all database (HFA-DB)*. Copenhagen, Denmark.

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† A European Union country which is a partner of FPH-SEE.

moving forward and welcoming, participating in and forming the new order, whereas others have fallen behind, unable to cope with the dramatic changes [8,9]. The inability of certain disadvantaged segments of the population to adapt to the new political and economic system inevitably leads to change in the position of individuals in the society, enhanced social mobility and increased inequalities, with some groups thriving and other falling behind [8,9]. Thus, most of SEE countries are likely to be heterogeneous in terms of within-society disease patterns and distribution of health characteristics and conventional risk factors as it was recently shown in the adult population of Albania [12].

Nonetheless, there isn't much ongoing research in SEE countries directed towards gaining a clear understanding of the health effects of transition and the fluctuations in health outcomes. From this point of view, there is an obvious need to promote research funding and especially to develop and strengthen research capacities in the SEE region.

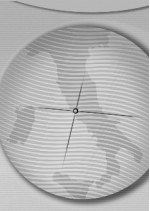
Difficulties to conduct research work and prospective solutions for southeastern Europe

Currently, a general characteristic in almost all SEE countries relates to the comparable problems they face for engaging in research work. A few similar challenging patterns observed in these countries are described below:

- *Lack of funds*: indeed, there are limited funds for research work in all SEE countries. This is

especially true for the newly established schools of public health or other university settings involved in public health training and research activities. The national institutes of public health are somehow in a better position as long as they absorb some funds from the Ministries of Health, but especially so from such international institutions and donors as the United Nations agencies, international foreign development agencies (USAID, DFID, GTZ, etc.), as well as other institutions. Therefore, there is a strong case for collaboration and affiliation of the schools of public health and other public health training university departments with the national institutes of public health in order to provide more flexibility and opportunities with regard to absorption of research funds.

- *Lack of expertise*: research funds aside, public health workforce in SEE countries is currently inadequately prepared to conduct research work according to international standards which would ultimately serve to improve the health status of the populations. The lack of proper research capacities dates back to socialist standards of research work and is deeply inherited in the "communist thinking" where e.g. probabilistic methods in health sciences were tailored in accordance with ideological reasoning – just to recall the point made by Archie Cochrane which was subsequently elaborated by Martin McKee: experimental methods in health sciences were



discouraged by communists as long as their results could not be predicted with confidence [13]. As long as diseases were viewed as transient conditions related to the transition to communism, the reigning ideology was to completely discourage innovation and scientific thinking in health sciences [13]. Therefore, there is an obvious need to train public health specialists in SEE countries to conduct research work in accordance with the best practices and the established international standards of quantitative and qualitative research methodology with the ultimate goal of developing and empowering communities to improve their health status and the quality of life. Of course, this requires time, but it's absolutely crucial to start changing the "thinking paradigm" of the public health researchers and practitioners in SEE countries in terms of exposure to sources of evidence and information, acquisition of basic searching techniques including bibliographic databases and virtual libraries and, more importantly, probabilistic thinking and levels of evidence in public health and health sciences [14].

- *Lack of "good data"*: notwithstanding the scanty information available, secondary data could be effectively used at least to compile electronic inventories for different health conditions and characteristics of the populations in SEE countries. Furthermore, baseline information on different health conditions and parameters is a core prerequisite of many applications for research funds. Therefore, there is an urgent need to break the vicious circle of "lack of data" in SEE countries through employment of research techniques which account for different sources of errors (and their respective extensions) and thereof enable approximates/estimations of different health care indicators and health status characteristics whose reporting and monitoring systems have been quite entirely neglected to date.

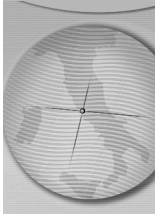
Informing policy through research work in southeastern Europe

The research activities in SEE countries should always be directed towards the health of the populations and should be fully compatible with the accepted international standards of ethics and research methodology. Research studies should set realistic targets, clear outcome measurements and, more importantly, should clearly state objectives and benefits for the populations [14]. Conclusions from research work should be drawn in a timely manner in order to influence and guide

policy and planning of public health services and other health care services. From this point of view, research work in SEE countries should be regarded as a function of policy making rather than "pure science" disconnected from health realities and problems of the populations. Yet, in contrast to the clinical medicine, research in public health and health sciences, especially research work on health system organization and management, have distinct organizational structures and programs from health policy making and place a different emphasis on dissemination and implementation [15]. Research is often driven by scientific priorities only with little regard for policy relevance, unlike health policy which is usually led by legal arrangements (laws, regulations) and often requires the consensus of a whole range of stakeholders [15]. Among other things, the Health for All strategy of 1984 emphasized the need of each member state to formulate research strategies in order to inform policy [16]. However, the two subsequent revisions [17,18] did not make sufficient reference to research. Therefore, at a European level, there is an obvious need to foster research work in public health and especially so the health-policy driven research in line with the statements on the future of public health in Europe published by the European Public Health Association in 2006 [19].

Forum for public health in southeastern Europe as a key network for reconstruction of public health training and research in SEE countries

This collaborative network established in 2000 and referred to as the *Public Health for Southeast Europe (PH-SEE)*, has contributed enormously to reconstruction of public health education and training programs in all SEE countries. In 2006, the network was transformed into the Forum for Public Health in South Eastern Europe (FPH-SEE: www.snz.hr/fph-see) which extends the successful and effective cooperation and collaboration between public health institutions in the region, including the existing and the newly established Schools of Public Health, selected national Institutes of Public Health, and most of the national Public Health Associations in the SEE region. A salient achievement of this network relates to development of more than 250 training modules which were designed in full compliance with European standards. Five teaching books (overall containing more 3000 pages) for teachers, researchers and health professionals have been published to date (<http://www.snz.hr/ph-see/publications.htm>).



Nevertheless, in parallel with education and training activities, there is an emergent need to improve research capacities in order to address and analyze on a scientific basis the health problems and challenges in SEE countries. From this point of view, FPH-SEE seems a suitable network to promote, provide guidance and support different research activities and research projects in SEE countries [20]. Nevertheless, there is need for close cooperation between members of the FPH-SEE network in order to conduct high-quality research work. More importantly, establishment and strengthening of permanent links and active collaboration with renowned public health institutions in Western Europe would be a crucial requirement for fund raising and, subsequently, for a successful implementation of research projects in the SEE region. Regional collaborative studies with assistance and support of well-known Western European universities will provide new information that may help to control and reduce the burden of premature disease and mortality in SEE countries [20]. It will also contribute to development of research capacity in research methodology in these countries, as well as international cooperation in important aspects of epidemiology and public health. Collaborative research projects would help to develop a cadre of trained public health specialists and researchers, as well as a study practice base for graduate student training (i.e. MPH and Ph.D. theses) within the Schools of Public Health and other public health training institutions in SEE countries. Furthermore, findings from research studies will help to develop strategies for public health interventions directed towards the general population, but especially so to vulnerable population subgroups which are supposed to be at social disadvantage in the wake of the socio-economic transition that SEE countries are facing. In addition, research studies would generate invaluable databases and opportunities for follow-up research that would eventually stimulate research interest and increase public health research networking and collaborative enterprises with European colleagues.

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