

education, which would facilitate the incorporation of the entire range of professionals, which public health needs, into the existing workforce and enable seamless transitions. We can observe a rising interest in non-health study programmes through a range of topics covered in their first and second Bologna level degrees. There is an overall shortage of in-work courses and programmes, which would enable graduates of non-health programmes to obtain the basic knowledge of terminology and methodologies required in public health. At this point, this is too often left to the individual heads and supervisors.

An intense process is underway to reform and substantially restructure the specialty of public health medicine with the recommendations of UEMS (1) and ASPHER (2) and Bloom's competencies' (3) model. The process should significantly improve the current programme, which has not followed the conceptual changes occurring in the meantime ever since 2002 when the existing programme was adopted. This situation, together with the finalisation of the assessment process of the Essential Public Health Operations carried out by the WHO and the MoH,

should enable a more thorough reform of public health education and training and renew the concept of the modern public health professional. It is essential to sustain and modernise not only the standard educational programmes, but even more importantly to introduce an in-workplace system for introduction into public health methodology and practice and for its continuous development.

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## Introduction of Competency-Based Education Approach to Specialty Training in Public Health Medicine in Slovenia

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Education of public health (PH) in Slovenia has been experiencing slow, but radical changes in the last two decades, which should enable introduction of the new PH concept in the country. This is true also for PH specialty (PHS) training for physicians/dentists.

The renewal of PHS training programme began early in the second millennium. In 2002, the epidemiology, social medicine and hygiene specialties were replaced by PHS (1). The programme, which is still valid, was designed in a modern way for the time being, but already at the beginning it was realized that a further transformation would be needed as soon as possible. Among the major problems are the imbalance in knowledge/skills set (with some new PH topics missing), an incomplete system of knowledge examination, and the approach not focused on the trainees' competencies.

The process of further transformation started soon, however, it turned out that it would be necessary to meet the conditions allowing the development of modern and high-quality PH training for all professionals in the PH field not only for physicians/dentists in Slovenia (2). The important prerequisite was setting-up the complete

knowledge/skills set necessary for quality operation in PH. In the South East Europe (SEE), a lot has been done in the frame of the Forum for PH in SEE (3). At the same time ASPHER - Association of Schools of PH in the European Region started to introduce the competency-based education approach (CBE) in the area of PH (4), as well as UEMS - Union Europeenne des Medecins Specialistes (5) in medical specialties training, including PHS (6). The CBE represents a major shift in education, as it builds both on knowledge/skills as well as on the attitude of the trainees (7,8). These were the main guidelines for further transformation of PHS in Slovenia. In practice, it started in 2007, when CBE was introduced in the part of the existing PHS training programme representing the knowledge/basic skills base - the one-year Postgraduate PH course. Its final revision was completed in 2016 (9). However, it was necessary to accomplish also the transformation of other programme parts.

In 2012, the first fully renewed program was prepared (10). It had some shortcomings (the CBE was not introduced, and the knowledge/skills were still not balanced enough), but it represented a good step forward. Unfortunately, the procedure was not

completed. It was stopped at the certification by the Slovenian Medical Association stage.

Afterwards, the process continued in the direction of harmonizing the PH knowledge/skills for the Slovenian territory, and the introduction of CBE. The new programme draft has been prepared in summer 2018 (11). It has retained the basic structure of the existing programme, however, with updated content. The trainees are guided through the training process by the targeted products requiring the use of modern PH methods. It anticipates a process and summative evaluation of knowledge/skills within/at the end of each part of the programme, as well as comprehensive final summative evaluation. The advantage is consideration of ASPHER/UEMS recommendations (4,6), including introduction of CBE, and balanced knowledge/skills. Additionally, it enables the transition between other programmes in the area of PH in Slovenia (e.g. PhD study in PH).

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## Public Health in Different Study Programmes in Slovenia

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In Slovenia traditionally, besides medical and dental doctors, nurses and also sanitary engineers have been involved in the core public health team. The sanitary engineers in Slovenia and also in former Yugoslavia have long tradition of being involved in public health work. The educational programme for them was established already more than 50 years ago. The education curricula has reflected the specificity of interdisciplinary work in public health from the beginning. The emphasis was on engineering fields that were of utmost importance for introduction of sanitation measures needed in the second part of 20th century.

Nowadays the involvement of other professionals in the field of public health is much more complex - especially when it comes to the development and implementation of measures for achieving better health. As an answer to the need for extensive interdisciplinary cooperation there are many educational programmes in place that employ interdisciplinary approach such as:

- First and second educational degree of study programme sanitary engineers - Faculty of Health, University of Ljubljana;
- All three study degrees of study program Nursing Care at different public and private educational organisation in Ljubljana, Maribor, Novo mesto,