disciplines, for instance clinical work.\(^5\) Thus, when there is a large variation in the number of specialists, it may be more difficult to achieve a harmonization of the content of the specialty and specialist training.

Given the free movement and automatic recognition of medical specialists in the EU, it would be important to develop a programme for the recognition of quality and for quality assurance of the specialist training. So far this has been the issue for national authorities and national professional organizations. However, several specialist organizations have started European exams or certification systems for European specialists. Quality assurance programmes may also focus on the organization and content of the specialist training, which for instance may be assessed at site visits to training institutions. Accreditation systems may also be developed. For instance for medical specialists, the UEMS organizes an European Accreditation Council for continuing medical education (EACME) in order to assure the standards of educational activities in Europe. It should be a matter of concern for the profession to agree upon strategies and methods for quality assurance of the specialist training.

The process of harmonization of the medical specialty in Public Health should include not only the definition of the core content of the specialty and the training of specialists but also the development of European quality systems for organizing and training Public Health Medicine.

References


Appendix 1

Medical specialities in Public Health recognized by the EU 2005 (1)

Česká republika: Hygenia a epidemiologie
Danmark: Samfundsmedicin
Deutschland: Öffentliches Gesundheitswesen
Ελλάδα: Καθοπτρική ιατρική
España: Medicina preventiva y salud pública
France: Santé publique et médecine sociale
Ireland: Public Health Medicine
Italia: Igiene e medicina preventiva
Κύπρος: Υγειονομικό/Καθοπτρική ιατρική
Luxembourg Santé publique
Magyarország: Megelőző orvostan és népegészség tan
Malta: Sani`ta Pubblica
Nederland: Maatschappij en gezondheid
Österreich Sozialmedizin
Пolska: Zdrowie publiczne, epidemiologia
Portugal: Saúde pública
Slovenija: Javno zdravje
Slovensko: Verejné zdravotníctvo
Suomi/Finnland: Terveydenhuolto/Hälsövård
Sverige: Socialmedicin
United Kingdom: Public Health medicine

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Public health capacity building—not only the property of the medical profession

Introduction

In this issue of the Journal, Westerling\(^1\) provides a comprehensive overview of the work performed by the Public Health (PH) Section of the European Union of Medical Specialists (UEMS), as this relates to the further development and harmonization of medical specialization in PH within the EU. He makes some very important points, many of which effectively have been overlooked and ignored, including by the European Commission, for much too long. His points regarding the harmonization of specialist training, the need for uniformly high standards of PH practice across the EU, as well as for high quality of education and training of PH specialists, and concerning the urgent need to define the core content of the specialty, are all well made. However, although all this is splendid stuff, he deludes himself if he believes that this remains a matter only for the medical profession: PH in the 21st century has become multi-disciplinary.

Over the years, the contribution of the medical profession to PH has been impressive; indeed, PH to a large extent owes its mere existence to the enormous contributions made to it by distinguished members of the medical profession, and during the 20th century medical postgraduate specialization in PH contributed significantly to the development of the specialty. However, nowadays there are new types of educational investments that are required for PH capacity building, at both academic and service levels of PH education and training; moreover, nowadays these involve students and trainees from a variety of backgrounds, only one of which may be medicine. In the UK for example, trainees are now selected for higher PH training from both medical and non-medical backgrounds (the non-medical entrants have usually distinguished themselves in professions related in one way or another to health services). All UK trainees, both medical and non-medical, undergo identical training, and both have to pass the same higher professional examinations [to achieve Membership of the Faculty of Public Health (MFPH)], and both have to be ‘signed off’ as having demonstrated a long list of competencies in their work.\(^2\) Once they have achieved the certificate of specialist training, they may compete equally, medical and
non-medical, for the same senior posts, whether these are in academic or service PH.

Founded in 1966,3 the Association of Schools of Public Health in the European Region (ASPHER)4 now represents 78 educational programmes in PH, most of which are located in Schools of Public Health (SpPH), university institutes or other similar but non-academic institutions, located in 35 European countries. Over the years, ASPHER has created comprehensive expertise in supporting and mentoring the initiation and further development of quality assurance in, and accreditation of, educational programmes in PH.5,6 First of all is the well-proven

... the need for educational programmes in PH. In some countries still constitute a basic part of medical specialization in PH. ASPHER has also begun to develop lists of competencies necessary to meet all the challenges in population health and in health systems, which a competent PH professional might expect to confront, and naturally systems for disease prevention and health promotion constitute an important component of this competencies portfolio.7

On the basis of this comprehensive perspective, but without necessarily reflecting official ASPHER viewpoints, we would like to focus on a few selected, yet important, developments in PH education in recent years.

Multi-disciplinarity

The field of work of PH is well described by Westerling,1 who refers firstly to population health surveillance of various kinds, including study of the distribution of determinants of health, secondly to the planning, participation in, and evaluation of preventive programmes, including health promotion, and thirdly work associated with organizational issues in health care. Thus, although PH is indeed recognized both at EU level and in most member states as a medical specialty, it constitutes a multi-disciplinary scientific and practical group of skills and activities in its own right, although there are important and obvious overlaps with its own and other medical activities within health services. However, while the standard medical paradigm is usually interested mainly in a ‘downstream perspective’, concerned with disease prognosis following diagnosis of established disease, often it has difficulty in addressing adequately the ‘upstream perspective’, which embraces both aetiology and primary prevention. Epidemiological analysis of aetiological factors starts with the acceptance that everyday activities of normal life, living conditions, environment, and community structure, all contribute some of the most potent causal components for almost all diseases and unhealthy states. This is where the discipline of PH must be rooted, but such PH activity requires skills derived from many disciplines, and can certainly no longer be seen as the exclusive property of medical doctors! This of course should not in any way diminish the importance of medical PH interventions, either currently, through history, or in the future.

Thus, while medical doctors are still needed in PH, they are nowadays welcomed into the PH profession along with entrants from a wide variety of other backgrounds, at least in much of Europe. So, while some MPH educational programmes in Europe still actually target medical doctors, in many other programmes (e.g. the Danish programme), medical doctors for many years have been accepted as students or trainees beside applicants from other backgrounds, e.g. nurses, physiotherapists, dieticians, social workers, etc., many of whom may already have bachelors or masters degrees, or similar qualifications, achieved in the context of other backgrounds, e.g. in sociology, economics, psychology, law, administration and management, political science, and in numerous other disciplines.

The creation of ‘100% PH professionals’

However, irrespective of their professional origins, in keeping with PH being seen as a discipline in its own right, one should expect all PH professionals, irrespective of original professional backgrounds, to be trained to see themselves and to act as ‘100% PH professionals’. Of course, all the other post-graduate training and experiences, which these disparate groups of PH trainees may bring with them, may be invaluable to their future contributions to PH work, and this can only enrich the overall PH community as a whole.

In recent years, the Bologna Process8 has provided the PH education field with common basic terms of reference, i.e. the three cycles of education:

- **First cycle (bachelor level) qualifications** may typically include/be represented by 180–240 European Credit Transfer and Accumulation System (ECTS) credits;
- **Second cycle (masters level) qualifications** normally carry 90–120 ECTS credits—the minimum requirement should amount to 60 ECTS credits at second cycle level;
- **Third cycle (PhD level) qualifications** do not necessarily have credits associated with them (typically 180 ECTS credits).

Thus, as according to the Bologna Process, for more than 10 years an increasing number of bachelor and master programmes in PH have been established at European universities and at SpPH. The target groups for such programmes are young people who are recruited just—or shortly—after they leave high school. Considering the challenges meeting the PH professional, bachelor, master and PhD programmes will include substantial components of the social sciences, the natural sciences, and the humanities. Educational programmes must include exercises in scientifically based methodology, which aim to follow, to study, and to analyse the populations’ environments, living conditions and health, as well as their health and social systems. Other components of such educational programmes will include methodologies for the initiation, management, follow-through, and evaluation of preventive programmes, of health promotion programmes, and of other social and health service programmes. To support all these developments, European networks for exchanges of experience, for creation of new paradigms and perspectives, for enhancement of research collaboration, and for student and teacher mobility, are all currently being organized by ASPHER.

Thus, in reality European cross-country harmonization of PH training and education is important not only within a medical PH specialty, as pointed out by Westerling,1 but also between types of educational programmes and approaches to PH training, e.g. timing of education and training experience in relation to career progression (e.g. graduate vs. postgraduate); target groups (e.g. young recruits vs. experienced professionals); backgrounds of professionals recruited (e.g. health professionals vs. those with other backgrounds); relationships between academic and service components of training; or the types of competencies aimed at in the programmes.

Competencies

At this stage many aspects of the above might be discussed in detail, but we shall concentrate on the matter of competencies, as this appears to be of particular interest, including to ourselves. In different parts of the world, different
methods have been chosen for establishing such lists of competencies, and for reaching consensus about them. Approaches differ, as do the particular concerns of different groups, e.g. their developmental phases, and the degree to which they are created by use of ‘top down’ as opposed to ‘bottom up’ decision-making processes to reach convergent opinions, or the type and degree of detail included within main classifications of competencies, or the strategy (if any) for continuous development. It is our belief that competencies are more likely to be seen as appropriate and valid if they are developed in an essentially ‘bottom up’ method, with the close involvement of the PH professionals who have to demonstrate PH competencies on a daily basis, in their work.

The European programme by ASPHER (European Public Health Core Competencies Programme (EPHCC) for Public Health Education) has included an initial phase of collection, where SsPH contributed by providing the lists of competencies which they themselves found important. Competencies were classified as being either ‘intellectual’ (essentially requiring knowledge and understanding) or ‘practical’ (requiring skills) within six thematic fields:

- Methods;
- Social environment and health;
- Physical, chemical and biological environment and health;
- Health policy, organization, management and economics;
- Health promotion and prevention;
- Cross-disciplinary themes, including strategy making, ethics, etc.

Overall, these fields are broadly in accordance with the thematic fields applied by the Association of Schools of Public Health (ASPH) in the United States. In contrast, it differs from the logical structure applied in the competencies framework (developed but not yet applied) in the UK. More focussed lists have been developed by the European Centre for Disease Control (ECDC), dealing with competencies necessary for infectious disease control. Moreover, as competencies for PH education all in the end have to reflect comprehensive population health as well as health systems, defined at a particular point in time and place, and because competencies have to be understood, accepted and used by SsPH, as well as by stakeholders and decision makers, it cannot be expected that logical structures for competencies can be copied without difficulty in one country from other parts of the world. The development of agreed-upon lists of European PH competencies has to be the result of a repeated and continuing process, characterized by interaction between European SsPH and PH workforce and decision makers. It is not a purely academic—not for that matter a purely practical or political—endeavour; accordingly, it is necessary to develop a strongly communicative culture, with mutual consensus processes in focus.

Thus, during the Competencies Programme’s Phase 2, contact was established with PH stakeholders in order to communicate with them about challenges in population health and concerning the further development and management of health systems. Communication platforms included two European conferences (in Aarhus, Denmark, and in Paris, France, both in 2008), at which there were present national health system representatives, and two local workshops (in Maribor, Slovenia, and in Lanarkshire, Scotland, also in 2008), which involved representatives of the respective local PH workforces. Challenges to population health and to health systems vary over time and across European regions, and it is thus hoped that this process can be continued and strengthened in the future (Phase 3), and that it will lead to general as well as to regional agreed-upon lists of core competencies for PH education at different educational levels. Ultimately, PH competencies need to be defined so as to match appropriately differing levels of PH education and training, and also the various possible levels of PH employment (to facilitate comparability of job descriptions, genuinely free movement of PH professionals around the EU, etc.).

Competencies can be monitored at the level of the individual student, and lists of competencies will also provide new potential for the development of PH degrees at the European level.

We believe that lists of PH competencies, including those used to inform PH education, should be subject to processes of continuous revision, and that this process should involve all relevant stakeholders; such discussions would take account of the changing PH challenges in Europe, of changing functions of PH services and of job descriptions of PH professionals, of developments in science and in PH technologies, and of changing realities concerning PH resources.

One of the roles of SsPH should be to translate competencies into learning objectives. For example, theoretical aspects, such as details of epidemiological and statistical methodologies, and the manner in which these are documented, often need interpretation, using language that can readily be understood by all stakeholder organizations, which will often involve, lay people.

Building a new integrated European PH workforce

Consideration of PH competencies in relation to real PH challenges leads inevitably to matters concerning PH capacity building, and the development of lists of competencies in this way has been shown to be a potent stimulant for such communication (Whitaker et al., manuscript submitted for publication). Discussion of competencies inevitably will lead to consideration of, besides functions and job descriptions, the systems that build on these functions and on PH professional activities. One of the organizational challenges which European PH stakeholders must seek to address in the next few years will be to work towards increasing comprehensiveness of PH systems, locally, nationally, and across Europe; today characteristically they can often only be described as a heterogeneous multitude of mutually independent initiatives. It is our belief that the construction of a European system of PH competencies, if achieved through an inclusive process, involving both the staff of SsPH and PH professionals involved in routine service PH work, can contribute significantly towards the integrative process that is so much needed.

Establishment of integrated, cohesive, and comprehensive systems of PH education and training will also facilitate the development of more systematic career ladders, the existence of which is, of course, important for the graduates of bachelors, masters and PhD programmes, and therefore also for the recruitment of high quality, well-motivated students. Moreover, more integrated PH programmes would be much better placed to address competition for resources, etc., from the more powerful and incomparably much wealthier medical treatment and care sectors.

Conclusions

Accordingly, building upon Westerling’s overview, we would suggest that:

- the medical profession contributed significantly to the establishment of modern PH;
- PH practice has a sound theoretical basis, and that epidemiology and social science provide its scientific base;

Overall, these fields are broadly in accordance with the thematic fields applied by the Association of Schools of Public Health (ASPH) in the United States. In contrast, it differs from the logical structure applied in the competencies framework (developed but not yet applied) in the UK. More focussed lists have been developed by the European Centre for Disease Control (ECDC), dealing with competencies necessary for infectious disease control. Moreover, as competencies for PH education all in the end have to reflect comprehensive population health as well as health systems, defined at a particular point in time and place, and because competencies have to be understood, accepted and used by SsPH, as well as by stakeholders and decision makers, it cannot be expected that logical structures for competencies can be copied without difficulty in one country from other parts of the world. The development of agreed-upon lists of European PH competencies has to be the result of a repeated and continuing process, characterized by interaction between European SsPH and PH workforce and decision makers. It is not a purely academic—not for that matter a purely practical or political—endeavour; accordingly, it is necessary to develop a strongly communicative culture, with mutual consensus processes in focus.

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Conclusions

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- the medical profession contributed significantly to the establishment of modern PH;
- PH practice has a sound theoretical basis, and that epidemiology and social science provide its scientific base;
modern PH practice must embrace study of, and control of, the widest definition of determinants of health; this endeavour requires many diverse skills, within which medical skills are included, such that modern PH requires a multi-disciplinary workforce; developments in European PH education seek to match the requirements of a modern multi-disciplinary PH workforce; development of a European system of PH competencies could contribute significantly both to PH education and training and to PH practice; construction of such a competencies system must be a ‘bottom up’ exercise, involving both SSPh and PH workforces; such collaborative work could contribute significantly to integration of currently disparate components of the PH profession; such integration combined with a system of competencies could assist the development of a more systematic career ladder in PH in Europe; and an integrated PH profession would have a louder voice within European health professions overall.

Conflicts of interest: None declared.

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