

## POLICY AND PRACTICE

# Strengthening the health workforce to implement public health interventions in the South-Eastern European Health Network: lessons learned from a technical meeting

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## ABSTRACT

Through the WHO European Region's Health 2020 policy framework, countries agreed to work together on policy priorities for public health such as strengthening people-centred public health systems and public health capacity. Alongside the Health 2020 strategy, the seventh of the 10 essential public health operations devised by the WHO Regional Office for Europe focuses on assuring a sufficient and competent public health workforce.

The Regional Office has supported the health activities of the South-Eastern European Health Network through a series of technical meetings on the health workforce since 2011. This article reports the results of SEEHN technical meeting on human resources for public health, organized by the WHO Regional Office for Europe, and analyses these results in the context of universal health coverage. During the meeting, through a series of interactive activities, participants shared details of eight successful public health interventions and discussed and analysed strategies addressing human resources for health to improve the public health workforce. The public health interventions matched the specific national burden of disease and

especially the national health policy priorities. In most cases they involved a multisectoral approach, and all interventions included multidisciplinary teams. The interventions mainly addressed the public health workforce in terms of education; five included training courses. Accreditation of training programmes, adjusted job descriptions for public health specialists and advocacy to show the importance of public health professionals were used in the other three interventions.

It is clear that training as a strategy to improve the public health workforce was a popular option; in most cases it was the only strategy used. This could indicate a lack of skills and experience on how to adapt the workforce to implement public health interventions using a variety of strategies for human resources for health, such as task shifting, supervision and career planning, among others. Global and regional policies and guidelines on human resources for health propose a variety of strategies to build and strengthen the health workforce. Therefore, it is now crucial to advocate strategies beyond training to continue to support the strengthening of the public health workforce.

**Keywords:** PUBLIC HEALTH WORKFORCE, PUBLIC HEALTH CAPACITY, PUBLIC HEALTH POLICY, HUMAN RESOURCES FOR HEALTH, HRH STRATEGIES

## BACKGROUND

WHO's *Interim report – Supporting Health 2020: governance for health in the 21st century (1)* revealed that in many countries in the WHO European Region there is a misalignment between the current strategic priorities in health policy (reducing the burden of non-communicable diseases and health inequities; implementing the International Health Regulations) and the capacity of services provided by institutes and organizations with public health tasks to address these, including the allocation of human and financial resources and the skills mix of the workforce. One reason for this misalignment could be changing circumstances in these countries, which are likely result from longer life expectancy, changes in population health needs, rising health inequalities, the impact of globalization, economic development and the imbalance between the demand and supply of public health services (2, 3). Through Health 2020, the European health policy framework (4), the 53 countries in the WHO European Region agreed to work together on common policy priorities for health. The specific Health 2020 priorities for public health are tackling the Region's major health challenges of non-communicable and communicable diseases and strengthening people-centred public health systems, public health capacity and emergency preparedness, surveillance and response. Alongside the Health 2020 strategy, the 10 essential public health operations (EPHOs) were developed in 2012 to support countries in planning for stronger public health services and capacities. EPHO7 focuses on assuring a sufficient and competent public health workforce (5).

## CONTEXT

The South-Eastern European Health Network (SEEHN) developed as the health component of the European Union's Stability Pact for South-Eastern Europe. The Network comprises representatives of the health ministries of its nine Member States (Albania, Bosnia and Herzegovina, Bulgaria, Israel, Montenegro, the Republic of Moldova, Romania, Serbia and the former Yugoslav Republic of Macedonia)<sup>1</sup>. SEEHN also works closely with 12 partner countries (Belgium, France, Greece, Hungary, Italy, the Netherlands, Norway, Slovenia, Sweden, Switzerland and the United Kingdom) and seven partner organizations (the Council of Europe, Council of Europe Development Bank, European Commission, International Organization for Migration, Northern Dimension Partnership in Public Health and Social Well-being, Regional Cooperation Council and WHO Regional Office for Europe). These partner countries and organizations provide SEEHN with ongoing political, technical and financial support (6).

Over the past decade, SEEHN has been the undisputed vehicle of health development in South-Eastern Europe, covering mental health, communicable diseases, food safety and nutrition, blood safety, tobacco control, information systems, maternal and neonatal health, public health services and health systems. To bolster the policy priority of strengthening public health capacity, the WHO Regional Office for Europe has supported SEEHN's health activities through a series of technical meetings on the health workforce since 2011. These have focused on health workforce retention, data collection on health workforce employment and education, strengthening the health workforce knowledge base to support evidence-informed health policies, harmonization and mutual recognition of health professionals' qualifications in Europe and transforming health workforce education and training.

This article reports the results of an SEEHN technical meeting on human resources for public health, organized by the WHO Regional Office for Europe, and analyses these results in the context of universal health coverage (UHC).

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<sup>1</sup> Croatia was one of the founding members of the Network and also participated in the technical meeting.

## APPROACH

The WHO Regional Office for Europe and two WHO collaborating centres – the Royal Tropical Institute in Amsterdam, the Netherlands, and the School of Public Health and Health Management at Belgrade University (Faculty of Medicine), Serbia – designed the technical meeting. Its aim was to provide countries with a better understanding of the capacities of their public health workforce in order to strengthen the delivery of public health services. The 20 meeting participants were representatives of eight SEEHN countries, selected at the national level. This group comprised an interesting mix of nine policy-makers from six countries, six researchers from five countries and five public health practitioners from five countries.

The meeting focused on interventions to address specific public health challenges in SEEHN countries, which included strategies to strengthen the public health workforce. It included a number of activities: interactive presentations on the latest WHO policy context for human resources for public health services, poster presentations on successful public health interventions and discussions and analysis of human resources for health (HRH) strategies to improve the public health workforce and in consequence public health services.

Prior to the meeting, participants from each SEEHN country were asked to prepare a poster setting out a successful public health intervention from the last five years that addressed a public health challenge at the national or subnational level, outlining its strategies to strengthen the public health workforce. These case studies were developed through data collection by national representatives about public health professionals involved in the interventions and a description of necessary changes made to the public health workforce to achieve success. The posters included information on country profile, public health priorities, the public health intervention and its results, the workforce related to the intervention and the lessons learned. Participants discussed their posters during the meeting with the aim of familiarizing each other with examples of successful public health interventions and strategies to strengthen the public health workforce in SEEHN countries, thus increasing regional knowledge exchange. Table 1 shows the roles and affiliations of the participants from each country, as well as the interventions discussed.

**TABLE 1. COUNTRIES, INTERVENTIONS, ORGANIZATIONS AND PARTICIPANTS REPRESENTED AT THE SEEHN MEETING**

| Country<br>(Public health intervention)  | Organization(s)   | Participant's role         |
|--|---|----------------------------|
| Albania<br>(Continuing the education of the public health workforce)   | Ministry of Health  | Policy-maker               |
|  | University Hospital Centre "Mother Teresa"                          | Public health practitioner |
| Bosnia and Herzegovina<br>(Response to HIV and AIDS in the Federation of Bosnia and Herzegovina;<br>Establishment of the Centre for Health Management in the Republika Srpska) | Ministry of Health of the Federation of Bosnia and Herzegovina      | Policy-maker               |
|  | Ministry of Health and Social Welfare of the Republika Srpska       | Policy-maker               |
|  | Public Health Institute of the Federation of Bosnia and Herzegovina | Researcher                 |
|  | Ministry of Civil Affairs of Bosnia and Herzegovina                 | Policy-maker               |
| Bulgaria<br>(The "Sea and Health" festival for the promotion of public health and public health professionals)   | Ministry of Health and Social Welfare of the Republika Srpska       | Public health practitioner |
|  | National Centre of Public Health and Analyses                       | Researcher                 |
|  | Medical University of Varna   | Researcher                 |

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| Country<br>(Public health intervention)   | Organization(s)  | Participant's role         |
|---|--|----------------------------|
| Croatia<br>(Cervical cancer screening programme)  | Service for Health Institutes and Human Resources                  | Public health practitioner |
|   | Public Health National Institute                                   | Researcher                 |
| Montenegro<br>(Colorectal cancer screening programme)   | Ministry of Health   | Policy-maker               |
|   | Centre for Health System Development<br>Institute of Public Health | Researcher                 |
| Republic of Moldova<br>(Approving and implementing tobacco control legislation)                           | Regional Ministry of Health  | Policy-maker               |
|   | Regional Ministry of Health  | Policy-maker               |
|   | School of Public Health  | Researcher                 |
| Serbia<br>(Monitoring of child abuse to support efficient prevention of violence against children)        | Ministry of Health   | Policy-maker               |
|   | Centre for Analysis, Planning and Organization of Health Care      | Public health practitioner |
|   | Institute of Public Health of Serbia                               |                            |
|   | Dr Milan Jovanovic Batut   |                            |
| The former Yugoslav Republic of Macedonia<br>(Evidence-based policy intervention for violence prevention) | Ministry of Health   | Policy-maker               |
|   | Institute of Public Health   | Public health practitioner |

The following sections summarize the public health interventions discussed, describe their strategies to strengthen the public health workforce and discuss these using a framework on HRH policy actions for universal health coverage (7).

## MEETING RESULTS AND DISCUSSION

In total, eight public health interventions were presented. Topics ranged from continuing education of the public health workforce in Albania to treating HIV and improving management of health care in Bosnia and Herzegovina, advocating the importance of public health professionals in Bulgaria, screening for cancer in Croatia and Montenegro, reducing tobacco consumption in the Republic of Moldova and reducing violence in Serbia and the former Yugoslav Republic of Macedonia.

### COMMON FEATURES OF THE INTERVENTIONS

The public health topics matched the specific national burden of disease and, in particular, the national health policy priorities. Many of the interventions presented were based on recently approved laws, which were accompanied by health policies that contributed to the success of the intervention. For example, in the Republic of Moldova the approval of a tobacco control law in December 2007 led to a series of changes in the National Centre of Public Health to coordinate implementation of the new law.

Most case studies included a multisectoral approach; for example, interventions involved decision-makers from the ministries of health in Bosnia and Herzegovina, the Republic of Moldova and Serbia and from the parliaments in the two latter countries. Other stakeholders involved were non-health professionals, representatives of academia and nongovernmental organizations and, in some cases, the wider community. As an example, in Bulgaria the advocacy effort for public health professionals included the Faculty of Public Health in Varna, Municipality

of Varna, Regional Health Inspectorate, Institute of Oceanology and Fishing (Bulgarian Academy of Science), Bulgarian Red Cross, National Naval Academy, District Directorate for Food Safety, professional and nongovernmental organizations and business representatives. Other ministries were also involved in the interventions, such as the ministries of interior, education, justice and labour and the parliament in the Republic of Moldova and the former Yugoslav Republic of Macedonia.

All case studies included multidisciplinary teams that designed and/or implemented the intervention. These were composed of professionals from different disciplines within and outside the health care sector, such as clinicians, nurses, public health specialists, psychologists and social workers. For example, the team created to address the reporting of suspected cases of child abuse or neglect in Serbia consisted of paediatricians, nurses, psychologists and social workers. The team that addressed the screening of colorectal cancer in Montenegro consisted of general practitioners and specialists in clinical medicine, coordinated by a public health specialist. In the cases of Bosnia and Herzegovina, Bulgaria and the former Yugoslav Republic of Macedonia, the teams involved non-health professionals such as lawyers, economists, ecologists and law enforcement professionals.

## COUNTRY-SPECIFIC PUBLIC HEALTH WORKFORCE STRATEGIES

The implications of the public health intervention on the public health workforce were mainly addressed in terms of education: five interventions included training courses for public health specialists, other health professionals or non-health professionals. The former Yugoslav Republic of Macedonia's intervention included training new professionals. Training existing health workers to improve their skills and responsiveness was undertaken in the two case studies from Bosnia and Herzegovina and those from Montenegro and Serbia. The quality of the workforce was improved using a system of accreditation of training programmes in Albania. Adjusted job descriptions for public health specialists were created in Montenegro, the Republic of Moldova and Serbia. For instance, in Serbia the public health specialist was given a new task of developing and operationalizing tools to monitor implementation of policies to prevent violence against children. In Bulgaria advocacy was used to show the importance of public health professionals to the general population.

## OBSERVATIONS

The lessons learned from the strategies to strengthen the public health workforce are as follows.

- Multidisciplinary teams are needed for implementation of public health interventions to succeed. This approach involves health professionals other than medical doctors, such as nurses, psychologists and social workers. Public health specialists are needed to coordinate the multidisciplinary team.
- Training through continuing education and certification can improve the professional development and skills of public health professionals, standardize their knowledge and serve as a platform to build a network of public health professionals.
- Specific training modules are needed to improve the public health management skills of existing managers.
- New training courses for public health professionals are necessary to implement new laws and protocols, such as on child abuse. Development and operationalization of tools to monitor implementation of policies can be incorporated into the tasks of the public health workforce.
- Training health professionals on new protocols for control and prevention of violence against women improves implementation of public health services in this field. Institutes of public health can also take on the task of initial training of professionals from health and other sectors.

- Public health professionals can be designated as the workforce to coordinate implementation of a new law, such as on tobacco control. The public health workforce needs to be trained for this new task and job descriptions need to be adjusted as necessary.
- Adapting job descriptions for public health specialists and general physicians helps to build a workforce with a wider range of public health responsibilities.
- A public health professional is needed in a key position in screening programmes.
- Health festivals can be used to improve recognition by the public of the importance of public health professionals.

Based on the results of the workshop, the implications of these public health interventions on the public health workforce were further analysed. This was done using the Campbell et al. framework outlining how to achieve UHC through HRH, which consists of four dimensions: availability (e.g. stock and production), accessibility (e.g. spatial, temporal and financial dimensions), acceptability (e.g. gender and sociocultural) and quality (e.g. competencies and regulation) (7). The framework shows which HRH policy actions can improve trends of workforce numbers and their performance.

Further analysis of the case studies using this framework shows that most focused on providing continuing education for existing professionals or training in public health tasks for different types of health professional (five of the eight case studies) to improve service quality. Training public health professionals in new tasks was used in one case study; this ensures that sufficient staff are available to deliver a public health service. Training existing public health workers to improve their skills and responsiveness was done in the other four case studies; this improves quality and acceptability. Quality of training is also increased by using a system of accreditation, which was done in one case study.

Only two countries indicated using at least two different strategies improving availability, accessibility and quality (Montenegro offered training and adapted job descriptions; the Republic of Moldova adapted job descriptions and reorganized roles and responsibilities). Although training more staff is necessary in many countries, increasing numbers and improving knowledge and skills are insufficient to provide culturally appropriate, acceptable services to communities and to address the effectiveness of public health interventions (7). Additional HRH strategies are required to achieve universal health coverage and strengthen public health services. Examples from the case studies include accreditation and regulatory systems that promote improved quality of the workforce and modification of job descriptions, which can create a public health workforce that provides focused approaches to increasing access for vulnerable or neglected groups. Other examples of strategies to enhance the availability, accessibility, acceptability and quality of HRH are (7):

- strengthening the policy, regulatory and fiscal environments to match health workforce supply and demand;
- actively stewarding, managing and deploying the health workforce to equitably meet population needs across urban, rural and remote areas;
- providing evidence-based guidance on workforce sex balance, skill mix and task delegation, competencies and sociocultural needs; and
- designing and implementing country-specific workforce management, performance and monitoring systems to sustain high-quality services.

Many global and regional HRH policies and guidelines – such as Global strategy on human resources for health: Workforce 2030, Health 2020 and the 10 EPHOs – propose a variety of HRH strategies to build and strengthen the

health workforce (4, 8, 9). It is unclear why in most public health interventions discussed in the SEEHN technical meeting HRH improvements were targeted only through training. Education and training may provide more tangible and better measurable results compared to the results of HRH strategies in the areas of financing, deployment, retention and management or performance. Nevertheless, a variety of HRH strategies are required if universal health coverage is to be achieved, including strategies to improve retention and performance through human resource management systems and finance.

Capacity-building of SEEHN participants in the development and implementation of different HRH strategies is important if improved human resource capacity for public health is to be achieved and universal health coverage is to be obtained.

## CONCLUSION

This two-day technical workshop on human resources for public health facilitated regional knowledge-sharing on successful strategies to address current public health challenges and enabled participants to gain insight into the complexities of strengthening the public health workforce. The workshop participants:

- demonstrated the importance of linking the national burden of disease and the public health system – one key element that made the interventions successful was alignment with national health priorities;
- had a good understanding of multidisciplinary and multisectorality as key factors of successful implementation of public health interventions; and
- understood the need to have a critical core workforce in public health to coordinate the formulation and implementation of public health policy and related services.

The development of a public health workforce is grounded in EPHO7: assuring a sufficient and competent public health workforce, and taking into account their training, curriculum development, core competencies, accreditation, leadership skills, mentoring and continued professional development. A starting-point for development of the public health workforce, including generic definitions of core competencies, has recently been described for low- and middle-income countries (10) and in the European public health literature by the Association of Schools of Public Health in the European Region (11); these studies present the cornerstone for future developments (12). The core competencies need to be validated in SEEHN countries, and core skills and responsibilities of the public health workforce need to be defined to facilitate a common understanding for exchange and collaboration on the transformation of the public health workforce at the SEEHN level.

Further, even though public health interventions have implications for the public health workforce, the most common strategy used was limited to training. This could indicate a lack of skills and experience on how to implement the workforce to public health interventions using a variety of HRH strategies, such as adapting human resource management systems to accommodate public health, including adaptations of job descriptions, task shifting, supervision and career planning, among others. Advocacy for strategies beyond training and funding mechanisms to implement these are now crucial to further strengthen the public health workforce in SEEHN countries.

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## REFERENCES

1. Interim report – Supporting Health 2020: governance for health in the 21st century. Copenhagen: WHO Regional Office for Europe; 2012 (<http://www.euro.who.int/en/about-us/governance/regional-committee-for-europe/past-sessions/sixty-second-session/documentation/background-documents/interim-report.-supporting-health-2020-governance-for-health-in-the-21st-century>, accessed 23 January 2017).
2. Willke H. Smart governance: governing the global knowledge society. Frankfurt: Campus Verlag; 2007.
3. Martín-Moreno JM, Harris M, Jakubowski E, Kluge H. Defining and assessing public health functions: a global analysis. *Annu Rev Public Health*. 2016;37:335–55.
4. Health 2020: a European policy for health and well-being. Copenhagen: WHO Regional Office for Europe; 2013 (<http://www.euro.who.int/en/publications/policy-documents/health-2020.-a-european-policy-framework-and-strategy-for-the-21st-century-2013>, accessed 20 June 2017).
5. EPHO7: Assuring a sufficient and competent public health workforce. In WHO/Europe [website]. Copenhagen: WHO Regional Office for Europe; 2012 (<http://www.euro.who.int/en/health-topics/Health-systems/public-health-services/policy/the-10-essential-public-health-operations/epho7-assuring-a-sufficient-and-competent-public-health-workforce>, accessed 23 January 2017).
6. The Dubrovnik Pledge: meeting the health needs of vulnerable populations in South East Europe. Copenhagen: WHO Regional Office for Europe; 2001 (<http://www.euro.who.int/en/health-topics/Health-systems/public-health-services/publications/2001/dubrovnik-pledge-2001>, accessed 15 May 2017).
7. Campbell J, Buchan J, Cometto G, David B, Dussault G, Fogstad H et al. Human resources for health and universal health coverage: fostering equity and effective coverage. *Bull World Health Organ*. 2013;91(11):853–63.
8. Global strategy on human resources for health: Workforce 2030. Geneva: World Health Organization; 2016 ([http://www.who.int/hrh/resources/pub\\_globstrathrh-2030/en/](http://www.who.int/hrh/resources/pub_globstrathrh-2030/en/), accessed 23 January 2017).
9. The 10 essential public health operations. In WHO/Europe [website]. Copenhagen: WHO Regional Office for Europe; 2012 (<http://www.euro.who.int/en/health-topics/Health-systems/public-health-services/policy/the-10-essential-public-health-operations>, accessed 15 May 2017).
10. Zwanikken PA, Alexander L, Huong NT, Qian X, Valladares LM, Mohamed NA et al. Validation of public health competencies and impact variables for low- and middle-income countries. *BMC Public Health*. 2014;14:55. doi:10.1186/1471-2458-14-55.
11. Foldspang A. From potential to action – public health core competences for essential public health operations: a manual. Brussels: Association of Schools of Public Health in the European Region; 2016. Available from: (<http://www.aspher.org/repository,12,0,0.html>, accessed 30 January 2017).
12. Bjegovic-Mikanovic V, Foldspang A, Jakubowski E, Müller-Nordhorn J, Otok R, Stjernberg L. Developing the public health workforce. *Eurohealth incorporating Euro Observer*. 2015;21(1):24–7.