

PUBLIC HEALTH EDUCATION IN CENTRAL AND EASTERN EUROPE Croatia perspective -



INTERVIEW with
Professor **Jadranka
BOZIKOV**, MPH, PhD ,

*Director of the Andrija
Stampar School of Public
Health, School of Medicine,
University of Zagreb*

Working on international projects she visited many health care, scientific and higher education institutions outside Croatia, in particular those in South-Eastern European countries, Austria, France, Germany and Japan.

At the School of Medicine a PhD program in Biomedicine and Health Sciences has been established in 1998 based on Bologna principles and Professor Bozиков assisted Programme's coordinator in the development of this modular Programme as well as in the organization of two European Conferences on Harmonization of PhD Programs in Biomedicine and Health Sciences that were held in Zagreb in 2004 and 2005 and resulted in the establishment of the organization named ORPHEUS (Organization for PhD Education in Biomedicine and Health Sciences in the European System, more detailed available at <http://www.orpheus-med.org>).

Professor Bozиков co-edited two books in English (published in Germany and UK) and co-authored more than 100 scientific and professional papers in international medical journals; more than 40 of them are indexed in Current Contents and cited in SCI more than 350 times.

Simulation modeling and its applications in public health and biomedicine has been in a focus of her scientific interest from the very beginning of her career and also methodological tool employed in her MSc and PhD thesis as well as in numerous scientific articles.

Academic positions:

Jadranka Bozиков is Full Professor at the School of Medicine University of Zagreb and Director of the Andrija Stampar School of Public Health since 2008, being previously Deputy Director and Head of the Department for Medical Statistics, Epidemiology and Medical Informatics. For more than ten years she assisted the Coordinator of the PhD program "Biomedicine and Health Sciences" and contributed a lot to the establishment of this modular PhD program covering all medical disciplines including public health ones.

Research interests:

Health System Research, Application of Simulation Modeling in Epidemiology and Public Health, Bioinformatics, Medical Informatics, Health Information Systems, e-Health and m-Health apps.

Jadranka BOZIKOV is Full Professor at the University of Zagreb, School of Medicine in the Department/Chair for Medical Statistics, Epidemiology and Medical Informatics belonging to the Andrija Stampar School of Public Health.

She was a head of the Department for Medical Statistics, Epidemiology and Medical Informatics (2004-2006) and currently she is director of the Andrija Stampar School of Public Health after being deputy director 2006-08.

She was born and educated in Zagreb (Croatia) where she graduated in Mathematics and in 1978 joined the Andrija Stampar School of Public Health which is a part of the School of Medicine, University of Zagreb, but also an institution with its own tradition and identity.

Jadranka enrolled MPH program Planning and Management of Health Care and earned both, MSc and PhD degree in the field of Public Health and Health Care (in 1988 and 1997, respectively). She teaches Medical Informatics and Research Methodology to both, undergraduate and postgraduate students at the School of Medicine and School of Dental Medicine and she is visiting Professor at the Medical School University of Mostar, Bosnia and Herzegovina.

Professor Bozиков participated in several internationally supported projects intended for capacity building in public health and medical education like the following two: PH-SEE - Programmes for Training and Research in Public Health in South Eastern Europe (initially financed by Stability Pact for South East Europe and later by DAAD - German Academic Exchange Service) and Continuing education for primary health care (joint project with JICA - Japan International Cooperation Agency).

Reporter: Professor Jadranka Bozиков, you are in the position to coordinate the School of Public Health already for more than eight years and looking back we can appreciate a big part of your work is dedicated to the development of this institution which you joined almost 40 years ago after you attained qualification in non-medical field i.e. in Mathematics. You ascended gradually to the highest managerial position at the national public health school working in interdisciplinary field and developing professionally and scientifically surrounded and cooperating with colleagues of different backgrounds. How important you see this interchange and cross-fertilization between different disciplines and professions?

- How important do you consider interdisciplinary approach in Public Health.
- Would you classify your academic environment as friendly and encouraging for inter-professional cooperation?
- Are relationships and experiences you have at national and international level in Public Health and within higher education community also positive or not?

Jadranka BOZIKOV: Thank you very much for the invitation to be interviewed for your distinguished journal and for this question. Indeed, I consider myself as being privileged by the opportunity gotten so many years ago to develop my career in so challenging field like Public Health. I joined the Andrija Stampar School of Public Health, namely the School's Department for Medical Informatics as qualified Math-teacher and with short experience of teaching in secondary school. Medical or Health Informatics was introduced into the curricula for medical and public health students at our School already at the beginning of 1970-ties and the informatization of health care system started during the following decade.

Nowadays we have much more innovative use of Information and Communication Technology (ICT) like e-Health and m-Health and Internet of things. Accordingly, we have to introduce new topics on mobile health applications in our Public Health curricula. Firstly I was engaged in assisting researchers, including Master and PhD candidates, in use of statistical and computer methods in their research projects and applications in practice. At the time we used terminals accommodated at different higher education and research institutions and connected with mainframe computer at the University Computing Centre. Situation was completely different from today's when personal computers connected to Internet are everywhere and large databases, structured information and extensive knowledge are available on-line, practically on fingertips and even via mobile devices and smart phones.

I evoked this early days of my career to point out how important is inter-professional and multidisciplinary cooperation in Public Health education and research and how crucial it is for capacity building in Public Health. At the

School of Public Health we have research fellows, assistants and professors with different backgrounds, besides medical doctors who are the majority and who are specialists in different medical disciplines like family medicine, social medicine and organization of health care (now termed public health medicine), epidemiology, occupational medicine, school and adolescent medicine, social paediatrics and psychiatry, we have experts with background in sociology, psychology, economics, law and even mathematics and engineering. In broader academic community, within the School of Medicine we are working together with specialists in biochemistry, physics, biology and others including, of course, specialists in different branches of clinical medicine.

Nowadays, we cannot afford the highest attainable health care level without technology, neither in clinical medicine nor in public health interventions. I have to say with pleasure that especially in our School, multidisciplinary approach and inter-professional cooperation was always encouraged and promoted and that is why the School was so successful in some cutting edge initiatives during its history.

R: *The institution you coordinate has a long and prolific tradition, being one of the eldest schools of Public Health in Europe.*

- Please provide a brief historical perspective on the main steps of development of your institution.
- What is the mission and scope of the Andrija Stampar School of Public Health?
- In your vision, what is the role of PH schools in a modern and integrative Europe?

JB: You are right; the School of Public Health in Zagreb is one of the eldest institutions of its kind in Europe. School's building was erected by funds of the Rockefeller Foundation in 1926-27 and formally opened on October 3, 1927. It was done with support of League of Nations and thanks to the efforts of Dr Andrija Stampar who at the time was Head of the Department for Hygiene at the Ministry of Health in Belgrade and later he returned to Zagreb and became professor of hygiene and social medicine and School's director. Guided by his principles and vision, the School of Public Health developed outstanding activity and grown up into an academic institution extremely active in international cooperation. In the beginning the School was integrated with the Institute of Hygiene into one institution. At the time institutes of hygiene carried out very important tasks: they supervised and directed the work of the network of health institutions in their regions. The School was the top element of public hygienic service entrusted with the task to study conditions that might have favourable or unfavourable impacts on people's health and organize health education of population.



One of the principles which gained in importance many years later in international community was to consider medicine as one and an integrated discipline in which prevention and treatment are different aspects of integrated health care. According to such views, the hygienic and health service established in the country in only 10 years during 1920-ties was considered by many experts in the world as an original, progressive and successful form of health care system. Extensive field work on the investigation of health conditions was organized in parallel with health campaigns, endemic disease control (malaria, tuberculosis, alcoholism and malnutrition), rural sanitation as well as health education and social services for vulnerable groups. The School started so called "Peasant's University", specially designed seminars for village residents, both men and women, conducted in School's premises where they were accommodated in the Dormitory. They were taught and trained how to maintain hygiene in their households and villages, how to care for babies and sick family members, what are the methods for improvement of health and living conditions in general, including methods for agriculture, rural sanitation and expenditure control. Many different profiles of professionals participated in these activities – physicians, nurses, veterinarians, economists, agronomists, sanitary engineers and others. In these programmes, modern pedagogical methods were developed and used, such as practicum, workshops and exercises and advanced visual tools were employed including movies. A rich library and documentation centre as well as the School's own publishing and printing service were organized including a photo-film laboratory which became one where the first artistic films in the country were made. In cooperation with technical faculties, the Department for sanitary technic engaged engineers and architects and provided assistance in planning and construction of sanitary infrastructure all over the country.

In the same time the School had a pivotal role in continuing education of physicians, nurses, veterinarians, teachers and other professionals.

Health was seen in line with Stampar's principles, in its broadest sense as a part of life and development of the community. Let me cite four of these principles formulated by Stampar in an articles published in 1926.

- First of all the physician must be a social worker; by individual therapy he cannot attain much, social therapy is the means of success.
- The physician has to be the teacher of the people.
- The question of national health is of a greater economic than humanitarian importance.
- The principal fields of action of a physician are human settlements and not laboratories and consulting rooms.

Stampar himself was a medical doctor but he was aware of the importance of social determinants of health and believed in social therapy.

Andrija Stampar is considered as a founder of the School although during the first two decades he supervised and steered its development on distance and substituted by many co-workers. After the World War II he re-established School activities and under his bright leadership and Directorship, School became an independent institution operating under the wings of the School of Medicine and the University of Zagreb, and took over teaching of preventive subjects for medical and nursing students. Due to his international experience and reputation, Andrija Stampar had got the opportunity to play an important role in the foundation of the World Health Organization; he chaired the Interim Commission and was elected by virtue of acclamation as President of the First World Health Assembly held in Geneva in 1948. The School proudly took Andrija Stampar's name after he passed away in June 1958.

After the World War II the School is operating under the wings of the School of Medicine belonging to the University of Zagreb and thus is much more devoted to medical education. Many postgraduate programmes were introduced during 1950-ties and early 1960-ties as part of specialization including the organized postgraduate vocational training for general practitioners, the first of its kind in the world. Through postgraduate programmes and training of primary health care practitioners and nurses the School influenced public health practice and informed health policy makers.

At the same time the School organized, in collaboration with the World Health Organization, many international postgraduate courses in different public health disciplines (e.g. occupational medicine, environmental health, planning of primary health care services etc.) attended by students from more than 60 countries.

The School started a large number of postgraduate (MSc) programmes in public health disciplines that attracted students from all other federal republics (mainly MDs and other medical professionals but also those of non-medical background working in health care services or engaged in public governance).

The mission of the Andrija Stampar School of Public Health is to develop and promote high quality professionals, methods and standards in the field of public health aiming at the higher level of population health. This has been achieved by both scientific, research and professional activities of the School and through undergraduate, postgraduate education, and continuing professional development programmes.

Being a part of the School of Medicine, but also the institution with its own tradition, the School is still paying attention to population health education and community actions towards health. School also supports, both scientifically and professionally, the planning, development and evaluation of public health programs and policies regardless if they are coming from governmental or nongovernmental sector.

Today, when we are witnessing brilliant scientific achievements and advances in clinical medicine, we have good understanding of the causes and risk factors for diseases and impaired health; we are experiencing an increase in life expectancy but in the same time we see a widening of health inequalities, both within and between European countries.

Therefore, the public health work is even more important and challenging because we need “evidence based” interventions.

In order to answer your question how I see the role of Public Health Schools today in a modern, united and integrative Europe, I must to take historical perspective again.

Unlike in the United States and Canada, where Schools of Public Health were established and operate as independent academic institutions engaged in research and education of Public Health experts, the development of European schools was primarily influenced by medical profession and the healthcare system.

Regardless if they are operating under the wings of the Ministries of Health that are actually the constituents of public (state-governed) healthcare system or under the wings of Medical Schools/Universities (for instance, Hygiene or Social Medicine Departments or, more recently, Public Health or Health Management Departments as typical entities), European Schools were dominated by medical profession from the very start gradually also affiliating experts of other backgrounds as necessary due to the multidisciplinary nature of Public Health.

Basic and continuing education remains the main task of Public Health Schools. Their mission is to ensure public health workforce in appropriate quantity and with adequate competences. In many Central and Eastern European countries Public Health remained a field for postgraduate training, at least when it comes to university degrees. It is not yet recognized as a profession and there are no job positions for trained public health graduates.

That is why some university programmes organized during last 15-20 years by Public Health Schools failed. Some Western European countries are exceptions in that regard but without having job positions in the country, we may not introduce Master programmes (those in Bologna sense) and particularly not Bachelor programmes in Public Health.

R: Given your institutional experience in the PH education field, it is a fact that you can boast numerous results that I please share them with our readership. Of special significance is the transfer of experience and collaboration with developed and developing countries. It has been stated several times that the Andrija Stampar School of Public Health is a leader in international cooperation in public health.

- What are the main training programmes developed at Andrija Stampar School of Public Health and what is the target group for each ones?

- What are, in your opinion, the arguments your institution is considered a leader in the field of public health and how difficult do you consider will be to keep this status?

JB: Nowadays the School comprises five departments (Department for Social Medicine and Organization of Health Care, Department for Family Medicine, Department for Environmental Health and Occupational Medicine, Department for Medical Statistics, Epidemiology and Medical Informatics and Department for Medical Sociology and Health Economics) with some 50 faculty members affiliated with the School of Medicine and collaborating with colleagues from its other departments, institutes, hospitals and higher education institutions from Croatia, neighbouring and EU countries and worldwide.

The majority of our teaching engagements are in undergraduate and graduate medical and nursing programmes in which the share of Public Health subjects is around 10%. These are 6-year medical study enrolling 300 freshmen yearly and 6-year medical programme in English for international students. In addition we have 2-year master programme in nursing with more Public Health content.

At postgraduate level numerous programmes organized as part of medical specializations are running as well as a multidisciplinary PhD programme covering all medical disciplines including Public Health ones which is open to students of non-medical background as well. The same PhD programme runs in English for a smaller number of international students. Within the University of Zagreb we have neither Bachelor nor Master programme in Public Health due to the reasons mentioned earlier.

As already mentioned above, international cooperation stands at the roots of the School's activities since its establishment and enabled introduction of international programmes and training courses.

Currently, two School's departments are designated by WHO Regional Office for Europe as WHO Collaborating Centres (CC), namely CC for Capacity Building in HIV/AIDS Surveillance and CC for Occupational Health. The first one also known as Knowledge Hub for HIV Surveillance brings together an interdisciplinary group of scientists and policy makers across the University of Zagreb and institutions of excellence in HIV surveillance from all over the world.

Aimed at increasing the capacity of participants for development and implementation of HIV/AIDS surveillance systems, the Centre regularly organizes training courses attended by the participants from all over the world and provides technical assistance employing the best biological and behavioural methods ensuring that the development of HIV prevention and control programmes.

R: Generally, PH education development should be related to internal/national needs but there are more and more relevant voices in the field of PH that allocate to PH education development a key role in supporting common efforts for attaining European PH goals for next period. Health systems are divers and PH education needs are not similar across Europe. Despite these, in a global perspective, similar institutions from different countries could collaborate and put together objectives, experiences and resources to assure a high level education in PH for professionals.

-To what extent do you consider that similarity could be beneficial for regional cooperation in PH and PH education field?

-What do you think would be the issues that should be developed such regional/trans-border cooperation? Please detail also for specific issues in Central and Eastern Europe.

JB: It is self-understanding that the co-operation in public health within Central and Eastern Europe was in the past most intensive between countries within the same political blocks. In case of Croatia, the cooperation was most intensive between countries that were brought together into the Kingdom of Yugoslavia after the World War I and continued to belong to the same federal state after the World War II till its dissolution in a painful circumstances and wars during 1990-ties. Public health education and practice in those countries was based on common roots due to harmonized development of their health care systems during 70 years.

The Andrija Stampar School of Public Health as leading institution for Public Health education and training provided courses attended by many public health and medical professionals and that is why we have alumni in all former Yugoslav republics, now independent states in South Eastern Europe (SEE) but also in many countries outside the SEE Region, particularly in Arab countries then belonged to non-aligned movement. I know that Romanian Public Health and Medical Schools also have large alumni community outside Romania as well.

After a ten year break during 1990-ties the co-operation was re-established through several projects and regional networks like FPH-SEE - Forum for Public Health in South Eastern Europe, project started in the year 2000 that brought together schools and institutes of public health involved in academic programs from 11 South East European countries (Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Kosovo, Macedonia, Moldova, Montenegro, Romania, Serbia, and Slovenia). As a result of the co-operation and mutual exchange of experiences only through this network numerous meetings, conferences and summer schools were held during the last 15 years and six book volumes were prepared and published between 2004 and 2010 containing some 250 teaching modules authored by more than 200 authors.

In 2010 School organized together with the London School Economics and Political Sciences (i.e. its LSE Research on South East Europe) and the European Observatory on Health Systems and Policies a Research Workshop that took place in Dubrovnik and brought together participants from UK, Germany and South Eastern European countries. As the outcome of this workshop book entitled "Health Care Reforms in South East Europe" was prepared and published in 2012 by Palgrave Macmillan and includes a contributions of Romanian authors, as well.

R: Europe-wide associations and organizations, like ASPHER which brings together schools and departments of Public Health and provide a framework for capacity building for both education and research in the order to foster a creative and dynamic academic and practical training infrastructure for public health workforce development.

-What are the benefits for your institution as an ASPHER member?

-What other partnerships or collaborations do you have and what are the benefits of such collaborations?

JB: ASPHER was established 50 years ago in response to the initiative of the WHO Regional Office for Europe gathering together the leading Schools of Public Health in WHO Euro Region and, may I say with proud, the Andrija Stampar School of Public Health was among the founding schools. Moreover, the School hosted the First General Assembly convened in October 1968 and Dr. Teodor Gjurgjevic, acting in a capacity of the Administrative Secretary of the School was elected the Secretary General of the newly-established organisation. By the end of 1969 ASPHER counted 40 member schools and gradually the membership extended to 110 schools or departments established in 43 European countries and representing more than 5000 faculty members and experts.

It is a respectable association not only in number of institutional members but also as a community of academics with enormous potentials for gathering and exchange of experiences and good practices in teaching, encouragement of research and dissemination of findings and mobility of teachers and students, as well. In order to fulfill its mission and to align with the WHO and EU Strategies ASPHER set up its five strategic objectives and adopted its 2020 Strategy in June last year during presidency of Professor Vesna Bjegovic Mikanovic whom you interviewed so that the distinguished readership of Management in Health Journal is informed with the ASPHER Strategy and its benefits right from these pages of volume XIX, number 2. In two months ASPHER will mark and celebrate 50th anniversary, central meeting will be the summit of the schools' principals in Athens. This year's Deans' and Directors' Retreat is hosted by the National School of Public Health under the aegis of the Hellenic Ministry of Health.

The School is an active member of several other associations and networks organizing summer schools, meetings and conferences and very often we are hosting such events. Let me mention as a showcase the European Training Consortium in Public Health and Health Promotion (ETC-PHHP) which regularly organizes a summer school focused on developing practical and theoretical tools to enhance health promotion strategies in Europe. The course consisted of 200 hours of formal study for Master level participants take place every July/August in another member school and it happened that my School was the Summer school host in the years 2000, 2006 and 2011. The learning approach is based on salutogenic principles using a Pan-European perspective, information about this year's summer school which is taking place in Wageningen is available at <https://etcsummerschool.wordpress.com>.

Different working groups from the School are actively participating in many other associations, societies and networks whose activities are often supported by European and international organizations and foundations like for example WHO, UNICEF or Open Society Foundation. At national level the School undertakes initiatives that are sometimes recognized also beyond national borders. An example is the Healthy Counties Network (Program), a unique training program entitled "Health - Plan for it" that was awarded by the US Centers for Disease Control and Prevention (CDC) Global Health Program of Distinction Award. The award was presented to the School on January 16, 2013 as a part of CDC Sustainable Management Development Program (SMDP) 20th Anniversary Celebration. It is worth so say that this was only a crown of a series of awards reached by Healthy Counties member counties and project leaders since the start of the collaboration with CDC, namely with their Sustainable Management Development Program in 2001. In 2006 program leaders were awarded by the Management Training Program Excellence Award and one of the best performing counties, Istria County won Applied Management Learning Project Award two times (2004 and 2006). We co-organized and host the 4th CDC, SMDP bi-annual conference entitled "Global Conference on Strengthening Public Health Management Capacity" in 2008 in Cavtat near Dubrovnik.

R: Would you like to add anything else, maybe an answer to a question unaddressed in this interview?

JB: The Andrija Stampar School of Public Health as a part of the School of Medicine, University of Zagreb participates in many other networks, initiatives and projects at national, European and international level. I was personally involved in the establishment of ORPHEUS (Organization for PhD Education in Biomedicine and Health Sciences in the European System), an organization and a network of higher education institutions that is com-

mitted to developing and disseminating best practice within PhD training programs (at <http://www.orpheus-med.org> one can see that ORPHEUS includes currently three institutional members from Romania, as well). It is worth to mention that ORPHEUS invested a lot of efforts to establish quality indicators for PhD programs and developed and published "Standards for PhD education in Biomedicine and Health Sciences in Europe" that were also adopted by other associations, e.g. the Association of Medical Schools in Europe (AMSE), the World Federation for Medical Education (WFME) and later were revised and adapted by ASPHER through discussions within its Working Group for Doctoral Programmes and Research Capacities meaning these standards were found appropriate for PhD programs in Public Health, as well. It is important to say that this is in line with many other efforts aimed to increase the scientific productivity, in particular publishing in internationally visible journals.

It is well known that, in general, scientific productivity varies across Europe showing clear north-west to south-east gradient what also applies to scientific output concerning health systems, policies and services research and public health.

Large disparities in scientific output in health systems research exist not only across European Region but also within EU giving opportunities for its upsurge and international cooperation. Further inputs and efforts are needed to speed up research activities in public health and health sciences and to promote publishing of results as a tool for public health workforce capacity building. In the age of demographic transition and economic austerity the European Union (EU) and wider European region is seen as natural laboratory for health systems and health policies research which gives opportunity for international comparative studies, and in the same time it is expected that accession to EU is giving an impetus to scientific output of acceding and candidate countries and allowing them to diminish their inferiority to old EU member states. Particularly it is true for new EU members states, here I have in mind both, Romania and Croatia.

Thank you for your kindness to answer to questions.

Interview conducted by: Dr. Marius Ciutan