EUROHEALTH

RESEARCH • DEBATE • POLICY • NEWS

The Association of Schools of Public Health in the European Region

› **50th Anniversary of ASPHER**

- Balancing priorities and focusing efforts

- Reflections on 50 years

- Educating the global workforce

- Public health leadership needs

- Translation of evidence into practice

- Public health education accreditation

- Competences for professionals

- Views on shaping the profession

- Public health after Brexit

- Position paper on refugee health

:: Special Issue ::

Volume 22 | Number 4 | 2016

ASPHER

Eurohealth is a quarterly publication that provides a forum
for researchers, experts and policymakers to express
their views on health policy issues and so contribute
to a constructive debate in Europe and beyond.

The views expressed in *Eurohealth* are those of the
authors alone and not necessarily those of the European
Observatory on Health Systems and Policies or any of
its partners or sponsors. Articles are independently
commissioned by the editors or submitted by authors
for consideration.

The European Observatory on Health Systems and Policies
is a partnership between the World Health Organization
Regional Office for Europe, the Governments of Austria,
Belgium, Finland, Ireland, Norway, Slovenia, Sweden,
Switzerland, the United Kingdom and the Veneto Region of
Italy, the European Commission, the World Bank, UNCAM
(French National Union of Health Insurance Funds),
London School of Economics and Political Science and
the London School of Hygiene & Tropical Medicine.

Design and Production: Steve Still

List of Contributors

Henrique Barros ◆ Medical School and Institute
of Public Health, University of Porto, Portugal

Arnold Bosman ◆ Transmissible, The Netherlands

Laurent Chambaud ◆ EHESP School of Public Health,
Rennes, France

Fiona Cianci ◆ Health Service Executive, Dublin,
Ireland and EuroNet MRPH

Katarzyna Czabanowska ◆ Department of International
Health, CAPHRI, Faculty of Health, Medicine and Life
Sciences, Maastricht University, the Netherlands

Jeannette de Boer ◆ Netherlands School of Public
and Occupational Health, Utrecht, The Netherlands

Regine Ducos ◆ EHESP School of Public Health,
Rennes, France

Anders Foldspang ◆ Department of Public Health,
Aarhus University, Denmark

Ansgar Gerhardus ◆ Department for Health Services
Research, Institute for Public Health and Nursing
Research, University of Bremen, Germany

Bernardo Gomes ◆ North Region Health
Administration Public Health Services and Institute
of Public Health, University of Porto, Portugal

Julien Goodman ◆ Agency for Public Health
Education Accreditation, Brussels, Belgium

Selena Gray ◆ University of the West of England,
Bristol, UK

Olivier Grimaud ◆ EHESP School of Public Health,
Rennes, France

Damir Ivankovic ◆ Croatian Institute for
Public Health, Croatia and EuroNet MRPH

Ramune Kalediene ◆ Faculty of Public
Health, Kaunas University, Lithuania

Alessandra Lafranconi ◆ University
Milano Bicocca, Italy

Marion Lecoq ◆ EHESP School of Public Health,
Rennes, France

Jutta Lindert ◆ University of Applied Sciences of
Emden and EUPHA section on Public Mental Health

John Middleton ◆ Wolverhampton University and
UK Faculty of Public Health, London, UK

Yannis Natsis ◆ European Public Health Alliance,
Belgium

Jacqueline Müller-Nordhorn ◆ Institute of Public
Health, Charité, Universitätsmedizin Berlin, Germany

Robert Otok ◆ Association of Schools of Public
Health in the European Region (ASPHER), Belgium

Oliver Razum ◆ Bielefeld School of Public Health,
Germany

Kevin Rieger ◆ German Pharmaceutical
Industry Association, Belgium

Sofia Ribeiro ◆ Young Gastein Taskforce,
Gastein, Austria

Giacomo Scaioli ◆ EUPHAnxt, The Netherlands

William Sherlaw ◆ EHESP School of
Public Health, Rennes, France

Martin Sprenger ◆ University of Graz, Vienna, Austria

Laurence Théault ◆ EHESP School of Public Health,
Rennes, France

Ted H. Tulchinsky ◆ Braun School of Public Health,
Hebrew University, Jerusalem, Israel, and School of
Health Sciences, Ashkelon College, Ashkelon, Israel

**Anca Vasiliu** ◆ Université de Rouen,
France and EuroNet MRPH

Nick de Viggiani ◆ University of the
West of England, Bristol, UK

Mark Weiss ◆ UK Faculty of Public Health,
London, UK

CONTENTS

EUROHEALTH

ASPHER ©

BALANCING PRIORITIES AND FOCUSING EFFORTS:
ASPHER'S COMMITMENT AND FUTURE VISION

In 2016, ASPHER reached the half-century mark. To crown an exciting year of celebrations, we are happy to present this *Eurohealth* special issue addressing the Association's 50th anniversary.

Founded in 1966, ASPHER works hand in hand with numerous stakeholders to safeguard and to strengthen public health education and training of public health professionals for both practice and research.

ASPHER has gone far thanks to its committed community of members. Our members always come first and we take pride in drawing our strength from them, which makes ASPHER one of the most vibrant and engaging public health networks.

Over recent years, we have also celebrated many of our members' individual anniversaries. With every occasion to celebrate also comes the opportunity to look back, reflect, and think about the years to come. Some of our members focus on cultivating past developments, while others adopt more forward-looking approaches. ASPHER is here to support them and to grow together with them, in line with the Association's 2016–2020 Strategy, by:

› Improving the quality of academic programmes and Continuing Professional Development (CDP) for public health;

› Strengthening the research capacity among all members;

› Setting up a public health profession for public health services in Europe;

› Developing a global dimension for education and training in public health; and

› Strengthening ASPHER's governance, management and sustainable development

ASPHER's members show a profound level of commitment, genuine interest, willingness and trust in working together to develop and strengthen public health education and training towards producing a public health workforce that is fit to operate effectively in the complex, evolving and insecure international and global health systems context.

While focusing ASPHER's strategic vision around public health workforce development and systematic methods to support it, the next ASPHER presidency will be based on the principles of continuation, collaboration, wide stakeholder involvement, and sustainability:

• *Continuation*

For 50 years, ASPHER has been successfully developing a public health agenda through different initiatives and presidential programmes. There is a rich legacy to follow and carry forward, adapting to the current needs of the members. All these efforts will be brought closer to the members through their direct involvement in the execution of some of these programmes, consultations or expert reviews.

• *Collaboration*

This entails a strong emphasis on collaboration and exchange of good practices at all levels, helping the schools to showcase their achievements, benchmark and compare curricula, and exchange students and staff. It also includes the active involvement of early career public health professionals and students in collaborative activities – with their enthusiasm and scientific savviness – supported by ASPHER, to voice their needs and to provide constructive feedback.

- *Wide stakeholder engagement*

We will aim for more coherent and interconnected initiatives, with a strong inter-professional and inter-sectoral component, involving key stakeholders to discuss, develop and propose solutions which may have a favourable impact on new public health policies and regulations, and assuring a strong position by ASPHER in relevant partnerships and collaborative efforts.

- *Sustainability*

This involves securing ASPHER's sustainability as a modern network organisation by working together, identifying synergies and common interests, building upon the Association's strengths and excellence, enhancing participation in key structures and initiatives, and finding new solutions, financial instruments and management practices.

The model that will guide ASPHER's efforts in supporting public health workforce development identifies three key thematic elements: (i) professionalisation; (ii) education and training, including CPD; and (iii) translation of evidence for public health practice.

Professionalisation will include activities related to defining and enumerating the public health workforce, promoting academic public health competences and developing professional competency models to assure professional development, self-assessment and planning, development of a professional code of conduct and striving to develop a regulatory basis to safeguard the rights of public health professionals, the attainment of qualifications and their certification. There will be a strong emphasis on the identification of career development paths, including CPD courses that will be available through the creation of the new ASPHER Public Health Training Academy from July 2017. We will acknowledge, support and promote the translation of scientific evidence into public health practice, education, and training through cutting-edge, innovative scientific course content

and through developing competences in dissemination and implementation strategies, also including communication and social entrepreneurship skills.

The implementation of these themes will require the development of strong public health leadership, which should be more adaptive, content- and experience- driven, transformational and authentic, thus facilitating the growth and development of the workforce. It should be horizontal and more participatory, involving many actors and many sectors. That is why collaboration and communication with various stakeholders based on consensus, mutual interest, and the principles embedded in ASPHER's strategic vision will hopefully enable joint action towards public health workforce development, benefiting the health and well-being of European citizens in the long run.

This anniversary issue

We are delighted to present to you this *Eurohealth* special issue which addresses some key aspects of the ASPHER strategy and future presidency priorities, illustrating them with practical examples, reflections and needs.

The individual contributions are clustered around three main topics: 1) public health education and training, 2) health workforce development and planning, and 3) policy impacts and international developments.

The first section of this special issue will showcase examples of good practice in education, featuring the case of the EUROPUBHEALTH programme; and will also cover issues such as the need for public health leadership courses; the translation of evidence for the benefit of practice and public health education and training; and accreditation of public health education and training.

The second section will look at the European Public Health Reference Framework for individual career guidance and human capacity planning; while young professionals from a number of networks will present their views on public health leadership training and the shaping

of the public health profession. Next follows an article on health workforce development and planning issues based on the collaboration between ASPHER, EUPHA and WHO, related to the EU Health Policy Platform initiative. Rounding up this section are reflections from the Portuguese experience of the ageing of the public health workforce.

Section three of the issue includes articles which deal with some current policy issues, such as the consequences of Brexit for public health training and research; migrant and minority health; and finally, a forward-looking perspective reflecting on what areas ASPHER may wish to develop in the future.

We hope that this special issue of *Eurohealth* will stimulate reflection on a variety of topics in which ASPHER plays a key role.

Representing the schools and departments of public health in the European region, ASPHER is at the forefront of innovation in education and training in the face of complex health problems, trying to address them with the best possible knowledge and expertise. Akin to the lighthouse presented on this issue's cover, we want to offer our guidance to the public health community so that, working together, we shape the future of public health.

Robert Otok
ASPHER Director.

Katarzyna Czabanowska
ASPHER President elect.

Jacqueline Müller-Nordhorn
ASPHER President.

REFLECTIONS ON
50 YEARS OF ASPHER

Jeffrey Levett

ASPHER gives hope for Europe's future. Its strategy enables new frontiers in health diplomacy and health disaster management and the transformation of institutions into a more interactive network. Inspiration comes from ASPHER's homunculus logo, a small and humble human being, a big heart, and the mind of public health.

Jose M Martin-Moreno

The role of Schools of Public Health is increasingly meaningful due to the challenging forces of changes occurring in our society (including globalisation, technological advances, more active citizens, and new public health paradigms). ASPHER has been (and will be) crucial in using its collective strength to foster public health training and essential professionalism.

Vesna Bjegovic-Mikanovic

ASPHER has special meaning for its members, schools and departments of public health. It is a powerful organisation which is supporting the voice of the academic community in making the vision of harmonised education, research and practice possible in the field of public health. ASPHER activities are a permanent call for action to deal with the public health workforce through collaborative efforts.

Anders Foldspang

In its own organisation, public health is still faced by the need of shaping and arming a public health professional with comprehensive theoretical, academic and practical competences, accountable to the population and its leaders. And by the need to develop coherent organisational structures for likewise comprehensive, evidence based strategy making and evaluation. ASPHER member schools play crucial roles in the process of meeting these needs.

Antoine Flahault

ASPHER gives unique potential to its members to share their experiences on public health education and training. ASPHER succeeded to foster harmonisation among various schools and programmes in public health in Europe. It is now becoming one of the leading European organisations constituted from major academic institutions to deliver debates on important and topical public health issues.

Josep Figueras

50 years on ASPHER continues at the full front of public health training developments in the region; now more than ever if we are to succeed in putting health at the core of the political agenda, we need to rally behind ASPHER's innovative initiatives to endow the profession with the new competences and leadership skills that it requires.

Ulrich Laaser

Since the early 1990s, ASPHER has embraced local, regional and global public health challenges. To achieve goals related to global health, ASPHER stimulates interdisciplinary, multi-professional, and multilateral collaboration of its members. Recognising the importance of leadership for global health, ASPHER is spreading its activities beyond European borders.

Peter Piot

We at the London School of Hygiene and Tropical Medicine are proud to have been part of ASPHER from its inception. It has provided an invaluable network for sharing experiences and ideas and, especially, as a facilitator for the wide range of collaborations we have with partner institutions across Europe.

Martin McKee

As a close observer of the political transition in Europe in the 1990s, I will never forget the crucial role that ASPHER played in encouraging those courageous, innovative, and entrepreneurial groups that created and built the new schools of public health in central and eastern Europe.

EUROPEAN PUBLIC HEALTH EDUCATION IN SUPPORT OF THE GLOBAL PUBLIC HEALTH WORKFORCE:
THE EUROPUBHEALTH EXPERIMENT

By: William Sherlaw, Katarzyna Czabanowska, Olivier Grimaud, Regine Ducos, Laurence Théault and Marion Lecoq

William Sherlaw is Lecturer at the International Relations Department and Department of Human and Social Sciences; **Olivier Grimaud** is Head of the Department of Quantitative Methods in Public Health; **Regine Ducos** is Director of International Relations; **Laurence Théault** is Deputy Director of International Relations and Europubhealth programme Coordinator; **Marion Lecoq** is Europubhealth programme officer, all at the EHESP School of Public Health, Rennes, France; **Katarzyna Czabanowska** is Associate Professor at the Department of International Health, Maastricht University, The Netherlands. Email: europubhealth@ehesp.fr

Summary: Six European universities have collaborated to deliver Europubhealth, an innovative, integrated masters course for training public health professionals at the local, national or global level. Emphasising the urgent need to build sustainable health systems whilst addressing health inequalities, Europubhealth provides multi-disciplinary training delivered in a unique multi-cultural environment. Recently, Europubhealth+ received renewed support from the European Commission's Erasmus+:Erasmus Mundus programme. This offers the opportunity to look at lessons learnt, to appraise what has been accomplished and to reflect on how to match global health training with public health work force and population health needs.

Keywords: Public Health Training, Global Health, Internationalisation, Erasmus Mundus

Introduction

Europe has recently been described as being a unique "natural laboratory of health systems",[1] combining diversity in both governance and operating mechanisms and resulting in a range of health outcomes. The sustainability of this health laboratory will depend greatly on a well-trained public health workforce which effectively delivers public health operations and services and is capable of managing sustainable and equitable health systems at the local, national and international levels.

Academic institutions providing public health education have sought to find the best fit between the health needs of the populations and the competencies required in different health system contexts. This requires not only up-to-date knowledge and understanding of public health problems, but above all, innovative ways of addressing problems and implementing

solutions. It is crucial to incorporate educational methods which transcend the confines of the classroom. Key approaches we suggest are inter-professional, transdisciplinary and experiential. Notably, they will be sensitive to diversity, professional practice-based and link the needs of the public health employment market with the design of the curricula.

Recognising such training needs, the Europubhealth (European Public Health Master, EPH) consortium designed and successfully delivers a programme embodying equity and ethical practice on the one hand and on the other, integrates operational dimensions such as inter-sectoral collaboration, transnational and cross-border cooperation, cultural competency and evidence-based practice. The EPH programme, having trained not just students from the European region, but also international students from over 70 different countries, can truly be called global. Public health no longer depends on the action of single states since health information, human resources and threats to health cross frontiers and thus need to be addressed locally and through transnational action.

> trained more than 200 students from 70 countries

Within the context of such training needs, the aim of this article is threefold: 1) to describe the main features of the EPH masters training programme; 2) to share what has been learnt from this venture; and 3) to describe how we may address training needs for public health professionals in the future.

Europubhealth

In 2006, a group of European universities (ASPHER members) coordinated by the EHESP School of Public Health joined forces to create "Europubhealth", a joint European public health masters course. The ambition was to offer academic

Figure 1: EPH+ course pathways

Source: Authors based on EuroPubHealth Plus, *Erasmus+ EMJMD technical proposal*, February 2016.
Note: ECTS – European Credit Transfer and Accumulation System.

training in public health to an audience of European and non-European students. For three consecutive periods, the consortium obtained recognition and funding from the European Commission Erasmus Mundus programme. This offers grants to EU and non-EU students to fund their studies and stay in Europe, as well as funding third-country visiting professors who contribute to the programme and further training and research ties with universities from outside the EU. Since its inception the Europubhealth masters course has trained more than 200 students, coming from some 70 countries. Last July, the renewed consortium made up of universities and associated professional partners including ASPHER (**see Box 1**), launched a new version of the programme: "Europubhealth+" (EPH+).

The Europubhealth two-year masters course has been developed from existing running masters courses in public health at partner universities and is designed to provide up-to-date public health education and internships for future public health professionals and researchers working in high, middle and low income countries.

The originality of Europubhealth lies in a unique combination of a rich intake of international and European students from a wide range of academic and professional backgrounds coupled with the opportunity to benefit from multiple academic and transcultural pathways[2] (**see Figure 1**). One fundamental principle of the Europubhealth masters course is that training pathways always cover two and usually three different country

Box 1: Academic partners of the EPH+ consortium

- **Maastricht University**, The Netherlands
- **Jagiellonian University Medical College Krakow**, Poland
- **University of Granada – Andalusian School of Public Health**, Spain
- **University of Sheffield's School of Health & Related Research**, United Kingdom
- **University of Rennes 1**, France;
- **EHESP School of Public Health**, France

Figure 2: Essential public health operations (EPHO)

How EPH+ intergrates the 10 Essential Public Health Operations (EPHOs)		Biostat and Epidemiology	Environmental and Occup. Health	Health promotion	Leadership in European PH	Governance of Health Systems	Health policy prog. Manag	Law, Health and Ethics	
The 10 EPHOs (WHO 2011)	Year 1	Year 2							Integration modules
EPHO 1: **Surveillance** of population health and wellbeing	✗	✗	✗						
EPHO 2: **Monitoring and response** to health hazards and emergencies	✗	✗	✗						✗
EPHO 3: **Health protection including environmental** occupational, food safety and others	✗	✗	✗						✗
EPHO 4: **Health promotion** including action to address social determinants and health inequity	✗			✗	✗	✗	✗	✗	✗
EPHO 5: **Disease prevention** including early detection of illness	✗	✗	✗	✗			✗		✗
EPHO 6: Assuring **government for health** and wellbeing	✗				✗	✗	✗	✗	
EPHO 7: **Assuring a sufficient and competent public health workforce**	✗	✗	✗	✗	✗	✗	✗	✗	✗
EPHO 8: Assuring **sustainable organisational structures** and financing	✗				✗	✗	✗	✗	✗
EPHO 9: **Advocacy communication** and social mobilisation for health	✗			✗	✗			✗	✗
EPHO 10: **Advancing public health research to inform policy and practice**	✗	✗	✗	✗	✗	✗	✗	✗	✗

Source: Authors based on EuroPubHealth Plus, *Erasmus+ EMJMD technical proposal*, February 2016.

settings. Thus, the course maximises opportunities to discover how common public health issues are tackled in different political and cultural environments.
In order to accommodate the needs of students, not just from Europe, but from other continents, the curriculum has been enriched with a global health perspective. A whole spectrum of public health issues and threats are covered, encompassing climate change, emerging infectious diseases, epidemics of non-communicable chronic diseases and migrant health to name but a few.

Students start their masters studies through pursuing a Foundation Course in public health either at the University of Sheffield (UK) taught in English, or in Granada at the Andalusian School of Public Health where courses are taught in Spanish. Two integration modules held in Rennes (France) at the EHESP School of Public Health conclude each year of training. This not only allows first year students from Granada and Sheffield to meet up for the first time, but also allows them to link with second year students. This creates the conditions for establishing substantial long-lasting ties. Importantly, the Integration Modules offer the opportunity for a Capstone experience through which students may consolidate newly found knowledge, hone their skills and creatively apply them to realistic public health scenarios. The first year module employs student-directed problem based learning[3] to resolve issues in relation to global health, while the second year module builds on this experience to respond to a European call for research funding. Students design interventions, draw up work packages, Gantt diagrams and a business plan.

Both these Integration modules explore ideas but also build cross-cutting competencies such as team building, leadership, presentation and communication skills, consensus building, creativity and conflict resolution.

Following on from the First year Foundation course and Integration module, students carry out an internship and an associated masters thesis in their chosen specialty in a different country. The Europubhealth experience ends with the second Integration module at EHESP (Rennes), an employability week and the graduation ceremony.

Lessons learnt

A number of lessons have been learnt from administering and delivering this transnational masters programme, including:

Good will and perseverance reap rewards

Europubhealth brought together diverse partners working in different European university systems. When faced with an intake of students from over 20 different countries, national partners had to adapt their teaching and working practices to accommodate this dual diversity. It required goodwill, a degree of perseverance and time in order to go beyond initial tensions and reap the

benefits of a rich transnational partnership. Spurred on by a profound belief in the goal of training high quality public health professionals, the partners have forged lasting reciprocal relationships. These have ensured that students are well supported during their academic mobility and thus receive maximum benefit from belonging to this transnational network.

Regular transnational face-to-face meetings of all partners are necessary for the smooth running of a transnational programme

Strong on-going coordination and the holding of regular consortium assessment, selection and management committees, often during the Integration modules, in the presence of all partners and all students, allows for the necessary time and logistics to develop trust and understanding between partners and coherence within the programme.

The continuing relevance of the programme curriculum is enhanced through a strong network between educational providers, professionals and their organisations

The Consortium institutions maintain close ties with local, national or international health services, health care institutions and regional governments. Through maintaining such close links with employers, such as private sector institutions and NGOs carrying out public health and health promotion, the relevance of the programme is maintained and can be adjusted if necessary.

Sharing academic and professional networks strengthens not just transnational but also allied national programmes

Europubhealth quickly learnt the value of sharing networks and resources. Each partner has a wide training network involving public health practitioners, as well as the supranational and national agencies involved in implementation, regulation and policy. All partner institutions had a strong tradition of actively involving representatives of potential employers from the public and private sectors in the delivery of training. This is of the utmost importance since it offers our students the possibility

to learn first-hand from active professionals, experienced academics with international know how and health service administrators. This benefited not only the EPH programme itself but also other programmes delivered by the consortium partners.

The added value of cultural diversity and multidisciplinarity

Courses are greatly enhanced through the combination of lecturers with international experience and the rich multicultural and educational diversity of the students. Debates and discussions go beyond the taken-for-granted and explore areas which would not be broached in standard Masters of Public Health classes. The training is enriched by the presence of international visiting professors who benefit from Erasmus Mundus mobility scholarships to come to teach on the programme, contribute to curriculum development and facilitate group work.

High class academic education must be complimented by concern for employability

In today's labour market educationalists must not only take into account the needs of future employers of masters graduates within the training curriculum but also provide fora to facilitate meetings between potential employers and graduates. Through career days, EPH students receive advice on how to get a job or a PhD offer, how to write CVs and how to prepare for interviews.

The setting up and facilitation of a worldwide alumni network is a key factor for the sustainability of the training programme

The setting up of an alumni organisation boosts the building of lasting ties and future opportunities to collaborate in the public health field. The Consortium has established a worldwide network of more than 200 alumni from all continents. This is maintained through disseminating relevant information such as job offers and networking events or conference invitations. Besides hosting EPH+ students at their workplace, around 80 alumni are willing to become personal 'mentors' for incoming students.

Addressing future training needs for public health professionals

We have sketched how the EPH programme has been structured and run in the past. The new Europubhealth+ programme introduces further innovations to ensure that its public health training programme matches up to the needs of both public health students and employing organisations. An attempt has been made to ensure that the recently formulated WHO Essential Public Health Operations (EPHO)[4] receive coverage within the different components of the EPH+ programme (**see Figure 2**)

New ways of enriching the curriculum are also envisaged such as webinars on leadership and entrepreneurship in the field of public health. This corresponds to the functions of advocacy, consultancy, knowledge transfer and the ability to obtain funding for research or intervention projects aimed at improving population health.

Experience has shown that close ties with a network of professional and institutional partners maintain both the relevance of the programme and its quality. Thus, the EPH+ network now involves nine leading European and international academic partners, four public institutions, three international organisations (the full list of partners can be seen at www.europubhealth.org). Having privileged ties with key players in the public health policy field offers a guarantee for future employers.

Conclusion

Our programme can serve as an example of good internationalisation practice and collaboration among ASPHER members and various institutional stakeholders from both the public and private sectors in Europe and beyond. The programme fosters student and faculty mobility, double degrees, international research collaboration, international attractiveness, international/intercultural curriculum content and teaching in multiple languages. Notably, it promotes pedagogical innovation within public health education, sharing benchmarked educational practice and consolidating a high standard of service to international

students. We believe we are fulfilling important public health training needs and we will strive to ensure that tomorrow's workforce will achieve excellence and respond to population and individual needs equitably and with sensitivity, creativity and perseverance.

References

[1]   Walshe K, McKee M, McCarthy M, et al. Health systems and policy research in Europe: Horizon 2020. *The Lancet* 2013;382(9893):668–9.

[2]   Pommier J, Sherlaw W, Grimaud O. Une formation transeuropéenne pour répondre aux défis de la santé publique. [A trans-European course to respond to public health deficits] *Les cahiers de la fonction Publique* 2014; 347 Septembre.

[3]   Sherlaw W, Hobbs S, Sychareun V, et al. Using problem based learning in development of cross-cutting competencies for global health practice. *Proceedings of ICERI 2011 Conference,* 14th –16th November 2011, Madrid, Spain.

[4]   World Health Organization. The 10 Essential Public Health Operations. Available at: http://www.euro.who.int/en/health-topics/Health-systems/public-health-services/policy/the-10-essential-public-healthoperations

Alessandra Lafranconi is Public Health Resident Physician and Jean Monnet Module Coordinator at University Milano Bicocca, Italy; **Kevin Rieger** is Consultant, German Pharmaceutical Industry Association, Belgium; **Damir Ivankovic** is Public Health Resident Physician at the Croatian Institute for Public Health, Croatia and EuroNet MRPH Board Member; **Anca Vasiliu** is Public Health Resident Physician at Université de Rouen, France and EuroNet MRPH President 2015; **Fiona Cianci** is Specialist Registrar in Public Health Medicine at the Health Service Executive, Dublin, Ireland and EuroNet MRPH President 2016; **Katarzyna Czabanowska** is Associate Professor, Department of International Health, CAPHRI, Faculty of Health, Medicine and Life Sciences, Maastricht University, the Netherlands, President Elect ASPHER and Chair EUPHA Working Group on Public Health Leadership. Email: a.lafranconi1@campus.unimib.it

ADDRESSING GAPS AND NEEDS IN PUBLIC HEALTH LEADERSHIP

ACADEMIC COURSES IN THE EUROPEAN REGION

By: Alessandra Lafranconi, Kevin Rieger, Damir Ivankovic, Anca Vasiliu, Fiona Cianci and Katarzyna Czabanowska

Summary: Leadership skills are essential in public health and should be developed early in our careers. Available training in leadership in public health is thought to be scarce, diverse and not specific to this field. In mapping the available courses in the European region, we identified 25 leadership courses in fields related to public health and collected information regarding their targeted population, language, method, duration and price. These data will serve to assess the education gap in this specific field and help other public health professionals find the best course according to their needs.

Keywords: Public Health Leadership, Academic Courses, Public Health Professionals Training

Introduction

Public health professionals seem to be developing a growing consensus that *"today, the need for leaders is too great to leave their emergence to chance."*[1] Currently, professionals and organisations worry about the abilities and capacity of future public health leaders due to a lack of formal public health leadership education and training. Shickle and colleagues state that the "public-health workforce and infrastructure have been neglected, and training programmes are inadequate."[2]

Leadership in public health is described as "mobilising people, organisations and communities to effectively tackle tough public health challenges."[3] Anyone can step forward and lead, but do they know when the time is right, what is to be done, and how and where to lead? Competency-based approaches aim at providing stimuli, and answers, to such questions.[4]

In 2015, during the 8th European Public Health Conference, many early career professionals called for the development

and implementation of Public Health Leadership (PHL) competences. The need became particularly evident during the workshop " 'Whiter shades of pale' – public health leadership: policy, research, education and practice", [5] that led to the creation of a junior section inside the already established European Public Health Association (EUPHA) working group on PHL.

The working group, which includes public health professionals interested in PHL from the perspective of research, education and policy debate, was established in the context of the 7th European Public Health Conference, through the joint interest of EUPHA and ASPHER (Association of School of Public Health in the European Region).

With the aim of offering possibilities for personal and professional growth, the PHL working group welcomed the idea of helping and supporting junior professionals in collecting evidence on the current level of PHL in Europe, and in advocating for more competency-based courses in their home institutions.

As a result, a mapping exercise was conducted with the aim to: 1) identify the availability of courses in PHL in the European Region, 2) assess the geographical distribution of such courses and 3) create a database of PHL courses for the public health workforce interested in developing leadership competences. A secondary aim of this assessment is to provide evidence-based recommendations on the principles, format and content of PHL training.

Collecting information on PHL courses

Five junior public health professionals searched for PHL courses through the analysis of educational material available on the website of each School of Public Health affiliated with ASPHER. Information was collected according to a grid (**see Box 1**).

At this stage, the information was simply extracted from each relevant website. No direct contact either with ASPHER or academic directorates was established in order to validate the information collected.

The database was then circulated among all sixteen junior section participants, and to the representatives of the European Network of Medical Residents in Public Health (EuroNet MRPH) in its eight European Country members (Croatia, France, Ireland, Italy, Portugal, Spain, Holland and the United Kingdom). They were asked to add PHL courses taking place in institutions known to them.

Schools were considered only if they were physically placed inside the European Region (according to the WHO definition) and listed on the ASPHER website or known by any of the junior section participants, through direct or indirect experience.

The inclusion criteria for courses to be analysed were: clear focus on leadership; specific to the field of public health, medicine or health care; course offered at least once over the past five years; offering institution based in the WHO European Region. Courses were excluded if they were purely oriented towards management, if offered by non-academic providers or if placed outside of the European Region. For each course, inclusion and exclusion criteria were assessed by two independent authors; when agreement was not reached, a third author evaluated the course against the criteria. No language restrictions were applied.

advocating for more competency-based courses

The results

25 courses were retrieved and are presented in **Table 1** (see next page).

Most of the identified PHL courses take place in the United Kingdom and Ireland, while three courses are held in Italy, two in Finland and in the Netherlands; and only one course in Austria, Croatia, France,

Georgia and Portugal. While 19 courses are offered in English (and one of these is offered in one additional language), the remaining six are provided in the official language of the country where the hosting institution is based.

Differences in teaching methodology are documented: two courses are practical only, eight have a blended approach (theoretical and practical), and eight are theoretical only. For eight courses the information on teaching methodology was missing.

Three courses are offered for free, and only to restricted categories (UK trainees or medical trainees), while for fourteen the price ranged from €400 to €30,000 (the highest price being recorded for a course lasting one full year). Cost information was missing for nine courses.

Addressing the education gap

This assessment should be seen as a first scoping exercise, and not an exhaustive mapping process. As reported by Paccaud, there are "about 400 schools of public health worldwide, plus an unknown number of units or departments specifically devoted to hygiene, epidemiology, social medicine, etc." [7]

Despite a narrow focus, on a convenience sample of public health schools in the European region, we were able to draw some preliminary conclusions:

Table 1: Public Health Leadership courses

Course title and institution	Brief description
1. Steuerung und Leadership im Gesundheitssystem (Management and leadership in the health care system), Graz University (Austria)	Course taught in German
2. Postgraduate Study Leadership and Management of Health Services, Andrija Stampar School of Public Health, School of Medicine University of Zagreb (Croatia)	Course taught mostly in Croatian, with a blended (theoretical and practical) approach
3. Transformational Leadership (Public Health Action Support Team – PHAST), The UK's Faculty of Public Health (United Kingdom)	Course taught in English, with practical activities
4. Edward Jenner Programme: The foundations of leadership, NHS Leadership Academy (United Kingdom)	Course taught in English, with practical activities
5. Mary Seacole programme: for first time leaders, NHS Leadership Academy (United Kingdom)	Course taught in English, with a blended approach
6. Leadership Development Programme, Health Education North West (United Kingdom)	Course taught in English, with theoretical lectures
7. Preparing for Leadership, Health Education North West (United Kingdom)	Course taught in English
8. Emerging Clinical leaders, King's Fund (United Kingdom)	Course taught in English
9. Public Health Leadership Programme, Imperial College London (United Kingdom)	Course taught in English, with theoretical lectures
10. MIH-G08 Leadership in Global Health, University of Tampere (Finland)	Course taught in English
11. TERHOJ1 Developing Leadership in Health Care, University of Tampere (Finland)	Course taught in English
12. Post-master's in health management, Ecole des hautesétudesen santé publique (France)	Course taught in French
13. Introduction to Management and Leadership, Tbilisi State Medical University (Georgia)	Course taught in English
14. Master of Science in Leadership, RCSI Institute of Leadership (Ireland)	Course taught in English, with a blended approach
15. Clinical leadership programme, RCSI Institute of Leadership (Ireland)	Course taught in English, with theoretical lectures
16. Introduction to Leadership for Doctors, RCSI Institute of Leadership (Ireland)	Course taught in English, with theoretical lectures
17. Masters in Leadership in Health Professions Education, RCSI Institute of Leadership (Ireland)	Course taught in English
18. Master of Science in Leadership, RCSI Institute of Leadership (Ireland)	Course taught in English, with a blended approach
19. Diploma in Leadership and Quality in Healthcare, Royal college of physicians of Ireland (Ireland)	Course taught in English, with theoretical lectures
20. Summer School in Health Care Management, ALTEMS Università Cattolica del Sacro Cuore (Italy)	Course taught in English, with a blended approach
21. Leadership in Medicina (Leadership in Medicine), ALTEMS Università Cattolica del Sacro Cuore (Italy)	Course taught in Italian, with a blended approach
22. Master Management e Sanità (Specialised Diploma in Management and Health), Scuola Superiore Sant'Anna (Italy)	Course taught in Italian, with a blended approach
23. Executive healthcare leadership programme, Maastricht University (The Netherlands)	Course taught in English, with a blended approach
24. Leadership for European Public Health (LEPHIE), Maastricht University (The Netherlands)	Course taught in English, with a blended approach
25. Young Medical Leaders Programme, Catolica Lisbon Business and Economics (Portugal)	Course taught in Portuguese or English, with a blended approach

Source: Authors' own.

- there are few leadership courses for public health and health-related professionals in our region;

- these courses are taught through theoretical, practical and blended approaches, but often such crucial information is not explicit on the programme website;

- some courses have entrance criterion, for instance are tailored for medical doctors, or health care professionals, or educators only; this results in a further reduction of the available options for public health professionals;

- there are no publicly available evaluations of these courses, therefore it was not possible to assess how the course was received by the participants;

- these courses are expensive and financial barriers could discourage young public health professionals from attending them.

From the perspective of junior professionals, there is a need to evaluate the courses' curricula in order to assess whether they are a good investment: PHL courses available in European higher

education institutions are expensive, scarce and not always tailored to the needs of modern public health professionals

incorporate leadership into public health programmes

From the academic perspective, there is a call for action directed at the schools and departments of public health in the European region to incorporate leadership into their public health programmes in order to meet the pressing demands of professionals, while building a culture of leadership that embraces a commitment to building problem-solving and implementation capacity, focusing on organisational outcomes.[8] Providers of public health education should develop more progressive curricula highlighting the importance of gaining in-depth understanding of public health challenges.[9] This can be done by integrating public health content with leadership theories and life stories of effective public health leaders. The modern PHL offer should be competency-based, collaborative, interdisciplinary and inter-professional,

blending various approaches including face-to face, experiential, online and practice-based methodologies. The educational or training offer should mirror or integrate the cross–cutting values, attitudes and behaviours that are essential for new forms of PHL which are more horizontal, more participatory and involve many actors and sectors.

Therefore, the course designers should aim to propose courses that develop system thinkers, who adhere to scientific evidence, have an appetite for innovation and change, and are social entrepreneurs able to take opportunities and manage risk. The courses should produce public health leaders who can lead with persistence, patience and passion and who, above all, will be emotionally intelligent, authentic and transpersonal leaders able to "operate beyond the ego while continuing personal development and learning."[10]

Reference

[1] Institute of Medicine. *The Future of Medicine*. Washington, D.C.: National Academy Press, 1988.

[2] Shickle D, Day M, Smith K, Zakariasen K, Moskol J, Oliver T. Mind the public health leadership gap: the opportunities and challenges of engaging high-profile individuals in the public health agenda. *European Journal of Public Health* 2014;36(4):562–7.

[3] Begun JW, Malcolm JK. *Leading Public Health: A Competency Framework*. New York: Springer Publishing Company, 2014.

[4] Czabanowska K, Smith T, Könings KD, et al. In search for a public health leadership competency framework to support leadership curriculum – a consensus study. *European Journal of Public Health* 2014; 24 (5):850–6.

[5] Round table: 'Whiter shades of pale' – public health leadership: policy, research, education and practice. *European Journal of Public Health* 2015; 25 (Suppl 3): ckv174.017–22.

[6] ASPHER Community web page. Available at: http://aspher.org/users.html

[7] Paccaud F. Educating and training the public health workforce [editorial]. *European Journal of Public Health* 2011;21(2):137.

[8] Hobbs S, Stankunas M, Rethmeier K, Avery M, Czabanowska K. Clinical leadership improves health outcomes, but do we have it? *The Lancet* 2013;382(9903):1483–4.

[9] Czabanowska K, Rethmeier KA, Lueddeke G, et al. Public Health in the 21st Century: "Working Differently Means Leading and Learning Differently" (A qualitative study based on interviews with European public health leaders). *European Journal of Public Health* 2014;24(6):1047–52.

[10] Knights J. *Ethical Leadership. How to develop ethical leaders?* Transpersonal Leadership series. White Paper One. Routledge. Taylor and Francis, 2016. pp.1.

50 years of professional public health workforce development

ASPHER's 50th Anniversary Book

Edited by: A Foldspang, J Müller-Nordhorn, V Bjegovic-Mikanovic and R Otok

Freely available to download at: http://aspher.org/download/80/anniversary-book-may2016.pdf

ASPHER was founded 50 years ago on the initiative of the World Health Organization – 50 years actually bringing vast developments in public health, both in terms of policies and as concerns education and training and the development of research methods and scientific production. The anniversary was celebrated during the Deans' & Directors' Retreat at the National School of Public Health in Athens, Greece,

from 25 to 27 May 2016, where ASPHER's 50th Anniversary Book was also launched.
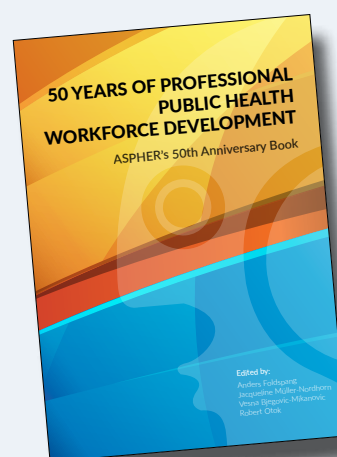
The Anniversary Book tells the history of ASPHER, as reported by many of those who were responsible for the active role of the association and its members, in the European context, as well as within national and local frameworks. Also the perspectives for the future are presented and discussed, in the context of ASPHER's strategy for 2016–20.

EVIDENCE IN PRACTICE AND EDUCATION OF PUBLIC HEALTH:
FROM TRANSLATION TO EXCHANGE

By: Ansgar Gerhardus

Summary: Evidence should inform decision-makers, practitioners and the public on what works in public health, under which conditions, and for whom. However, in real life, evidence often does not translate into public-health-practice. This article suggests that we abandon the concept of translation of evidence as a one-way-process that is independent from values, resources, interests and other contextual aspects. Instead, we suggest a model where evidence is generated within a deliberate exchange process between scientists and practitioners, taking values, resources and interests into account.

Keywords: Evidence, Public Health, Evidence-based Public Health, Translation, Implementation

Ansgar Gerhardus is Professor and Head of the Department for Health Services Research, Institute for Public Health and Nursing Research, University of Bremen, Germany. Email: ansgar.gerhardus@uni-bremen.de

The concept of evidence

According to Winslow's well-known definition, public health is the "…the science and the art of preventing disease, prolonging life and promoting physical health and efficiency through organised community effort…"[1] Evidence is usually considered to be related to science, rather than to art. Evidence-based knowledge should inform decision-makers, practitioners and the public on what works, under which conditions, and for whom. Only a few would oppose the claim that "any public-health-intervention should be based on the best available evidence". This leads to the question: Why does evidence often not translate into public-health-practice?

The concept of evidence has entered the health sector through clinical medicine and, more specifically, through the critical assessment of pharmaceuticals. The ideal design for studying the effectiveness of pharmaceuticals is most often the randomised controlled trial (RCT) where a population of patients is randomly divided into two (or sometimes more) groups: the members of one group receive the drug to be tested, the other serves as a control. As all other factors, such as the context and the mode of implementation are supposed to be equal, the difference in outcomes can be related directly to the different active ingredients of the pharmaceutical. Based on the assumption that only the active ingredient is responsible for any effect of the intervention, results from various studies performed under different conditions are pooled into systematic reviews. Systematic reviews are arguably the most prominent feature of evidence-based medicine.

Figure 1: Model for Evidence-Based Public Health
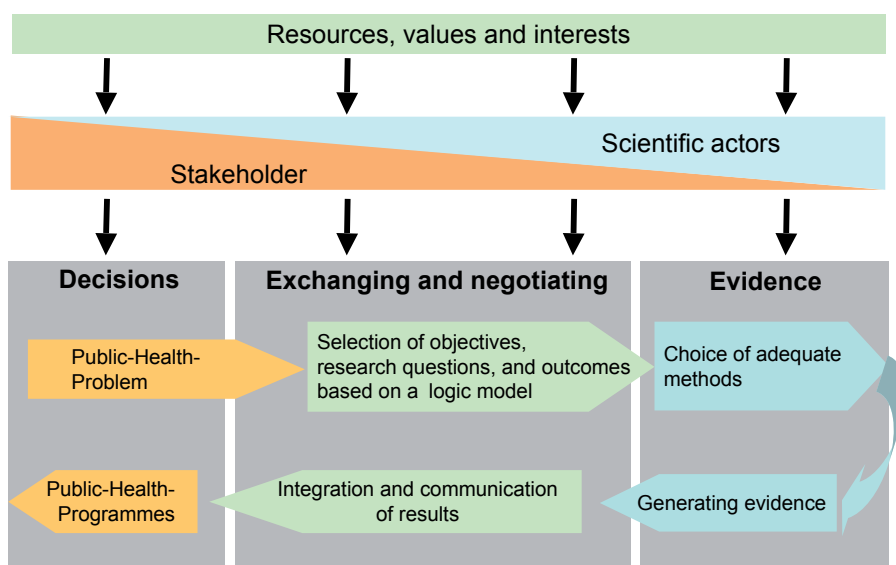
Source: Adapted from Ref. [2]

Public health interventions are complex

However, most public health interventions are far more complex than a pharmaceutical. Complex interventions are characterised by several interacting components, the number and difficulty of behaviours required by those delivering or receiving the intervention, multiple groups or organisational levels targeted, many and variable outcomes, and explicitly permitted flexibility or tailoring of the intervention.[3] For public health interventions it is often not possible to define which of the components are "the active ingredients", how they interact with each other (i.e., how they would perform if one component is added or deleted), and how effective they will be under varying conditions. For example, the success or failure of an educational programme to prevent the transmission of the human immunodeficiency virus (HIV) might depend on the message itself (e.g., abstention or condoms or both), the messenger (a young celebrity or a respected religious leader), the target group (sexually active adolescents or older religious people), the medium transmitting the message (internet spots or lectures), and the perceived prevalence of the disease (omnipresent threat or unlikely event). While the only outcome that was evaluated is the rate of transmission, decision-

makers might also be interested on other effects of the intervention, e.g., effects on empowerment and on other sexual transmitted diseases. To focus only on the content of the programme (the active ingredient) without considering the other variables and the interactions between them may result in misleading conclusions or conclusions of limited relevance.

A model for exchanging on evidence

The frequent non-translation of evidence into practice would then not reflect an unwillingness or ignorance by practitioners and decision-makers, but rather a mismatch between information and information need. It might be helpful to abandon the concept of translation as a one-way-process where an enlightened researcher informs a knowledge-hungry recipient. Evidence itself should not be conceptualised as a sharply defined "information-module" that needs to be inserted into a linear decision-making process at the right location. Also, evidence is not generated in isolation from the values, resources, interests, and contextual aspects that shape the thinking and acting of all stakeholders, including the researchers. To make evidence a more natural part of the decision-making process we suggest a concept where evidence is generated in

a deliberate exchange between scientists and practitioners, taking values, resources, and interests into account.

Figure 1 illustrates a model for evidence-based public health (EBPH) that covers the process from the definition of the public-health topic to the formulation of recommendations. The first step is the definition of the public-health topic. Data from health information systems should support the prioritisation of the public-health topic. Additional criteria are the potential for health improvement and the size of the evidence-gap. In the next step, more specific objectives, research questions and outcomes are formulated. Both steps require an intensive exchange between researchers and other stakeholders. To achieve this, various approaches have been tested, such as having stakeholders on advisory panels or focus group interviews.[4] A logic model can help to structure the intervention, its various ways of implementation, contextual factors that might interfere with the intervention, as well as intermediary and ultimate outcomes.[5] Discussing, negotiating, and ideally consenting to the logic model and its underlying theory, is an important part of the exchange between the researchers and other stakeholders as it will define large parts of the intervention and the information that needs to be collected.

> Evidence does not exist independently from values, resources and interests

In the third step, methods are assigned in accordance with the research questions, the underlying theory and the logic model. Lysdahl et al have developed a selection of methods to investigate complex interventions as part of a European project

on assessing complex technologies.[6] The presentation of the results can be structured by the same logic model so that possible interactions between components of the intervention, different ways of implementation, and the context on the outcomes are transparent.[7] The actual meaning of the results for the public-health topic, including the uncertainties related to them as well as possible recommendations, should be jointly discussed and interpreted.

Values, resources and interests

The selection of a public-health topic, the research questions and the generation and interpretation of evidence are shaped by values, resources and interests. Values comprise ethical values as well as epistemological values, e.g., different researchers apply different thresholds regarding which study design they will accept to generate valid evidence. It is important to note that resources that are available for research are not distributed evenly among different public-health topics. Public-health-interventions that are complex and/or not profitable are less likely to receive research funding than interventions that are of lower complexity and promise to be profitable. Moreover, researchers might have a special interest in doing research on topics that are easier to publish. Similarly, decision-makers might favour prestigious interventions to less popular ones.

Thus, evidence does not exist independently from values, resources and interests. When evidence is not part of a decision-making process this can be due to differences in epistemological values. To avoid this, these values need to be reflected and openly discussed before the process of evidence-generation has started.

Evidence in public health education and training

EBPH can have a difficult standing in public health education and training. Students often consider public health to be an applied subject that focuses on content-related issues and the practical skills needed to deliver this content. How the evidence underlying the content is generated is often of less interest.

In addition, public health comprises many different disciplines and methods. Education and training is often structured alongside these disciplines and the methods each discipline contributes. However, a structure that follows the borders of disciplines makes it difficult to strengthen capacity to ask interdisciplinary questions and to identify adequate methods to investigate these questions. In a rapidly changing environment alumni might find themselves left without the capacity to ask the right questions and to apply the best methodology when being confronted with a new situation that requires an interdisciplinary approach.

More recently, research-based learning has received increasing interest as an innovative approach to teaching at graduate and post-graduate level. In research-based learning students acquire knowledge by following the research process from choosing a topic and identifying a corresponding theory to applying the adequate methods and analysing and interpreting the data. Research-based learning has some components in common with problem-based learning: both start with a public-health topic and encourage students to develop their own research questions. However, whereas in problem-based learning students will then collect the information from the literature, in research based learning they apply research methods themselves. In our Masters of Public Health course at the University of Bremen we use a modified approach to research-based learning with an emphasis on EBPH. The public-health topics are introduced by real stakeholders such as hospitals, sickness funds or professional associations who are looking for an evidence-based intervention that fits their specific situation. Students take the role of researchers who will clarify the research questions, identify and apply the different scientific methods needed and finally interpret the findings jointly with the stakeholders. By facilitating a close collaboration with stakeholders from the practice, students are exposed to different values and interests. They learn how to negotiate and integrate them into a process that is constantly referring to evidence. We expect that as alumni they will continue

using an evidence-based approach toward the practical public-health topics they will be facing.

Conclusions

EBPH is far more than producing systematic reviews on narrowly defined questions. Strengthening the role of evidence in public health requires a reflection on the specific conditions under which the evidence is to be applied as well as on the values, interests and resources involved. Only then can evidence be integrated into a decision-making process that is often characterised by exchange and negotiation rather than by a linear process. If this approach to evidence in public health becomes a structural element of education and training, it has the potential to be the default way to tackle public-health topics for future decision-makers and researchers.

References

[1] Winslow CEA. The untilled fields of public health. *Science* 1920;51:23–33.

[2] Gerhardus A. Evidence-based Public Health: Ein Gebiet in Entwicklung. In: Gerhardus A, Breckenkamp J, Razum O, Schmacke N, Wenzel H (eds). *Evidence-based Public Health.* Bern: Hans Huber, 2010, pp. 17–29.

[3] Craig P, Dieppe P, Macintyre S, Michie S, Nazareth I, Petticrew M. Developing and evaluating complex interventions: the new Medical Research Council guidance. *BMJ* 2008;337:a1655.

[4] Brereton L, Ingleton C, Gardiner C, et al. Lay and professional stakeholder involvement in scoping palliative care issues: methods used in seven European countries. *Palliative Medicine* 2016; doi: 10.1177/0269216316649154.

[5] Rohwer A, Pfadenhauer LM, Burns J, et al. Use of logic models in systematic reviews and health technology assessments of complex interventions. *Journal of Clinical Epidemiology* 2016; doi: 10.1016/j.jclinepi.2016.06.012.

[6] Lysdahl KB, Mozygemba K, Burns J, Chilcott JB, Brönneke JB, Hofmann B (eds.) *Guidance for assessing effectiveness, economic aspects, ethical aspects, socio-cultural aspects and legal aspects in complex technologies,* 2016. Available at: www.integrate-hta.eu/downloads

[7] Wahlster P, Brereton L, Burns J, et al. *Integrated assessment of complex health technologies – The INTEGRATE-HTA model.* 2016. Available at: www.integrate-hta.eu/downloads

RECENT DEVELOPMENTS IN
PUBLIC HEALTH EDUCATION ACCREDITATION

By: Julien Goodman, Selena Gray, Laurent Chambaud, Martin Sprenger, Nick de Viggiani, Ramune Kalediene and Jeannette de Boer

Summary: In 2011, ASPHER established the Agency for Public Health Education Accreditation (APHEA). This represented the culmination of nearly a quarter of a century of activities dating back to 1988 in developing and assuring quality in public health education in Europe. This article provides a brief history of APHEA, outlines current activities, and explores the experiences of some of those who have participated in the process to date.

Keywords: APHEA, Public Health Education, Public Health Accreditation, Public Health Quality Assurance

Julien Goodman is Director, Agency for Public Health Education Accreditation, Brussels, Belgium; **Selena Gray** is Professor of Public Health, University of the West of England, Bristol, UK; **Laurent Chambaud** is Professor and Director of EHESP School of Public Health, Rennes, France; **Martin Sprenger** is Head of the Postgraduate Public Health Program, University of Graz, Vienna, Austria; **Nick de Viggiani** is Senior Lecturer in Public Health, University of the West of England, Bristol, UK; **Ramune Kalediene** is Professor and Dean, Faculty of Public Health, Kaunas University, Lithuania; and **Jeannette de Boer** is Medical Specialist in Public Health, communicable disease control, Netherlands School of Public and Occupational Health, Utrecht, The Netherlands. Email: julien.goodman@aphea.net

Introduction

The Association of Schools of Public Health in the European Region (ASPHER) established the Agency for Public Health Education Accreditation (APHEA) in 2011. The foundation of the agency is a result of many years of international collaboration which began with ASPHER's partnership with the World Health Organization (WHO) in 1988 and the application of the WHO "Health for All" targets throughout the European region.[1] This activity led to the establishment of the ASPHER Public health Education European Review (PEER) process in 1994 as a means to establish a common European standard in education and training and the recognition of professional qualifications.[2] In 2000, ASPHER joined forces with Foundation Mérieux to further develop the PEER criteria towards a system of accreditation,[3] which was ratified by the ASPHER Deans and Directors in 2001. These developments took place at the same time that ASPHER and the Open Society Institute began using the PEER process as a framework for establishing and developing 22 Schools and programmes of public health in the Central and Eastern European region.[4]

With the aid of European funds, an accreditation task force was then instigated by ASPHER in 2002 to pursue accreditation.[5] In 2009, ASPHER, along with several European stakeholder partners including EUPHA, EPHA, EHMA and EuroHealthNet made the final push towards the development of an agency which was launched in 2011. The initial focus was on the accreditation of Masters level programmes of public health. Following a two-year review of their processes, APHEA opted for the development of systems reflective of the earlier central principles of the PEER review encompassing course, programme and institutions.

In 2015, APHEA adopted a global remit. This was in response to calls from schools, programmes and courses outside Europe wishing to obtain international accreditation but unable to do so through any other organisation. The agency also began to initiate accreditation standards for PhD and Bachelor degrees. Unlike the vast majority of accreditation agencies, APHEA's history is rooted in a formative, improvement-led, approach, which places equal emphasis on quality assurance and quality improvement. This approach seeks to recommend activities based around an appreciation of the specific context of each course, programme or school, as well as their own ambitions for improvement.

APHEA's history is rooted in a formative, improvement-led, approach

At present, APHEA offers accreditation for public health short courses, Masters programmes and schools, as well as validation of programme curricula. In the following sections we provide a summary of the experiences to date from courses, programmes, institutions and from those who have participated as reviewers.

A perfect way to make a more united community

Professor Laurent Chambaud describes his experience of undertaking institutional accreditation with APHEA.

EHESP School of Public Health in Rennes, France was keen to enter into an external institutional accreditation process. We first made some contacts with the US accreditation body (CEPH), but decided to enter the APHEA process for three main reasons: firstly it is a European institution and I do believe that Europe needs to develop such quality assurance systems on its

own; we also could find a more diverse reality of what are schools of public health in Europe than the situation in the US. For instance, our school is both an academic and a professional institution, and this diversity has to be taken into account. So in entering APHEA accreditation I was expecting a more flexible process than with the US one (but this is compatible with a very detailed and demanding review and analysis). Finally, and it is important to highlight, the accreditation's fees are much less expensive and this will allow even small schools of public health to enter the process.

At the end of the process we are very satisfied. Of course because we went through the accreditation criteria and we are now able and proud to promote this label at the national and international level. But this satisfaction is also with the process itself. With internal and external evaluation and, through very fruitful discussion with the experts coming from different countries and backgrounds, we had the opportunity to address the main issues of our School, and also to start an internal process to make a number of improvements. Moreover, we feel that this accreditation process is a perfect way to make a more united community: faculty members, students and administrative staff.

I think that it is important for our schools in Europe to be part of this accreditation process. We have to find our own way to develop quality assurance for public health training and research in Europe. This is a condition for strengthening our network and to adapt our criteria to national and local contexts. Our originality will be to support a solid, unique process dealing with a rich diversity of situations.

Why small schools should be accredited too

In 2002, the first Austrian postgraduate Masters programme in public health started at the Medical University of Graz and in 2004 it became a member of ASPHER. With two full-time equivalent staff it was – and still is – one of the smallest schools in the European network.

In 2015, they decided to go through the APHEA process of Curriculum Validation. Dr Martin Sprenger comments:

What seems to be a routine act for bigger schools looks completely different when resources are very scarce. However, for us, the return on investment was high and therefore we want to share some experiences that are especially relevant for small programmes.

First, in small schools most of the time and energy is dedicated to operational tasks, especially programme organisation. The application process forced us to conceptualise our programme in great detail, something we hadn't done for a long time. The self-evaluation handbook provided a comprehensive and helpful checklist, especially to find those blind spots that are usually overlooked. At the end we were happy with the result, but what really matters and makes a difference is the process.

Second, for a small school any professional feedback is welcome. On the one hand, it provided some appreciation that shows us that we are doing a good job. On the other hand, it gave us the kind of constructive criticism that we needed to get better.

Third, small schools are largely funded through tuition fees and permanently threaten to vanish student recruitment is not successful. Therefore, a widely accepted Curriculum Validation is an important quality feature in the postgraduate education market. Additionally, it is that kind of award that counts in university settings.

By motivating and helping small schools of public health to go through the Curriculum Validation process, APHEA could help to diminish some of the existing inequalities among ASPHER members.

Bringing a European perspective into our classrooms

Jeannette de Boer describes the experience of the Netherlands School of Public and Occupational Health (NSPOH) . The school has a variety of education programmes in public and occupational

health and offers many modules for Continuous Professional Education to various professionals in the field of public and occupational health. There are around 170 short modules yearly, 60% of which are core training modules for public health. She states:

Within the country, we are already experienced in the accreditation process for Dutch (medical) professionals. The question was why we would need also a European accreditation. What could be the benefits for the school, our participants and Europe?

In 2015 the NSPOH decided to apply for curriculum validation and to offer two specific training modules for accreditation. In 2016 we started the application for institutional accreditation. Being accredited by a new system gives you many things to think about. It means a lot of work, critical self-reflection and a lot of discussion, but the whole process really is rewarding. First, we learned through conversation with our participants and our stakeholders that there was a lot of interest in European accreditation from their perspective, since it reflects that our modules can meet the international standards of education in Public Health. Second, through this European accreditation we could bring a European perspective into our classrooms. This will be an improvement for our participants and for other European professionals. The next step is to deliver some modules to international participants. The third positive aspect of the process is that teaching staff are more and more aware of the European perspective of training in public health. After being accredited, the staff felt proud to have met the criteria and they want to share Dutch knowledge and the training opportunities with our European colleagues!

External scrutiny and international recognition

The MSc Public Health programme run by the University of the West of England (UWE) in Bristol, United Kingdom received Curriculum Validation by APHEA in 2014 and accreditation in 2015, following an intensive four month scrutiny

process. Dr Nick de Vigianni was the Programme Leader at that time, and reports that:

The programme team were proud to represent the faculty as the second university in the UK to achieve accreditation with APHEA, and the fourth in Europe. The experience enabled the faculty to reflect upon the programme's quality and fitness for purpose, especially in terms of its internationalisation agenda in seeking to respond to the needs of a diverse and expanding international student population.

A key outcome for the programme was to have independent and objective critique from international peers. It enabled the programme to be scrutinised beyond the level of conventional periodic curriculum review (a standard quality process within the UK higher education system), especially in providing intensive scrutiny of the curriculum, the learning experience and of the broader University infrastructure. Since validation and accreditation, the programme has continued to develop and flourish, following the valuable guidance from APHEA on extending and enriching the international public health offer from UWE Bristol. UWE continues to attract students to its Public Health programme from low and middle income countries in Africa, Asia and the Middle East, as well as supporting UK-based public health professionals, and in 2016 UWE was invited by Villa College in the Maldives to develop a franchise agreement to deliver the APHEA accredited MSc Public Health at Villa College.

In conclusion, the APHEA experience was valuable in enabling the UWE programme to attain external scrutiny and international recognition, whilst providing the academic team with insight into areas for further development and innovation.

A unique opportunity to discuss public health training challenges in depth

The accreditation process relies on the quality of scrutiny and engagement of its reviews. As an experienced reviewer, Professor Ramune Kalediene reflects

on the experiences and benefits that she has perceived from being involved in this process.

Acting as a reviewer of public health training programmes is an exciting and challenging process. Involvement in this field for over a decade allowed me to get acquainted with a considerable variety of programmes across the many different regions of Europe and beyond.

The pattern of training programmes in public health depends greatly on the cultural, social, economic and political context. Many of the challenges which were observed during the site visits were very familiar to me as a long serving Dean of the School of Public Health in Lithuania, where we have been exposed to the continuous reforms in the health sector, changes in governments and considerable economic challenges. Coming from a highly dynamic context myself, I admired and took into account the ways the schools used to successfully pass through the process of continuous development and quality improvement. Most importantly, the review process is a learning process in itself not only for the schools which are undergoing the review or accreditation procedure, but also for the reviewers.

Another extremely valuable aspect of this process is being involved in a multicultural team of the reviewers, coming from different regions and cultures. Working in the team during the review process provides a unique opportunity to deeply discuss public health training challenges and search for common solutions. Each review adds to the existing experience of the reviewer and enables them to accumulate competences and good practices, which later could be shared with their own and other schools, advising them on quality improvement and further development. I am sure that the school review process is a process of lessons learned together and contributes to overall improvement of public health competences across Europe.

Conclusion

APHEA has developed a robust process of quality assurance of public health education in Europe and beyond.

Participation in the process has the potential to offer benefits to participating organisations of varying sizes, in terms of stimulating internal review and reflection, and in offering the opportunity for external critical review. It provides a "badge" of quality for courses, programmes and institutions both internally and within the wider public health community both nationally and internationally. Through its work, APHEA is helping to build a worldwide community of public health educators sharing good practice and expertise. The focus on development and the identification of areas of good practice adds value to the processes. The future offers significant opportunities to extend this model internationally, and to support the development of established and emerging public health courses in low and middle income countries.

References

[1] Cavallo F, Rimpela A, Normand C, Bury J. Public health training in Europe. Development of European masters degrees in public health. *European Journal of Public Health* 2001;11(2):171–3.

[2] Köhler L, Bury J, de Leeuw E, Vaughan P. Proposals for collaboration in European public health training. *European Journal of Public Health* 1996;6(1):70–2.

[3] Bury J, *Gliber M. Quality Improvement and Accreditation of training programmes in Public Health.* Lyon: Foundation Mérieux, 2001.

[4] Goodman J, Overall J, Tulchinsky TH. *Public Health Workforce Capacity Building: Lessons Learned from "Quality Development of Public Health Teaching Programmes in Central and Eastern Europe."* Brussels: Association of Schools of Public Health in the European Region (ASPHER), 2008.

[5] Otok R, Levin I, Sitko S, Flahault A. European Accreditation of Public Health Education. *Public Health Reviews* 2011;33(1):30–8.

Public Health Reviews

Editor in Chief: Laurent Chambaud, EHESP, Rennes, France

Deputy Editor: Ted Tulchinsky, Braun School of Public Health, Israel

Associate Deputy Editor: Selena Gray, University of the West of England, UK

Freely available to access at: https://publichealthreviews. biomedcentral.com

Public Health Reviews (PHR) is the official journal of ASPHER. It is dedicated to promoting public health knowledge and practice, placing a special emphasis on the integration of state of the art information and translational issues, interdisciplinary approaches, innovations, and emerging public health concerns.

The journal publishes thematic series of review articles on key topics in public health that aim to inform public health practitioners, students and policy-makers. The scope of the journal is global, but special emphasis is placed on Europe and issues that impact and speak to public health in the European Region. *PHR* is published online on the BioMed Central platform and is free for all to access.

Several thematic series are currently available online and will remain open to future submissions, including:

- Teaching Public Health Ethics
- Migrant and Minority Health
- Climate Change and Health
- Contemporary Issues in Screening

Future collections are planned on Public Health Workforce Training, Human Rights and Patient Care, and Maternal and Child Health.

We hope the *Eurohealth* community will find *PHR* to be an important reference on key subjects in public health and we welcome your contributions to the journal.

COMPETENCES BASED INDIVIDUAL CAREER AND WORKFORCE PLANNING IN PUBLIC HEALTH

By: Anders Foldspang and Robert Otok

Summary: ASPHER's lists of generic core competences for public health professionals constitute a comprehensively developing information bank, the result of academic reporting and analysis with empirical backup. In the Repository of ASPHER's European Public Health Reference Framework (EPHRF), competences are assigned to action, thus forming a logical structure with potential to form the basis of public health human resources planning and individual public health education, training and career planning. More specific competences lists are needed for health professionals performing public health functions in the field, as are lists specific for selected health phenomena and lists focusing on living conditions, population health and health systems.

Keywords: Public Health Workforce Planning; Public Health Human Resources; Public Health Competences; Essential Public Health Operations

Anders Foldspang is ASPHER Past President and Professor, Department of Public Health, Aarhus University, Denmark; **Robert Otok** is Director of the Association of Schools of Public Health in the European Region (ASPHER), Belgium. Email: anders.foldspang@gmail.com

ASPHER's lists of public health competences and WHO's European Action Plan

Aimed at strengthening the development and maintenance of a sufficient and competent public health workforce, the planning of public health education and training programmes has increasingly focused on the outcome of education and training in terms of competences achieved and the relationship of these competences to performance necessary in relevant public health job functions.

The Association of Schools of Public Health in the European Region (ASPHER) started its European Public Health Core Competences Programme ten years ago, involving, in the first place, about 100 academics and, later, also public health practitioners and decision makers, in the discussion of the selection, definition and practical implementation of generic competences.[1]

As indicated in the World Health Organization's (WHO) European Action Plan for Strengthening Public Health Capacities and Services (EAP),[2] the 2011 edition of ASPHER's lists of public health competences was endorsed in 2012 by WHO Europe's member states to guide

Figure 1: The strategic circle in public health

SITUATION ANALYSIS

FOLLOW UP INCL. EVALUATION/ ASSESSMENT

DEFINITION OF TARGETS AND TARGET GROUPS

RESOURCE ALLOCATION, IMPLEMENTATION AND MONITORING

CHOICE OF INTERVENTION
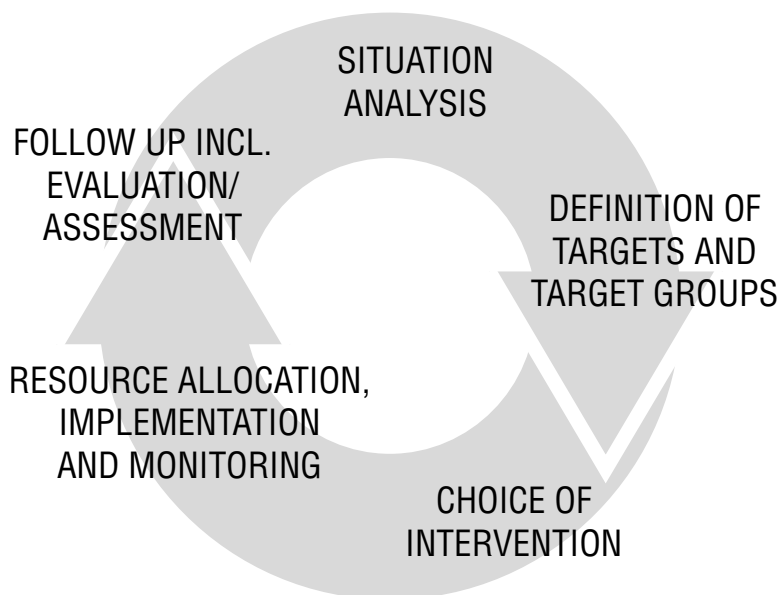
Box 1: Chapters of ASPHER's list of public health generic core competences

- Methods in public health
- Population health:
  – Population health and its social and economic determinants
  – Population health and its material environmental determinants
- Interventions and structures aiming at the improvement of population health:
  – Health policy; health economics; organisational theory; management and leadership
  – Health promotion: health education, health protection, disease prevention
- Ethics

Source: Ref. [6]

public health education in Europe. In 2013, WHO Europe delegated the responsibility to ASPHER to co-chair its working group on assuring a sufficient and competent public health workforce (Essential Public Health Operation (EPHO) No. 7 [2],[3]). With the 2016/17 mid-term evaluation of the implementation of the European Action Plan of 2012, this work is ready to enter its next phase.

> The public health workforce is accountable to the population as well as to decision makers

In line with the above developments and supported by EU Health Programme operating grants (2011–2014), ASPHER in 2013 initiated a programme aimed at shaping a comprehensive public health profession across Europe, thus sustaining the development of comprehensive

and coherent systems for public health services delivery for defined populations.[4] ASPHER created the European Public Health Reference Framework (EPHRF) to function as the organisational basis for the programme, its Council also being responsible for the continued development and storing in its Repository of the lists of generic core competences for the public health workforce.[5] Thus, the EPHRF, with its Council and Repository, is meant to play an important role in policy developments supporting public health workforce development and professionalisation.

Competences and the strategic challenge to be met by the public health workforce

The public health workforce is just as accountable to the population as to decision makers and thus must be able to identify population health challenges, as well as systems challenges within defined geographical and administrative entities, and select, implement and evaluate relevant interventions. These components are mutually dependent, following the iterative format of the strategic circle (**see Figure 1**).[6],[7]

None of the basic stages of **Figure 1** can be omitted if the rationality of the strategic

chain is to remain unbroken and the reaction to population health challenges and systems challenges is not to be left merely to unsystematic chance.

Moreover, each of the steps of the strategic process corresponds to one or more Essential Public Health Operations (EPHOs) (**see Box 2**).[3],[7] In order to be able to meet challenges in population health and in health systems and perform the EPHOs, the public health workforce and the health systems in which it works,[8] both must hold the necessary comprehensive, mutually coherent set of competences (**see Box 1**).

This is interpretable from a strategic perspective. Starting from a given challenge, the relevant actions, expressed in terms of EPHOs, can be determined. Given the planning of EPHOs, the necessary competences profile can be identified. Conversely, given a certain competency profile in a system for public health services delivery, the challenge-meeting potential of the system can be identified:

Challenges ←→ EPHO implementation and performance ←→ Competences

In combination with the strategic circle, this logical structure – 'The CEC Model' –

Box 2: Main categories of WHO's Essential Public Health Operations (EPHOs)

Intelligence EPHOs

EPHO 1   Surveillance of population health and well-being

EPHO 2   Monitoring and response to health hazards and emergencies

Core services delivery EPHOs

EPHO 3   Health protection, including environmental, occupational and food safety and others

EPHO 4   Health promotion including action to address social determinants and health inequity

EPHO 5   Disease prevention, including early detection of illness

Enabler EPHOs

EPHO 6   Assuring governance for health

EPHO 7   Assuring a competent public health workforce

EPHO 8   Assuring organisational structures and financing

EPHO 9   Information, communication and social mobilisation for health

EPHO 10   Advancing public health research to inform policy and practice

Source: Ref. [2], [3]

represents the basic structure of the EPHRF Repository. A simple, concrete example will support this understanding:

Obesity seems to increase in childhood populations. Consider the population of 6–17 year-old schoolchildren in a town. In order to understand an obesity incidence increase, an obesity survey – or even continued obesity and nutrition surveillance (EPHO 1) – has to be carried out, including the description of relevant major determinants of childhood obesity, e.g., social background, nutrition culture, social-psychological classroom dynamics. As indicated, this demands a relatively large number of competences within epidemiology, biostatistics, data management, sociology, anthropology, social psychology – and preferably also qualitative methods applied *à priori* to individuals, family groups and groups of children as well as schools' organisational structures, in order to identify more closely the nature of the problem. Having also identified (or even created) scientific evidence (competences in methods; EPHO 10) for intervention effectiveness, cost-effectiveness and ethical acceptability (series of specific competences are needed to be able to do so), stopping the continued increase can be expressed in concrete targets for concrete target

groups of children. But what childhood groups are most at risk? (Competences needed to analyse data in order to be able to identify high risk groups, if such exist). How do we best reach those most at risk? Health promotion programmes (EPHO 4) seem most readily at hand at first glance, but also health protection (EPHO 3) can be relevant, in turn demanding another series of competences. The decision to implement must be rooted in professional competences and communicated to decision makers through advocacy competences and organisational skills (EPHOs 8 – 9). Following up and evaluating the consequences of the implemented programme will include returning to the first step of the strategic process and thus the continued surveillance of obesity and nutrition habits (EPHO 1), etc, with its demand on sufficient competences. Leadership competences are needed to overview the whole of the process and discuss and decide on further initiatives, also taking into account financial prioritisation (EPHO 8).

Similar examples can – and should – of course be developed for other health phenomena, whether communicable diseases (e.g., tuberculosis, Ebola infection), non-communicable diseases

(e.g., cardio-vascular disease, diabetes, cancer, mental illness), traffic accidents, etc. Possibilities and needs are unlimited and appealing in a positive sense. Most population health and health systems challenges will present with complex strategic patterns, and we have strong tools to analyse such patterns, many of which (e.g., some multivariate statistical techniques; qualitative techniques concerning, e.g., organisations) have to be found in the standard toolbox (lists of competences) of public health professionals. Through this approach strategic conclusions will be valid and applicable. [6]

The EPHRF Council

The Council of the EPHRF was founded to:

a) Ensure the continued development of ASPHER's lists of competences and their relationship to EPHOs and population health challenges;

b) Ensure and monitor the development of the EPHRF Repository and its IT basis – the EPHRF Online Tool;

c) Support and monitor empirical data collection and inclusion of data in the Repository;

d) Support and monitor interaction with the activities of current European health policies and strategies.

The principles of logical competences-EPHOs structures were mapped and published this year. [7] The performance of EPHOs will need general public health core competences as well as core competences specific to the EPHO in question, so that, all in all, the combined logical structure is relatively complicated. Thus, the Council's continued work concerning the Repository's qualitative structure will cover the phases:

1. Reviewing and adjusting the lists of generic core competences *per se,* for public health professionals, to ensure that they are in accordance with current scientific and practical public health standards;

2. Reviewing and creating general competences-EPHO lists, in balance also with EPHO developments;

Figure 2: ASPHER's EPHRF online tool structure
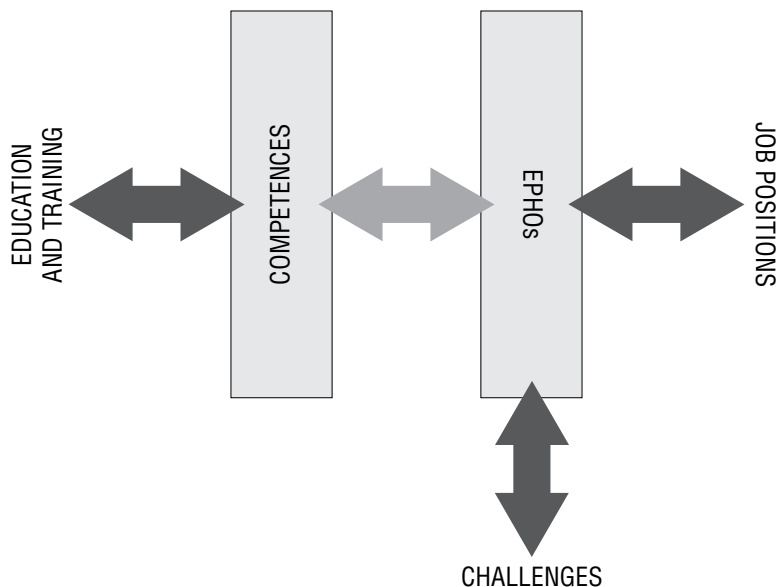
Source: Authors' own

3. Creating competences-EPHOs lists for selected population health challenges and systems challenges; and also:

4. Creating lists of public health generic core competences for defined levels of public health education and training.

> EPHRF is meant to play an important role in policy developments

In the future, the Council should participate in following-up the concrete implementation of lists of competences in strategies, in public health systems, and in population-targeted interventions. As few European countries have comprehensive public health systems, and most have isolated public health services, the Council has initially considered the principles of competences allocated to EPHOs[7] and will move to scrutinise relatively general individual competency profiles.

In parallel to this, the Council is planning to consider selected country case studies, looking at patterns of major groups of

competences and EPHO-associated competences delivered by schools and public health education and training programmes, in order to identify types of within- and between-country imbalances and unmet needs in terms of competences for EPHOs as well as challenges.[9] This should also interact with documentation on European countries' delivery systems for public health services, collected by WHO Europe. Thus, needs assessment will focus on education and training as well as service delivery.

The EPHRF Repository

Based on patterns of public health core competences and EPHO skills, ASPHER's EPHRF Repository was initiated to constitute a central and comprehensive source of information to serve as the basis for:

i.   Public health workforce planning;

ii. Mapping public health education and training programmes;

iii. Mapping job opportunities.

The repository will support and interact with accreditation of education and training programmes, as well as authorisation of public health professionals. Thus, based on the schools' and university departments' academic and practical culture, the Repository is

conceptualised as a central resource for the formation of a professional public health culture, sustained by certified/licensed professionals accountable for population health.

As indicated, the EPHRF Repository is operationalised by an Online Tool built on the principles of the CEC Model, so that it links (**see Figure 2**):

• Competences with EPHOs;

• Education and training module with Competences;

• Job positions and challenges modules with EPHOs.

Thus, the EPHRF Repository's outputs are intended to be able to advise (**see Box 3**):

1. The further development and adjustment of:

   a. Education and training programmes.

   b. Systems of public health service delivery.

2. The individual choice and adjustment of education and training for career planning.

At present, the current lists of generic competences and their relationship to EPHOs are in place in the Repository, and competences- and EPHO-information on concrete educational and training programmes in European countries are being included. Adequate data structures for population health challenges have to be developed and implemented. When the necessary empirical data are in place, it will be possible, at the systems level at a later phase of development, to study competences and EPHO profiles characteristic for selected parts and countries of Europe, and their association with population health patterns, education and training capacity, as well as public health job market structures. Furthermore, such patterns may in the future be scrutinised as functions of, e.g., socio-economic living conditions at individual as well as country level, and as functions of health systems and public health systems structure, culture, tradition and development. The EPHRF Repository's principles, methods and practice are applicable locally, across countries in Europe and globally.

Box 3: Examples of decision chains based on the Online EPHRF Repository

1. Systems planning: What is needed to meet population health challenges?

1. Select	➜	Population health challenge
2. Output: Identification of	➜	EPHOs needed to meet challenge
		➜ Types and associated human capacity
		➜ Organisation
		➜ Economy
		➜ Management
3. Output: Identification of	➜	Competences needed to perform EPHOs
		➜ Types
		➜ Human capacity needed to meet challenge

2. Systems planning: What challenges can be met by prevalent human capacity?

1. Identify	➜	Prevalent human capacity:
		No. of staff with competency profiles
2. Output: Identification of	➜	EPHOs that can be performed by prevalent human capacity with these competences
		➜ Types, numbers and amounts
3. Output: Identification of	➜	Population health challenges that can be met by existing human capacity

3. Individual career planning: Specialist training programmes to choose, based on interest in population health challenge and on job possibilities

1. Select	➜	Population health challenge
2. Output: Identification of	➜	EPHOs needed to meet challenge
		➜ Types, numbers and amounts
		➜ Organisation
		➜ Economy
		➜ Management
3. Output: Identification of	➜	Competences needed to perform EPHOs
		➜ Types
4. Output: Answer	➜	Training programme
		Job possibilities

4. Individual career planning: Specialist training programmes, based on interest in EPHOs and on job possibilities

1. Select	➜	EPHOs of interest
2. Output: Identification of	➜	Competences needed to perform EPHO(s)
		➜ Types
3. Output: Answer	➜	Training programme
		Job possibilities

5. Education and training: Curriculum planning

1. Select	➜	Population health challenge
2. Output: Identification of	➜	EPHOs needed to meet challenge
3. Output: Identification of	➜	Competences needed to perform EPHOs
4. Conclusion for curriculum	➜	Curriculum structure, content and goals
		➜ Thematic components
		➜ Teaching and learning methods
		➜ Competences to be achieved

Source: Ref. **5 7**

Added value

The added value of the development of the EPHRF Council and the Repository, together with the Online Tool, is the continuing adjustment and development of profiles of competences, in systems as well as in groups of individuals and in individuals, based on scientific evidence as well as good public health practice, balancing with EPHOs and with population health and health systems challenges across Europe. The innovative Repository is meant to constitute a systematic and flexible tool to contribute to the planning of cost-effective public health systems and services as well as individual public health careers. Thus, target populations, society – represented by systems planners and decision makers – and individual public health students and professionals are expected to benefit.

Further developments

ASPHER's lists of generic core competences for public health professionals constitute a bank of information under continuing development, the result of academic analysis with empirical backup. The basic structure of the lists is currently already implemented for accreditation of educational and training programmes.[4] Furthermore, a straightforward application will be the development of national and regional lists and a European testing function for the achievement of diploma and professional status and registration,[10] by public health graduates. Initiating decentralised, country-specific pilots could be among EPHRF Council

activities, also based on the work of the European Observatory on Health Systems and Policies.

While ensuring the crucial academic freedom of thought and scientific evidence for the continued development of its lists of generic core competences for public health professionals, ASPHER will work to increase the possibilities for the lists and the Repository to be used as resources for the creation of concrete public health job descriptions for the public health workforce covering more specific parts of public health, e.g., physicians, dentists, nurses, midwives, pharmacists. This important part of the competences movement, of course, should involve multiple partners, including public health associations.

References

1   Foldspang A (Ed.). *Provisional Lists of Public Health Core Competences. European Public Health Core Competences Programme (EPHCC) for Public Health Education*. Phase 1. ASPHER Series No. 2. Brussels: ASPHER, 2007.

2   WHO Regional Office for Europe. *European Action Plan for Strengthening Public Health Capacities and Services*. Copenhagen: WHO, 2012. Available at: http://www.euro.who.int/__data/assets/pdf_file/0005/171770/RC62wd12rev1-Eng.pdf?ua=1

3   Martin-Moreno JM. *Self-assessment tool for the evaluation of essential public health operations in the WHO European Region*. Copenhagen: WHO Europe, 2014. Available at: http://www.euro.who.int/__data/assets/pdf_file/0018/281700/Self-assessment-tool-evaluation-essential-public-health-operations.pdf?ua=1

4   Foldspang A, Müller-Nordhorn J, Bjegovic-Mikanovic V, Otok R (Eds.). *50 years of professional public health workforce development. ASPHER's 50th anniversary book*. Brussels: ASPHER, 2016.

5   Foldspang A, Otok R, Czabanowska K, Bjegovic-Mikanovic V. *Developing the Public Health Workforce in Europe: The European Public Health Reference Framework (EPHRF): It's Council and Online Repository. Concepts and Policy Brief*. Brussels: ASPHER, 2014. Available at: http://aspher.org/download/27/ephrf_concept_and_policy_brief.pdf

6   Birt C, Foldspang A. *European Core Competences for Public Health Professionals (ECCPHP). ASPHER's European Public Health Core Competences Programme*. ASPHER Publication No. 5. Brussels: ASPHER, 2011. Available at: http://aspher.org/download/77/eccphp-2011.pdf

7   Foldspang A. *From potential to action. Public health core competences for essential public health operations. A manual*. Vol. I–III. Brussels: ASPHER, 2016. Available at: http://aspher.org/repository,12,0,0.html

8   Birt C, Foldspang A. The Developing Role of Systems of Competences in Public Health Education and Practice. *Public Health Review* 2011;33:134–47.

9   Otok R, Foldspang A. Main competences and skills to perform Essential Public Health Operations, offered by Schools of Public health in four European countries: a short pilot report. *International Journal of Public Health*. DOI 10.1007/s00038-016-0870-4.

10   Foldspang A. Towards a public health profession: the roles of essential public health operations and lists of competences. Editorial. *European Journal of Public Health* 2015;25:361-2.

WHO Barcelona Course on Health Financing for Universal Health Coverage

13–17 March 2017, Barcelona, Spain

Addressing the overarching theme of universal health coverage, the Course will review policy instruments to improve health systems' performance through better health-financing policy.

The Course is built around 5 modules: **coordinating reform, raising revenues, pooling health revenues, purchasing and designing a benefit package**.

Each module will include **interactive discussions** between participants and trainers, throughout which **many examples of practical experience** from the WHO European Region will be shared.

The deadline for receiving applications for this week-long intensive course is **17 January 2017**.

Take a look at the course brochure: https://euro.sharefile.com/share?#/view/s68bb1c173fd4f158

For further inquiries, contact Ruth Oberhauser at WHO/Europe: eubar@who.int or Tel.: +34 607 07 07 23

PUBLIC HEALTH NEEDS TO STAND ON ITS OWN –
A VIEWPOINT FROM EARLY CAREER PROFESSIONALS

By: Sofia Ribeiro, Alessandra Lafranconi, Yannis Natsis, Kevin Rieger and Giacomo Scaioli

VIEWPOINT

Summary: On the occasion of the 50th anniversary meeting of the Association of Schools of public health in the European Region (ASPHER), held in Brussels on 6–7 April 2016, early career professionals from all over Europe discussed the future of the Public Health Workforce in Europe. Current challenges and the way forward were debated around three main topics: *professionalisation, education and training and evidence into policy.*

Keywords: *Early Career Professionals, Public Health, public health Workforce*

Sofia Ribeiro is on the Young Gastein Taskforce, Young Gastein, Austria; **Alessandra Lafranconi** is Jean Monnet Module Coordinator, University Milano Bicocca, Italy; **Yannis Natsis** is Policy Coordinator Universal Access and Affordable Medicines, European Pgublic Health Alliance, Belgium; **Kevin Rieger** is Consultant, German Pharmaceutical Industry Association, Belgium; **Giacomo Scaioli** is EUPHAnxt Coordinator, EUPHAnxt, The Netherlands.
Email: sofiafigribeiro@gmail.com

Introduction

Early career public health professionals at ASPHER's 50th anniversary meeting discued the current challenges and future for the public health workforce in Europe. This short article aims to briefly report on the outcomes of the meeting, and serve as a basis for future discussion on this topic.

Professionalisation

One of the main issues raised in connection to professionalisation was the lack of awareness of employers on the skills offered by a professional who has completed a bachelor degree in Public Health. There was consensus in the group that efforts should be made towards offering these programmes across Europe, in spite of the challenge this process represents. Defining the competencies for bachelor level programmes in a similar way to the Masters of public health (MPH) and PhD programmes, which follow a clear and standardised path, would facilitate greater recognition by employers.

Moreover, participants agreed that public health needs to be offered as a field of its own, and that the establishment of public health as a profession is an advantage for professionals from areas other than medicine and health care. Mutual understanding and collaboration among professionals from various areas and with different backgrounds is key to the development of a better and more equipped Public Health workforce.

Education and training

The group agreed that public health education and training should be both diversified and standardised, and cooperation with other stakeholders is needed to provide comprehensive

and useful public health education. In addition, introducing accreditation as widely as possible would allow public health professionals to know where they stand and what their role is. The identification of knowledge gaps in public health programmes, together with establishing a reliable way of making professionals aware of their Continuing Professional Development (CPD) needs, would contribute to further public health education and training.

> public health needs to be offered as a field of its own

ASPHER, directly or through its members, could play a role in offering courses aimed at complementing the perceived training needs in the Public Health community.

Moreover, in a follow up discussion during the Young Forum Gastein Workshop reflecting on *'the future of public health training in Europe',* held at the 2016 European Health Forum Gastein, it was concluded that ASPHER should play a role in ensuring that public health schools are run by good faculties. Good faculties are those able to offer a wide and comprehensive background,[1] and to teach how to manage change,[2] not only because of a fast-changing social and technological environment, but also because of the many levels at which a public health professional is supposed to work throughout his/her own life, from local experiences to international programmes and projects.

Evidence into policy

Several solutions were proposed for bridging the gap between science and policy. First, it was recommended that contact and mediation between policy makers, practitioners and researchers should be fostered. In addition, communication courses for policy makers and researchers should be designed and implemented. In addition, courses on translation of evidence into policy were considered essential. Research should

accommodate the needs of policy makers, and scientists should be encouraged to communicate the usefulness of their research into policy and practice, for example by including a paragraph in each published scientific paper on how the findings of their research have implications for policy.

Thus, the science policy debate should be a two-way channel of communication. To this end, workshops should be pursued between policy makers and public health professionals. This dialogue will be conducive to identifying needs and priorities, as well as to promoting a better understanding between the different stakeholders. The added value of public health professionals is the panoramic overview of a topic area that they usually have, including an insight into the various stakeholders involved. They can therefore put the different pieces of the puzzle together, breaking down the silos between research, policy and decision-making and the overall strategy. This is essential as policy fragmentation is one of the key challenges we face across the spectrum. Policy cohesion contributes to result-oriented recommendations as well as to a better management of resources. The latter is particularly significant as public health professionals act as facilitators and pave the way for the collaboration of actors who would otherwise not work together.

Concluding remarks

Although this article does not aim to be an exhaustive summary of the discussions, we hope that it will be an additional element to foster discussion on these areas. The public health workforce in Europe faces many challenges, but we are confident that all generations of professionals will be able to find the way forward.

References

[1] Foldspang A. Towards a public health profession: the roles of essential public health operations and lists of competences. *European Journal of public health* 2015; 25(3):361–2.

[2] Czabanowska K. public health competences: prioritisation and leadership. *European Journal of public health* 2016. DOI:10.1093/eurpub/ckw125.

Save the Date!

10th European Public Health Conference Sustaining resilient and healthy communities

1–4 November 2017 Stockholm, Sweden

The EPH Conference aims to contribute to the improvement of public health in Europe by offering a means for exchanging information and a platform for debate to researchers, policy makers, and practitioners in the field of public health and health services research as well as public health training and education in Europe.

For further information: www.ephconference.eu

ASPHER AND EUPHA JOINT STATEMENT

This statement has been developed to lead and drive forward the discussion at the EU Health Policy Platform (EU HPP) Thematic Network on Public Health Workforce Development and Professionalisation created by the European Commission to facilitate the dialogue between stakeholders. The statement also serves to inform and support the WHO Regional Office for Europe's agenda for action, which guides the implementation of the European Action Plan for Strengthening Public Health Capacities and Services.

With this call for action, we emphasise that future initiatives must take a holistic approach to the development of the public health workforce, including those in currently regulated professions and those not, recognising the heterogeneous and inter-disciplinary nature of the public health workforce.

PUBLIC HEALTH WORKFORCE DEVELOPMENT AND PROFESSIONALISATION

Call for collaborative and consensus building action

Aware of the different perspectives and initiatives with regard to strengthening the public health workforce, and taking into account the critical momentum in the relevant policy contexts such as the Action Plan for the EU Health Workforce and the European Action Plan for Strengthening Public Health Capacities and Services of the WHO Regional Office for Europe, the Association of Schools of Public Health in the European Region (ASPHER) and the European Public Health Association (EUPHA) call for a collaborative and consensus-building action on the continuing development and professionalisation of the public health workforce in Europe.

› *Health* is a Sustainable Development Goal (SDG) in itself, but also key to achieve the other SDGs.

› In order to achieve the SDGs, we need comprehensive and high-quality *public health systems,* which focus on delivering services to prevent disease, promote health and well-being, and provide protection from environmental hazards. Some of these public health services may be delivered in the health care setting, but crucially services in other sectors such as transport, education and social care are of equal importance. Public health services are complementary to the traditional curative health care services, and take a whole-of-society approach.

› In order to achieve comprehensive and high-quality public health systems, we need a competent and sufficient *public health workforce* to drive the necessary changes forward, deliver the public health services, and advocate for a healthier future. *Public health leadership* plays a key role as a multidisciplinary aspect of the workforce.

› In order to achieve a public health workforce that can deliver comprehensive and high-quality public health services, we need *to invest in its development* through clear roles and competences, education and training, attractive career paths, continuing professional development, needs assessment, and planning and forecasting.

› Within the public health workforce, we need to develop strong associations of public health professionals, accountable for the continued development of the *public health discipline* and the *public health profession,* and to nurture strong leaders to lead the development, implementation and evaluation of public health strategies, programmes and services.

Therefore, a collaborative, interdisciplinary and inter-professional action is needed in:

1. Contributing to the development and support of comprehensive, sustainable and resilient European public health systems through investment in the public health workforce.

2. Building and strengthening the public health workforce's professional identity and the feeling of belonging.

3. Strengthening and upscaling public health competence-based education and training at all levels of public health and other health related curricula.

4. Assuring the development and provision of adequate public health leadership and system-thinking education and training to support public health workforce capacities.

5. Facilitating constructive inter-sectoral and inter-professional dialogue leading to:
   a) Workforce authorisation, credentialing and a qualifications registry based on regulations, professional assessment and recognition at national and European level.
   b) The development or adaptation of existent public health ethical frameworks and codes of conduct.

6. Developing principles and systems for future public health workforce planning as well as public health career pathways.

7. Strengthening the evidence base for public health policy, strategy and intervention based on the capacities and potential of the public health workforce through collaboration and synergistic activities among various groups of professionals, so that policies and strategies are able to respond effectively to population health challenges and threats.

The Association of Schools of Public Health in the European Region (ASPHER) is the key independent European organisation dedicated to strengthening the role of public health by improving education and training of public health professionals for both practice and research. ASPHER is a membership organisation of institutions, spread across EU and wider across the WHO European Region, which are collectively concerned with the education and training, and professionalism, of those entering and working within the public health workforce. Founded in 1966, ASPHER currently has over 110 members in 43 countries in Europe.

The European Public Health Association (EUPHA) is an international, multidisciplinary, scientific organisation, bringing together around 16 000 public health experts for professional exchange and collaboration throughout Europe. EUPHA's mission is to facilitate and activate a strong voice for the public health network by enhancing visibility of the evidence and by strengthening the capacity of public health professionals. EUPHA encourages a multidisciplinary approach to public health.

PUBLIC HEALTH IN PORTUGAL:
DEMOGRAPHY AND ORGANISATION AT THE CROSSROADS

By: Bernardo Gomes and Henrique Barros

Summary: Public health services in Portugal may undergo reform over the next few years. In this context, it is appropriate to reflect upon the existing organisation of services, including the lack of professionals, the consequences of public health doctor demographics and the profile of public health professionals operating in the field. Some of the barriers to better public health practice and research are identified, along with opportunities to further enhance public health activities. Taking into account the current context and inevitable changes to come, Portugal provides an interesting case study on public health professionals.

Keywords: Public Health Professionals, Demographic Changes, Public Health Capacities, Portugal

Henrique Barros is Full Professor at the Medical School and President of the Institute of Public Health, University of Porto, Portugal. **Bernardo Gomes** is a Public Health Doctor at the North Region Health Administration Public Health Services and a PhD student at the Institute of Public Health, University of Porto, Portugal. Email: hbarros@med.up.pt

Introduction

Public health services are a fundamental pillar of the organisation of health systems. Thus, their appropriate organisation and an explicit definition of the relevant workforce are essential and raise international concern. This is reflected in the "European Action Plan for Strengthening Public Health Capacities and Services",[1] supported by the European Regional Committee of the World Health Organization, where the implementation of the ten essential public health operations is defined.

The recent historical changes in Portugal's political, social and demographic landscape, which resulted in tremendous health gains – as reflected by a number of traditional metrics such as greatly reduced infant mortality rates – pose interesting challenges both for understanding the role played by the public health workforce and on how to envisage its development in the near future. The exercise is particularly cogent in the face of the tremendous ageing of both the general Portuguese population and of public health doctors.

No overarching strategy on public health workforce issues

The way that public health services are organised has resulted in most public health personnel being located within Public Health Units based in Primary Care Clusters (PCC). Beyond these placements, there are five regional units on the mainland and a national structure in place (Directorate General of Health), with a hierarchical organisation from the national to local level. However, there is no overarching conceptual design or strategic documents that comprehensively

discuss key public health workforce issues. In particular there is no discussion on the way that health professionals, who are normally less involved but are nevertheless essential to the field, engage with those with a professional degree in public health in order to cope with the ethical and professional standards expected to meet core competencies.

Shortages of public health personnel and an ageing workforce

One of the WHO essential public health operations, "assuring a sufficient and competent public health workforce", is described in Portuguese legislation as "maintaining training and certification of public health human resources."[2] This has a more profound meaning in the Portuguese context, since there is a shortage of public health professionals in the field alongside unbalanced public health teams in terms of skill mix and professional backgrounds.

Portuguese legislation also establishes indicative ratios for professionals in Public Health Units (PHU): one environmental health technician per 15,000 inhabitants, one public health doctor per 25,000 inhabitants and one community health nurse per 30,000 inhabitants. Aside from a clearly conservative approach to the expected diversity of competencies (which urgently needs to be addressed), the status of these ratios in the various PCCs is not publicly known. However, 2013 data from the North Region, which contains more than one third of the country's population, indicate that approximately 130 Public Health Doctors were working in this region but also that 40 more were required. Nonetheless, the most striking feature is that 89.5% of these doctors were 50 years old or over. Taking into account retirement age, this translates into a peak of retirements in 2024 (approximately, 70% of the described workforce), with the full 89.5% leaving the workforce by 2027. Although the Government has attempted to collect and publish data on the distribution of health professionals, this initiative did not specifically focus on professionals working in public health units and activities. As such, it is noteworthy that no further data are available for the aforementioned

professionals, or for public health pharmacists, nutritionists or sociologists, to name just a few disciplinary areas, working in the PCCs. Additionally, epidemiology has no separate professional status in the country.

> personnel shortages and unequal distibution should be considered a threat to public health equity

Moreover, a demographic study of physicians working in the National Health System in 2011[3] showed that 86% of public health doctors were 50 years of age or older. Public health is one of the 15 medical specialties with diminishing personnel numbers – between 2002 and 2011 numbers fell by 24.4%. Public health is also one of only four medical specialties that do not have enough trainees to renew staffing levels (calculated as one trainee for every five specialists); currently, the ratio of residents to public health specialists is 13%.

There are several reasons for this demographic gap: public health historically has been, and continues to be, one of the less popular choices for medical residents. The work, which largely involves the absence of patient-contact at the individual or even population level, may deter many medical candidates who are motivated by working environments with direct contact with people.

Coherent multi-disciplinary work profiles are crucial

There was a generation of public health specialists, mainly focused on sanitary concerns in the wake of the post-revolution (1975) agenda which also supervised

the creation of primary care structures and performed paediatric and obstetrics/gynecology tasks. With the development of the National Health Service, and especially the growing numbers of Family and General Medicine specialists (General Practitioners), activities shifted towards more classic public health tasks. Nonetheless, this also went hand in hand with the preservation of a legal framework which directs a large number of legal duties towards public health physicians. As health regulators, public health doctors have to respond to public complaints regarding sanitary issues, cooperate in occupational disease investigations, and undertake inspections of commercial and industrial premises. Meanwhile, as public health doctors *per se*, they have a central role in health planning, managing health programmes and conducting epidemiological surveillance and research. This represents a wide span of activities, requiring constant adaptation and multi-tasking. On top of that, the image of "jack of all trades" promotes the assignment of further tasks required by the government and heads of PCCs. Even considering the challenging but essential multidisciplinary nature of public health (as clearly reflected in the good programmes and schools of public health all over the world), the Portuguese situation overstretches multidisciplinarity and imposes a further burden on medical professionals and public health services.

Thus, it is easy to conclude that the organisation of Public Health Units (where most public health physicians work) and the lack of professionals, in number and diversity, do not promote specialised work in disciplinary fields such as epidemiology or in thematic approaches such as working with vulnerable populations. On a more positive note, medical public health training is flexible and allows residents to pursue professional development in several areas. However, when trainees reach their placements as public health specialists, they face a kind of cognitive dissonance between training and practice, as Public Health Units' activities exceed the competencies of public health doctors as defined by the Medical Board and probably their work will not focus on particular fields.

As in other countries,[4] many different profiles and interdisciplinary work need to be the norm. Community health nurses and environmental health technicians make up the rest of the public health workforce in Portugal's Public Health Units, a clearly insufficient and inappropriate design, lacking a real community dimension and immersion. On top of that, it is a characteristic in Portugal that academic public health and practice have evolved along separate and often conflicting paths. Public health has a much more diverse profile in universities than in health service practice and the momentum is moving towards a common and necessary effort to open up academia to field work and bring people working in the field to academia.

> "
> in 2011, 86% of public health doctors were over 50 years of age

Enduring policy challenges

The definition of public health competences and workforce dimensions have been, and will continue to be, an international challenge [5] and it assumes further importance where resources are more scarce and barriers between practice and research are not overcome. In this context, there were no significant changes to the organisation of public health services during Portugal's financial assistance programme (2011–2014). However, the shortage of personnel and the geographical asymmetry of workforce distribution should be considered a threat to public health equity throughout the country.

An additional, but welcome, burden on workforce demand has resulted from the recent policy (2015) to deliver public health services in hospitals. Unfortunately, most of these structures are not operating as yet, due to a lack of trained personnel, financial constraints on creating

new services hiring professionals, a preference for resource allocation skewed towards clinical activities, and mainly the absence of a real vision for public health integration at different levels of the local decision-making process. With adjustments, this new development could be a major advance for the visibility of the profession and to more adequately manage some of the recognised and emerging health crises, such as addressing health system sustainability, population ageing, antimicrobial resistance and emergent infectious diseases.

Looking ahead

Portugal is currently discussing major reforms of its public health services. Clarifying and updating the main public health law, achieving negotiated outcomes and creating a more ambitious agenda will hopefully contribute to bridging the acknowledged gaps at the level of prevention, promotion and inter-institutional organisation, providing a leadership role for professionals and a Health-in-All Policies practical approach. The planning of public health services reform is occurring simultaneously with other efforts to reform primary care services and hospitals. Up to now, the real changes and expected outcomes are still unclear but public health professionals expect to obtain a clarification of their role in the health system and further resource allocation to achieve what is required of them. Whatever changes that may be implemented, it is clear that demographic trends in both public health professionals and the population, will be major drivers for change in the coming years.

Portugal presents a potential case study to gauge the impact of changes: will the needed public health reforms, with a special focus on the demographic transition ahead, be able to maintain population health, sustain the National Health System's current levels of service delivery and meet public expectations?

References

[1] World Health Organization Regional Office for Europe. *European Action Plan for Strengthening Public Health Capacities and Services* [online edition], Copenhagen: WHO, 2013. Available at: http://www.euro.who.int/en/health-topics/Health-systems/public-health-services/publications2/2012/european-action-plan-for-strengthening-public-health-capacities-and-services

[2] Portugal Health Ministry. Decree-Law 137/2013. Diário da República, 1.ª série, 7 October 2013; 193: 6050-6051.

[3] Santana P, Peixoto H, Loureiro A, Costa C, Nunes C, Duarte N. *Estudo de evolução prospectiva de médicos no Sistema Nacional de Saúde.* [Prospective study of doctors in the National Health System]. Lisboa: Ordem dos Médicos; 2013.

[4] Paccaud, F, Weihofen A, Frank, M. Public Health Workforce in Switzerland: are public health workers lacking? *International Journal of Public Health* 2013;58:799.

[5] Foldspang, A. Public health competences: from potential to action. *The European Journal of Public Health* 2016; DOI: http://dx.doi.org/10.1093/eurpub/ckw134

Save the Date!

ASPHER Deans' and Directors' Retreat – Rennes 2017

31 May – 2 June

Organised each year in a different location within the European region, the Deans' and Directors' Retreat is the most important ASPHER membership events of the calendar year.

This high level meeting of the heads of ASPHER member institutions plays a key role in evaluating ongoing activities, whilst also planning and organising the future direction of ASPHER.

OPINION PIECE

STILL HOLDING ON:
PUBLIC HEALTH IN THE UK AFTER BREXIT

By: John Middleton and Mark Weiss

Summary: The United Kingdom's public health community was overwhelmingly supportive of remaining in the European Union. Since the "Leave" vote, thinking has focused firstly on defending the regulations, funding streams and networks which have been protective of public health. These issues principally relate to staffing health services, research budgets, as well as to environmental, health, workplace and consumer protections. As the public health community has been able to take stock and debate more, we are moving towards a stronger agenda, setting out more ambitious policies to improve the public's health in the post-Brexit era. Such tasks will include advocacy for a national food policy which supports health and environmental objectives; green energy, housing and transport policies; and a universal health and social care system.

Keywords: *Public Health Services, Public Health Workforce, Research Collaboration, Brexit, United Kingdom*

John Middleton is Honorary Professor of Public Health at Wolverhampton University, UK and President of the UK Faculty of Public Health; **Mark Weiss** is Senior Policy Officer at the UK Faculty of Public Health, London, UK. Email: president@fph.org.uk

Introduction

The United Kingdom Faculty of Public Health (FPH) was the most forthright of all the UK medical education bodies in our support for remaining in the European Union (EU). In our paper published before the European Referendum, we concluded: *'... a decision to remain in the EU would ensure continued protection for health, notably from legislation on clean air, water, safe food and consumer products, a flow of qualified workers for the National Health Service (NHS) and funded opportunities for researchers to thrive in a dynamic scientific community. In contrast, leaving the EU would, on balance, be likely to be detrimental to the health of the UK population, impede effective public health practice and act as a barrier to UK research'.* Over 80% of the FPH members surveyed supported remaining in the EU.[1]

The major long term public health protections we saw from EU membership were political stability and peace in Europe, and economic conditions creating jobs and better living conditions. EU regulations for consumer, social,

workplace, environmental and health protection are vital and substantial, but a secondary benefit.[1]

After the Leave vote, the Faculty took the view that we should 'ensure that the best aspirations of the Leave campaign are delivered and the worst predictions of the Remain campaign are avoided'.[2] We are now revisiting the FPH statement, taking a risk-management approach to determine which benefits that we described most needed to be defended, for the maximum public health impact in the UK, in Europe and beyond.

The people who were most likely to vote to leave the EU are the people most likely to lose from it.[3] The alienation from political processes felt by these voters is only likely to increase. They may bear the brunt of an economic collapse, unless policies address their real concerns and are able to offer economic benefit to some of the poorest people in our society. Added to that, traditionally white, working class communities have experienced the biggest influx of EU migrants, without receiving the macro-economic benefits promoted by Westminster politicians.[3] So, we must address the economic inequalities at the root of the Leave vote, and at the same time protect the rights of our EU residents.

Moreover, with the UK Prime Minister's announcement (in October 2016) of a timetable for activating Article 50 (for the UK to start negotiations to leave the EU), there will be a 'Great Repeal Act' which will effectively transpose all the European law we have, to become British law for the post-Brexit era. "Austerity Britain" does not have the capacity, or the need, to throw out and re-examine every consumer safety standard. Nevertheless, we must guard against efforts being made from vested interests to throw out, for example, the Tobacco Products Directive.[4]

Public health and health services concerns

The most immediate concerns for health services leaders have been the health and social care workforce and the risks to health research. This evidence has been summarised in the submission of the UK's leading public health bodies to the UK Parliament Health Select Committee

inquiry into Brexit and Health and Social Care. In it, we set out what we see as the major direct public health impacts–for the UK health and social care workforce, research and collaboration, consumer protections, food and agriculture, and trade.[5]

Health and social care services and workforce

Around 6% of the social care workforce and 5% of the NHS workforce in England overall are EU nationals, rising to 10% in London; moreover, 10% of doctors are EU nationals. The estimated annual recruitment needed from the EU is 7000 nurses and 2000 doctors. Losing such significant staffing would have severe impacts on the ability to deliver already over-stretched health care services. EU nationals make up 16% of UK university staff, so losing EU nationals from the medical and public health research workforce would also have a major detrimental impact. We do not yet understand the full significance of Brexit to the public health workforce. However, we are pressing the government to ensure that the clinical, public health and research workforces remain free to work across the EU. They should protect employment rights and conditions, as well as pensions, and maintain equivalence in educational qualifications.

European health institutions

Public health is an international enterprise with many functions better undertaken internationally for effectiveness and cost saving. So a specific concern to the public health community is the ability to continue participation in agencies such as the European Centre for Disease Control and Prevention, the European Food Safety Authority, European Monitoring Centre for Drugs and Alcohol, European Chemicals Agency, and the European Environment Agency.[5] The European Medicines Agency (EMA) is currently located in London. Pulling out of the EMA would mean the UK replicating European medicines and vaccines approval processes.

Research and collaboration

The UK is a net beneficiary for EU research funding, contributing 11% to the research budget but receiving 16% for

projects it leads. Between 2007 and 2013, EU funds supported 3500 UK-based researchers with access to 1000 European research facilities. Over 100 UK national research facilities also received EU support to exchange knowledge across national boundaries.[5] [6]

Academic scientific output is 20% greater from the EU than the USA, and has higher impact outputs. The UK holds a coordination role for 34% of Horizon 2020 projects. Losing this role would have a very detrimental impact on UK science because of the inevitable loss of expertise, attendant research standing and loss of influence on priority setting. As an example, the UK has been at the forefront of European efforts to tackle anti-microbial resistance and it would be damaging to international efforts if the UK was not able to continue to play an active leadership role in this. The UK would need, at least, to hold Associated Country status to continue taking part in EU research programmes, with access to EU infrastructure.[5] [6]

We are asking the government to underwrite EU research funding – but it will be more difficult for it to protect personal and professional scientific relationships; these are nurtured and grown over many years and built on trust and professional respect. Somehow, the European scientific community will need to transcend narrow national interests and political isolationism, and continue to seek collaborations and to work together.

A health-creating UK society

There is a growing view in the public health community that we must do more than merely defend the health protecting regulations we have from the EU. We must set out a vision for a healthier, fairer, sustainable British society. Lord Crisp and others have expressed this in their Manifesto for a Healthy and Health Creating Society.[7] We need to argue for policies and plans that place public health objectives at their centre. Amongst these aims should be strengthening the UK's role as a global centre for health, biomedical sciences and life sciences; accelerating and funding transformation of the health system from a hospital-centred and illness-based system to a

person-centred and health-based system; developing and implementing a plan for building a health-creating society supported by all sectors of the economy and the wider population; and supporting health, care, and scientific institutions to develop and restore a healthy UK society. In doing this, our government would build truly health-improving national food, obesity, tobacco and alcohol policies, and realise the ambition of the WHO European Health Policy Framework, to "significantly improve the health and wellbeing of populations, reduce health inequalities, strengthen public health and ensure people-centred health systems that are universal, equitable, sustainable and of high quality".[5] [7]

This broader framework presents a number of avenues for concerted action, including:

Consumer protection

The UK Government can make an even greater contribution to better UK health and wellbeing than it does now. The Government can strengthen tobacco control strategy. It can enhance public protections on alcohol and adopt the Scottish minimum unit price policy across the UK. It can take on front-of-pack traffic light food labelling which is currently banned under EU regulations. In addition, air quality regulations could be strengthened to include measures to reduce particulate air pollution to WHO, rather than EU, levels.[5]

Farming and agriculture

The Government can ensure, in concert with the devolved administrations of Northern Ireland, Wales and Scotland, that fair, healthy, humane and environmentally sustainable food, farming, fishing and land management are central to a national food strategy for the UK, post Brexit.[6] Objectives of health improvement, reducing inequality and protecting the environment will be fairer to farmers, reduce the health and environmental burden of highly processed, high fat, high sugar, high salt foods and create a higher degree of UK food production and food security.[5] [8]

Trade

Vital lessons have been learned by the public health community about recent proposed trade deals.[9] The health harms of the Transatlantic Trade and Investment Partnership have been well documented, including the secrecy, the coercion of governments by multinationals, and the erosion of health, environmental, climate control and workplace protections.[9] The UK's ability to regulate, maintain or improve public health standards must not be eroded, or compromised by international investor-state dispute settlements. Public health agencies will be watching new trade deals closely and campaigning strongly against any threats to health.

The International Monetary Fund's analysis that "excessive inequality is not conducive to sustainable growth" is important.[10] A fair, sustainable system that recognises the Sustainable Development Goals must prioritise policy and legal coherence with international obligations to the right to health, human rights and to reducing inequalities as an essential prerequisite of trade and investment. The UK Government can strengthen its sovereignty within trade agreements through insistence on policy and legislation to protect and improve public health, nationally and internationally.

Conclusions

The Leave campaign rhetoric of 'self-reliance' – which unfortunately some embrace as a pseudonym for xenophobic isolationism – must be transformed into a tenet for sustainable healthy development and a low carbon footprint for the UK. The FPH's call for a national food policy also asks, 'Can Britain feed itself?' We might equally ask, 'Can Britain power itself?' and 'Can Britain care for itself'?

The UK Government also has climate change obligations under the Paris Agreement and it could ensure that the UK exploits strengths in low-carbon industries, energy policy and delivers carbon budgets. It can produce a strategy incorporating tackling climate change as a key driver of future business success.

We need to defend the political stability that our EU has created, which has protected peace and security, and generated economic benefits for the public's health. In this time of self-interest, the UK public health community, with our European colleagues, needs to be the collective voice and conscience for the dispossessed, the disabled and disenfranchised, to protect the health of this and future generations, in the UK, Europe and internationally. We must not allow ourselves or our political leaders to withdraw from our global responsibilities. We greatly value our professional collaborations with colleagues in other parts of Europe and we appreciate your solidarity and your friendship. We believe there is much more to be gained from continuing to work together.

In this, the 50th Anniversary of ASPHER it is important for us to celebrate the achievements we have made in defining a European public health specialism, in developing shared ideas of curriculum and competence and growing the public health workforce. As a recent Nobel laureate for literature said "I'll let you be in my dream, if I can be in yours". The UK public health community is still open for business.

References

[1] UK Faculty of Public Health. *The Health-Related Consequences of the European Union Referendum,* 2016. Available at: http://www.fph.org.uk/uploads/FPH%20-%20EU%20Referendum%20report%20FINAL.pdf

[2] UK Faculty of Public Health. *Statement on the vote to leave the European Union*. London: UK Faculty of Public Health, 24 June 2016. Available at: http://www.fph.org.uk/%27we_need_to_ensure_the_best_aspirations_of_the_leave_campaign_are_delivered_and_the_worst_predictions_of_the_remain_campaign_are_avoided%27

[3] Clarke S. *Brexit means …different things to different people*. London: Resolution Foundation, 16 October 2016. Available at: http://www.resolutionfoundation.org/media/blog/brexit-means-different-things-to-different-people

[4] Jacques S, Bates C. *Great Repeal Bill: proposal to repeal EU e-cigarette regulation and snus ban (letter to Jeremy Hunt Secretary of State for Health)*. London: Clivebates, 7 October 2016. Available at: http://clivebates.com/documents/NNA-Hunt2016.pdf

[5] Royal Society of Public Health, UK Faculty of Public Health, UK Health Forum, Association of Directors of Public Health. *Submission to the Health Select Committee inquiry into Brexit and Health and Social Care*. London: UK Public Health Network.

[6] Galsworthy M, Davidson R. *The relationship between EU membership and the effectiveness of science, research and innovation in the UK: response to the call for evidence by the House of Lords Select Committee on Science and Technology Scientists for EU*. London: Scientists for EU, 2015. Available at: http://scientistsforeu.uk/wp-content/uploads/2016/01/SfEU_HoL_final_submission.pdf

[7] Crisp N, Stuckler D, Horton R, et al. Manifesto for a healthy and health-creating society. *The Lancet* 2016; DOI: http://dx.doi.org/10.1016/S0140-6736(16)31801-3

[8] Sustain. *Over 80 organisations sign letter to new Secretary of State for Exiting the EU*. London: Sustain, 14 July 2016. Available at: https://www.sustainweb.org/news/jul16_davis_letter/

[9] Weiss M. *Trading health? Policy report on the Transatlantic Trade and Investment Partnership*. London: UK Faculty of Public Health, 2015. Available at: http://bit.ly/1EgZilk

[10] Dabla-Norris E, Kochhar K, Suphaphiphat N et al. *Causes and Consequences of Income Inequality: A Global Perspective*. New York: International Monetary Fund, 2015. Available at: https://www.imf.org/external/pubs/ft/sdn/2015/sdn1513.pdf

ASPHER POSITION PAPER ON REFUGEE HEALTH

By: Oliver Razum, Henrique Barros, Robert Otok, Ted Tulchinsky and Jutta Lindert

Summary: This article outlines ASPHER's position on meeting the health needs of refugees in Europe. Five areas are considered central for joint action by EU member states: safe passage and access to health care during transit; EU immigration laws; entitlement and access to health care; tackling root causes; and education and training in refugee health.

Keywords: Refugee Health, Access to Health Care, Humanitarian Crises

Oliver Razum is Head of the Department of Epidemiology & International Public Health and is the Dean of Bielefeld School of Public Health, Germany; **Henrique Barros** is Full Professor at the Medical School and President of the Institute of Public Health, University of Porto, Portugal; **Robert Otok** is Director of the Association of Schools of Public Health in the European Region (ASPHER), Belgium; **Ted H. Tulchinsky** is Emeritus, Braun School of Public Health, Hebrew University, Jerusalem, Israel, and Head of the School of Health Sciences, Ashkelon College, Ashkelon, Israel; **Jutta Lindert** is Professor of Public Health at the University of Applied Sciences of Emden and President of the EUPHA section on Public Mental Health. Email: oliver.razum@uni-bielefeld.de

Introduction

Health is a human right and access to health care is an integral aspect of this human right. The health of vulnerable groups such as refugees and asylum seekers has always been an issue of special concern to public health – in practice as well as in research, education and training. The ASPHER member schools are deeply concerned that the health needs of refugees in Europe and neighbouring regions are not adequately being taken care of. Moreover, public health education and training are often not responsive to refugees' health needs. ASPHER members ask their governments to act jointly to avoid or mitigate further health and humanitarian crises arising from conflicts and flight. Schools of public health will have to strengthen research and training opportunities to better prepare health professionals for refugees' health needs.

The current situation

The Office of the United Nations High Commissioner for Refugees (UNHCR) counts a total of 21.3 million refugees worldwide, half of them under the age of 18. It lists the total number of forcibly displaced persons at 65.3 million, the highest number ever reported since UNHCR began counting refugees.[1] In Europe, UNHCR and the International Organization for Migration (IOM) estimate that over one million men, women, and children arrived in 2015; as of November 2016, nearly 350,000 additional migrants reached Europe by sea. Several thousand refugees are drowning in the Mediterranean every year or die during their passage seeking safety.

ASPHER members are deeply committed to protecting refugees and promoting refugee health. They are concerned that the European Union (EU) is failing to adequately care for the health of refugees. In particular, ASPHER asks EU member states to act jointly to implement the following five points:

1. Ensure safe passage for refugees and adequately deal with their humanitarian needs in transit, including health care and disease prevention.

2. Implement liberal laws regulating immigration to EU countries.

3. Ensure entitlement, and provide unrestricted access to health (including mental health), as well as to social care, during transit and in the refugee-receiving countries.

4. Put health strategies into practice to mitigate unfavourable health and economic effects of EU policies on lower-income countries; develop effective prevention strategies to reduce human rights violations before, during and after the flight.

5. Support research, education and training on refugee health – here, ASPHER must also assume responsibility.

Safe passage and access to health care during transit

The "right to seek and to enjoy in other countries asylum from persecution" is enshrined in the Universal Declaration of Human Rights (UDHR) of 1948. In order to escape from human rights violations, violent conflicts, war and persecution, refugees often take great personal risks and travel under life- and health-threatening conditions. The European Convention on Human Rights (ECHR) implies that measures need to be taken to ensure safe passage of refugees.[2] Rescue missions – albeit desperately needed at the moment – alone will fail to achieve safe passages for refugees, especially for the most vulnerable groups such as children, women and individuals with health issues. Humanitarian emergencies are taking place almost daily in the Mediterranean Sea when refugees try to reach Europe: almost 4,000 deaths have been reported in the first ten months of 2016.[3] In addition to providing safe passage, basic medical care needs to be offered *en route*.[4] Fulfilling the commitments of international refugee law[2] and supporting UN bodies in accomplishing their mandate requires joint action by EU member states.

EU immigration laws

People seeking shelter or tolerable living conditions need safe and predictable opportunities for migration; this reduces not only human trafficking but health risks for refugees. A prerequisite is EU immigration law. In the absence of laws, refugees will continue taking life-threatening routes to save their and their

families' lives. EU immigration laws can also help to reduce disputes between member states on the right to asylum and refugee quotas. Experience from Germany indicates that quotas will be difficult to implement in a fair way.[5] Instead, resources should be pooled at EU level and made available where refugees first arrive, transit, and where they finally settle.

Entitlement and access to health and social care

Refugees show considerable resilience where they find welcoming conditions during and after their flight. However, detrimental conditions challenge their physical and mental health before, during, and after flight.[6] Violent conflicts, human rights violations and wars are common reasons for flight, and endanger not only physical, but also mental and reproductive health. Detrimental conditions during flight include violence, especially against women and minors, accidents, infectious diseases, sexual harassment and exploitation in manifold ways. During and after flight, health and social care interventions are needed which are integrated and tackle legal, social, and medical conditions. In line with the human rights perspective, entitlement to care should be similar to that of the majority population in the host country. EU nations, however, differ substantially in this respect, as shown by the comparative analysis of the MIPEX health strand.[7] Creating parallel structures or access barriers does not save money and may ultimately be more costly than providing comprehensive care for everybody.[8]

Tackling root causes

The increase in the number of refugees since 2009 is not only a consequence of inequalities between countries. Armed conflicts and human rights violations within and between nations compound the situation.[9] EU foreign and economic policies fail to effectively tackle human rights violations, conflicts, violence and poverty world-wide. This will almost inevitably increase the risk of human rights violations, poverty and violence between and within states and thereby the impetus for trying to escape such situations. In the long run, there is need

for a global policy offering human rights and a minimum of social protection to everyone.[10] [11]

Education, training and research in refugee health

EU governments should acknowledge that public health teaching and education on refugee health must take high priority. ASPHER should support this endeavour by taking a leading role in strengthening education and training of health care professionals in refugee health. For example, ASPHER is already supporting a training course on "Violence and refugee health". Similar activities by ASPHER member institutions can serve as starting points for comprehensive training courses on refugee health throughout the ASPHER network in Europe; training activities should put emphasis on empowering refugees. Collection of health-related data should be implemented and be harmonised between countries. Research is needed in various areas such as removing access barriers to health services, ensuring continuity of care, and establishing which screening procedures on arrival are effective. ASPHER can also help to facilitate comparative research between receiving countries.

The way ahead

EU member states need to fulfil the obligations arising from the UDHR and the ECHR[2] and speed up implementing Global Health policies. The European community needs to acknowledge how strong the interdependence of people and their well being across national borders has become.[12] It can draw from its collective memory of refugees and displaced people following World Wars I and II, the Holocaust, and the Balkan wars in the 1990s. Europe should give humanitarian help based on the principle of solidarity and respect for human life, implementing the five points listed above.

References

[1] UNHCR. Figures at a Glance web page, 2016. Available at: http://www.unhcr.org/figures-at-a-glance.html

[2] Gilbert G. Why Europe Does Not Have a Refugee Crisis. *International Journal of Refugee Law* 2015;27:531-5. doi:10.1093/ijrl/eev049

3 IOM. Missing Migrants Project web page, 2016. Available at: http://missingmigrants.iom.int

4 Smith JD. Thinking beyond borders: reconceptualising migration to better meet the needs of people in transit. *International Journal of Public Health* 2016;61:521-2.

5 Bozorgmehr K, Szecsenyi J, Stock C, Razum O. Europe's response to the refugee crisis: why relocation quotas will fail to achieve 'fairness' from a health perspective. *European Journal of Public Health* 2016;26:5-6. doi:10.1093/eurpub/ckv246

6 Lindert J, Carta MG, Schafer I, Mollica RF. Refugees mental health – A public mental health challenge *European Journal of Public Health* 2016;26:374-5. doi:10.1093/eurpub/ckw010

7 International Organization for Migration (IOM) Regional Office Brussels, Migration Health Division. *Summary Report on the MIPEX Health Strand & Country Reports,* 2016.

8 Bozorgmehr K, Razum O. Effect of Restricting Access to Health Care on Health Expenditures among Asylum-Seekers and Refugees: A Quasi-Experimental Study in Germany, 1994–2013. *PLoS ONE* 2015;10:e0131483. doi:10.1371/journal.pone.0131483

9 Pettersson T, Wallensteen P. Armed conflicts, 1946-2014. *Journal of Peace Research* 2015; 52:536-50.

10 Deacon B. *Global Social Policy and Governance.* London: Sage, 2007.

11 Razum O, Kaasch A, Bozorgmehr K. Commentary: From the primacy of safe passage for refugees to a global social policy. *International Journal of Public Health* 2016;61:523-4. doi:10.1007/s00038-016-0817-9.

12 Frenk J, Gomez-Dantes O, Moon S. From sovereignty to solidarity: a renewed concept of global health for an era of complex interdependence. *The Lancet* 2014;383:94-7. doi:10.1016/S0140-6736(13)62561-1.

PUBLIC HEALTH COMPETENCIES FROM THE PAST, THROUGH THE PRESENT, TO THE FUTURE

By: Arnold Bosman

Summary: In the past 50 years, ASPHER has rapidly developed as a key independent organisation strengthening public health education in the European Region. Important milestones, including the development of a European Masters of Public Health (MPH) curriculum and European Core Competences for Public Health Professionals, have contributed to a harmonised professional vocabulary for public health capacity in Europe. This perspective considers two areas of potential interest for European public health capacity development: public health informatics and E-learning.

Arnold Bosman is a public health consultant and owner of Transmissible, The Netherlands. Email: Arnold.Bosman@Transmissible.EU

50 years of achievement

Since 1966, ASPHER has developed rapidly as a key independent organisation in the European Region, dedicated to strengthening the role of public health by improving education and training of public health professionals.[1] In five decades, ASPHER has grown into an organisation with 112 full members in 43 countries.

Among the milestones on the road to developing a European public health workforce is the initiative to bring stakeholders together on the development of core competencies needed in Public Health training.[2] In 1988, a WHO-ASPHER task force, with teachers from 25 schools, produced the first draft of a European Masters of Public Health (MPH)-curriculum. The Bologna process and the Lisbon Strategy in Europe are often cited as the first international documents for higher education involving more than 40 countries, and followed by other regions in the world.[3]

In the past 50 years, public health evolved from a primarily medically-oriented discipline in most countries, with hygiene and basic epidemiology of

diseases as the main core disciplines, to an umbrella science and art relying on multi-disciplinarity. ASPHER presented the view that, in order to improve population health and be able to intervene (cost)-effectively and ethically, expertise is needed in the fields of sociology, anthropology, social psychology, ethics, environmental science, health economics, management, communication and advocacy, advanced statistical and epidemiological and qualitative research methods.[4] The multidisciplinary nature of public health is reflected in the work achieved on developing a set of European core competencies for public health professionals (ECCPHP). Consensus on such a set of core competencies will greatly facilitate analysis and strengthening of public health training curricula, and efforts to measure public health workforce capacity, which are important elements of strengthening public health capacity.

At present, the ECCPHP already encompass an area larger than merely medicine; they have moved to a multidisciplinary set of knowledge, skills and attitudes that senior public health professionals in Europe are expected to have. In addition, the ECCPHP reflect the increasing importance of health promotion and health education across cultures; modern public health professionals need to communicate public health messages effectively, strengthen community participation, design, implement, manage and evaluate health promotion strategies, and use standard public health tools.[5]

New horizons

Looking at the future, it may be pertinent to ask if there are areas not as yet in the full focus of ASPHER's activities that can be expected to play an increasing role in public health. Among the activities and achievements of ASPHER and the network of partners, two areas seem to be less pronounced: public health information technology and E-learning.

WHO recognises that the challenges facing public health are complex, calling for a "wide range of existing and new competences and expertise, including social epidemiology, information

systems, health promotion, environmental health, management and leadership, and collaborative working".[6] Though covering many of those areas, with strong emphasis on epidemiology and statistics in great detail, ECCPHP hardly touch information technology. The ECCPHP are presented as 'an appropriate list of competences for all senior public health professionals'. It is acknowledged that those working in one particular sub-specialty of public health (e.g., health promotion) may not be fully conversant with all the detailed competences required in another (e.g., material environmental determinants of health).[5] Recognising this, is it not relevant to also request a more detailed elaboration of competencies in public health informatics?

Public health information technology

Public health informatics is defined as the systematic application of information and computer science and technology to public health practice, research, and learning.[7] Among all foreseeable developments relevant for European public health education, a specific case for the increasing and vital role of information technology in public health in Europe has not yet been made. It is noteworthy that already in the previous century, the importance of information technology in the capacity for early detection and rapid assessment of public health threats was already recognised by American colleagues, when dedicated training programmes in Public Health Informatics were set up.[8]

Whereas the current ECCPHP are quite detailed in expectations of senior professionals to 'know and understand' epidemiological and statistical concepts, such as Binomial and Poisson regression, fixed and dynamic cohort design, there is no basic requirement for understanding public health informatics, new communication media and new educational methods. Contrary to several paragraphs of competences, detailing knowledge requirements for epidemiology and statistics, the entire field of information technology is summarised in one bullet point; understand and know 'general aspects of IT functioning'. This is also the case where practical skill requirements are concerned; for

information technology the senior public health professional is merely expected to 'make use of the most common IT functions'.

This raises the question: should we expect our future senior European public health professionals to be able to guide and direct developments in the public health information technology infrastructure, or are we satisfied that they remain in a passive role, restricted to 'us[ing] the most common IT functions'? Strategic and tactical choices in platforms, data exchange standards and information architecture at national and international levels need strong input from senior public health professionals, in order to keep providing and improve input of vital information on the state of population health and trends. Providing such strategic and tactical guidance will require more competences in IT than are currently recognised in the ECCPHP. The USA recognises extensive competences for public health informatics, yet this domain remains non-existent in the European region.

" finally establish public health informatics in the European Region

We may expect that the development of information technology will continue on an exponential path. This may require public health systems to include senior professionals in the workforce who are able to link to these developments and influence the shaping of new public health information infrastructures. Likewise, we will need IT experts that have sufficient knowledge and understanding of core public health capacities, in order to help translate IT solutions to public health needs. Currently, there are virtually no formal curricula available in Europe to allow information technology experts to

specialise in public health, although they can specialise in bioinformatics, medical imaging and diagnostic support.

We also need to expect more from our future senior public health professionals, regarding their competence in IT, if we want to maximise the gain between the two disciplines. Several of the recent ASPHER publications that look at future challenges recognise the importance of collaborative, interdisciplinary, global and digital leadership capacities for the 21st century.[9] There could be a critical niche for ASPHER to clear a path, together with educators in computer sciences, to finally establish public health informatics in the European Region, too.

E-learning

The use of terms such as e-learning, online learning, and distance learning environments are often used inconsistently in literature.[10] Here, I want to use the concept of e-learning as an umbrella that encompasses both online and offline digital learning, and that may include digital tools that teachers use in modern classrooms.

Czabanowska et al. state that public health in the 21st century requires professionals to work differently, which also means to learn differently. Blended learning – a combination of face to face, print and information technology – is encouraged, as it takes learning to the students and supports busy professionals interested in developing their expertise through continuing professional development.[9] The population of organisations engaging in e-learning is still growing. In addition, there are impressive training resources freely available on YouTube and various Massive Open Online Courses.

Another growing trend is the development of serious games for education in many sectors, currently not widely used in public health. Serious gaming describes a technology that can educate and train while entertaining users. It has been shown to improve learning outcomes, creating a learner-oriented approach and providing a 'stealth mode' of teaching. Many papers confirmed that serious gaming is a useful technology that improves learning and skills development

for health professionals.[11] With increasing infrastructure for E-learning, including the further establishment of mobile technology in public health practice, there could be a case to consider serious games as one of the tools for educating new generations in digital health as well as continuing professional education.

Considerations for the future

The WHO Regional Director for Europe emphasises that new competencies are required in order to enable public health professionals to effectively empower communities, to foster collaboration across sectors, and to deliver interventions that systematically target the full spectrum of health determinants.[1]

ASPHER's current President has identified several specific challenges for the future: the mapping of the European public health workforce with existing competencies and needs; the assessment of public health employers' expectations; the ability to adapt to a constantly changing and globalised world; social inequalities; changing demographics, and new epidemics, such as the obesity epidemic. Training in research of the public health workforce is considered crucial.[1]

She also points towards the emergence of virtual communities. New educational technologies and virtual universities/classrooms, based on digital media play an increasing role in public health education. Innovative learning technologies provide incentives for public health professionals and academic staff to work together. The use of online learning formats is recognised as a major development.[3]

In March 2016, ASPHER and the European Centre for Disease Prevention & Control signed an agreement committing to collaborate on further development of core competences and joint activities to develop training materials, including e-Learning.[12]

The above complementary future visions and the existence of collaborative partnership agreements, may allow inclusion of the two particular project areas: public health informatics and E-learning. The former may complement

the current set of ECCPHP, in order to allow assessment of public health workforce capacity and guidance of curriculum development. The latter may contribute to an infrastructure to deliver the European public health curriculum in various learning blends, benefiting all members. Moreover, it may even have a playful component.

References

[1] Foldspang A. 50 YEARS OF PROFESSIONAL PUBLIC HEALTH WORKFORCE DEVELOPMENT, 2016:1–145.

[2] Foldspang A (Ed.) Provisional Lists of Public Health Core Competencies. European Public Health Core Competencies Programme (EPHCC) for Public Health Education. Phase 2. ASPHER Series No 4. Brussels: ASPHER, 2008.

[3] Bjegovic-Mikanovic V, Jovic-Vranes A, Czabanowska K, Otok R. Education for public health in Europe and its global outreach. *Global Health Action* 2014;7(0):195–11.

[4] Müller-Nordhorn J, Bjegovic-Mikanovic V, otok R, Czabanowska K, Foldspang A. Fifty years of serving public health: the Association of Schools of Public Health in the European Region moving forward to the next half-century. *International Journal of Public Health* 2016;61(6):631–2.

[5] Birt CA, Foldspang A. European Core Competences for Public Health Professionals (ECCPHP), 2011: 1–41.

[6] World Health Organization Regional Office for Europe. European Action Plan for Strengthening Public Health Capacities and Services, 2012:1–42.

[7] Kukafka R, Yasnoff WA. Public health informatics. *J Biomed Inform*. 2007;40(4):365–9.

[8] O'Carroll PW, Yasnoff WA, Wilhoite W. Public health informatics: a CDC course for public health program managers. Proc AMIA Symp. 1998:472–6.

[9] Czabanowska K, Rethmeier KA, Lueddeke G, et al. Public health in the 21st century: working differently means leading and learning differently. *European Journal of Public Health* 2014;24(6):1047–52.

[10] Moore JL, Dickson-Deane C, Galyen K. e-Learning, online learning, and distance learning environments: Are they the same? The Internet and Higher Education 2011;14(2):129–35.

[11] Ricciardi F, De Paolis LT. A Comprehensive Review of Serious Games in Health Professions. International Journal of Computer Games Technology 2014;(108):1–11.

[12] Collaboration agreement between the European Centre for Disease Prevention & Control and ASPHER, 21 March 2016. Available at: http://aspher.org/download/70/collaboration-agreement-aspher-ecdc-signed.pdf

50 YEARS OF ASPHER

ASPHER Presidents	Andrija Stampar Medallists
Jacqueline Müller-Nordhorn (2016–2017)	Richard Horton (Vienna 2016)
Vesna Bjegovic-Mikanovic (2014–2015)	Jean Rochon (Milan 2015)
Helmut Brand (2012–2013)	Peter Piot (Glasgow 2014)
Antoine Flahault (2010–2011)	Jose M Martin-Moreno (Brussels 2013)
Stojgniew Jacek Sitko (2008–2009)	Julio Frenk (Malta 2012)
Anders Foldspang (2006–2007)	Zsuzsanna Jakab (Copenhagen 2011)
Charles Normand (2004–2005)	Elias Mossialos (Amsterdam 2010)
Roza Adany (2002–2003)	Gudjon Magnusson (Lodz 2009)
Jose M Martin-Moreno (2000–2001)	Ulrich Laaser and Theodore H Tulchinsky (Lisbon 2008)
Richard Madeley (1998–1999)	David Byrne (Valencia 2007)
Franco Cavallo (1996–1997)	Josep Figueras (Maastricht 2006)
Ulrich Laaser (1994–1995)	George Soros (Yerevan 2005)
Jeffrey Levett (1992–1993)	Theodore Abelin (Caltanissetta 2004)
Francisco Bolumar (1991–1992)	Martin McKee (Granada 2003)
Christian Rollet (1990–1991)	Alexander Macara (Zagreb 2002)
Ivan Forgacs (1989–1990)	Ilona Kickbusch (Debrecen 2001)
Lennart Köhler (1988–1989)	Charles Merieux (Aarhus 2000)
Michael Davies (1986–1987)	Richard Doll (Madrid 1999)
Aloïsio Moreira Coehlo (1984–1985)	Lennart Köhler (Torino 1998)
Frans Doeleman (1982–1983)	Ferenc Bojan (Prague 1997)
Charles Edward Gordon Smith (1980–1981)	Michel Manciaux (Utrecht 1996)
Alfred Eberwein (1978–1979)	Halfdan Mahler (London 1995)
Marcel Graffar (1976–1977)	Donald Acheson (Krakow 1994)
Bo Holma (1974–1975)	Léo Kaprio (Bielefeld 1993)
Christine Lucasse (1971–1973)	
Jean-Simon Cayla (1968–1970)	

As discussed in Gastein – EHFG Outcomes 2016

Future of Europe

- Wanted: leaders with the ability to devise a new, positive European narrative communicated with passion.

- The tip of the iceberg: Brexit is a symptom of growing inequalities in the UK and Europe. It is not the end of the European Union, but a warning sign – greater societal equity is essential.

- Nothing about us without us: people should be put at the centre of policies.

Demographics and Diversity

- Act early, on time and together: to embrace the unprecedented challenges and opportunities of demographic change.

- Let´s add life to years: think outside the box to enhance health and well being at all ages, enabling people to also enjoy healthier and longer working lives.

- The potential of migration: as a part-solution to Europe´s demographic challenge, we need to holistically plan for the inclusion of migrants and refugees into societies, recognising that they can be drivers of peace, growth and wealth.

New Solutions

- Be open to new possibilities from lessons learned by others: best-practice sharing is key to solving certain health and social problems. As Nobel Laureate Paul Krugman stated: we are experiencing significant macroeconomic difficulties, but solutions to some challenges are out there already.

- Policies need to be supportive of innovation and tackle upstream health determinants to combat inefficiencies such as highly fragmented and hospital-centric approaches.

- Accessible pharmaceutical innovation requires new models of working, including risk sharing mechanisms as demonstrated by some public-private partnerships. AMR offers an opportunity for (best) practice assessment.

For full details see the Gastein Outcomes 2016.
Available at: http://bit.do/gasteinoutcomes16

Save the date: 20th European Health Forum Gastein:
4–6 October 2017

EUROPEAN
HEALTH FORUM
GASTEIN