

## DEBATE AND EDUCATION

**Asserting Bologna Declaration in restructuring of school system at Comenius University Medical School Bratislava**

Bernadic M, Traubner P, Kukurova E, Bernadicova H

*Institute of Pathological Physiology, Faculty of Medicine, Comenius University, Bratislava, Slovakia. marian.bernadic@fmed.uniba.sk***Abstract**

**Asserting Bologna Declaration into university education is a long-term and challenging process. New features have to be asserted sensitively in order to develop school system and to strengthen the baseline for Declaration. Slovakia has started the restructuring of university system and study programs undergoing the process of accreditation, however marked support (or reform) for covering the costs of university education is missing (expressed as % of gross domestic product, Slovakia is still not comparable to other EU countries). At present, not satisfactory economic conditions prevent from reaching the content, personal and equipment preconditions at universities (Ref. 7).**

**Key words: Bologna Declaration, Medical School, restructuring of school system, ECTS, accreditation of study programs.**

One of the main roles of the Slovak universities is their integration with European universities. Prerequisites for this process were proved by Bologna Declaration, which was accepted by the Slovak Republic in 1999. Bologna Declaration introduces ECTS (European Credit Transfer System) and CATS (Credit Accumulation and Transfer Scheme) as the main requisites in restructuring university education.

In 2001, World Federation for Medical Education (WFME) released a document "Basic Medical Education" specifying medical education. The aim of WFME is to create study conditions highlighting practical experience at every level of education. This document concentrates world experts' opinions targeted at improving the quality of education. Regarding improving of the health care system it is necessary to restructure medical education in accord with worldwide accepted standards International Standards in Basic Medical Education (ISBME).

Comenius University School of Medicine in Bratislava continues in creating a compatible system of medical education according to WFME and ECTS recommendations and in accord with the conclusion of European Universities Association (EUA, 2002).

School of Medicine continuously creates conditions for improving transparency, compatibility and attractiveness within Europe. The credits are important for the curriculum restructuring and unification within universities thus accepting Life Long Learning. EUA highlights the need to continue discussion on

Universities Convention with the aim to specify main condition to be fulfilled so as EHEA (European Higher Education Area) become real till 2010.

By realization of generally accepted standards, all universities, schools and all institutes try to ensure compatibility with European and worldwide universities.

Transformation of biomedical study regarding conclusions of Bologna Declaration and entry of Slovakia into EU brings new features also to Comenius University School of Medicine: credits system (ECTS), wide range of voluntary subjects, possible interdisciplinary study with own study programs, mobility of both students and teachers, introducing dissertations, extending individual consultation, new study organization with three levels (bachelor (Bc.), magister (Mgr.) or medical (MUDr., MDDr.), and postgraduate (PhD.)).

The aim of this article is to detail new features in study programs and to evaluate their influence on study program innovation within schools of medicine.

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Institute of Pathological Physiology, Faculty of Medicine, 1st Department of Neurology, Institute of Medical Physics and Biophysics, Faculty of Medicine, Comenius University, Bratislava, Slovakia

**Address for correspondence:** M. Bernadic, MD, PhD, Ustav patologickej fyziologie LFUK, Sasinkova 4, SK-811 08 Bratislava 1, Slovakia.  
Phone/Fax: +421.2.52964500

In Slovakia, a boom of universities was observed. New universities were established, which enlarged the number of academic posts. One of their present characteristics is both formal and content restructuring. This process is associated with the entry of Slovakia into EU thus opening social and university environment.

Regarding formal restructuring, the main change might be represented by introduction of ECTS credits. Up till now, credits are not „defined“, not comparable between various universities. Many universities have started to use credits formally, but their functional use is far away. Credits are not able to open the study at different faculties, or within various universities or abroad. European universities have distance themselves during isolation and continue at present. For example, study programs at schools of medicine in Slovakia and in Finland are so different, that student exchange is not possible. The attempt to find the convergence of study programs is also missing. It has to be noted, that study programs are finally the same regarding the content of the study but they differs significantly in approaches and schedule within 5–6 years (i.e. study by systems versus study by subjects). The solution might a set of tests, objectively representing acquired knowledge and capability of students after a defined period of study. In this way, mobility of students could be realized after finished period regardless methods of study. Individualization of the study, creating own study programs or study abroad are possible options, which need suitable environment. However, it will be very difficult to break “traditions”, which don't allow liberation of study system, “obligatory” accepting 100 % of subjects (minimal study variability), length of study years and whole study (the schedule of study is still a problem). It is not possible to think of study individualization or specialization, although experience supports this approach. Classic medical study programs were enlarged, including more subjects (first aid, ethics, informatics, series of obligatory and voluntary optional subjects), but nothing can be omitted. Maybe it will be possible to unite several up till now separate subjects into new groups (for example: molecular medicine, clinical physiology). Content reduction in some subjects, belonging to high school education (foreign languages, physics, chemistry, biology, physical exercise) might be considered. Regarding organisation of study, some discrepancies exist in dividing the study into bachelor and magister levels. This problem won't be solved till an adequate program for praxis will be missing and till real employment after bachelor level in medical education will be missing (social sciences and health care system? natural sciences?). Definition of magister study (instead of used doctor study) seems embarrassedly at school of medicine, where the study ends with awarding the title MUDr., not Mgr. On the other hand, Comenius University School of Medicine has promptly reacted to increased number of hour in the study program dentistry (stomatology before). Including these EU requirements into the study programs has made this program the most costly one within biomedical studies (2–3-fold more expensive than general medicine, up to 5–6-fold more expensive than nursing).

The issue of presenting dissertations is also highlighted. The form and range is well defined, but the content of dissertation in medical studies is not set. Discussion, aimed at the content of dissertation has to take into account also the cost of research. There are no conditions created for the experimental studies of hundreds of students. We suggest that not only experimental, basic research or applicable research should be done. We want to discuss also works presenting medical experience of students, works aimed at case reports (history, diagnostics, therapy, diet, rehabilitation), monitoring (laboratory, biochemical, microbiological, electrophysiological and others). The thesis are closely associated with the study, they supplement the study and might form the base for additional students' activities. We should not forget the technical equipment of dissertations. It is necessary to include it in medical study expenses in future. The possible solution may be the system of students' grants at faculties, universities or ministry. If this system is not set in near future, dissertations will have mostly presentation or formal value (experience in writing dissertation, publication, presentation).

Increasing percentage of students' scientific work and teaching students the basics, terminology and outputs of scientific work in their field of study, is in accord with the law on university education, which highlights the value of research and creativity within university education and enables students to participate. This recommendation is included in the profile of the graduates of most universities study programs – in medical education as well. But up till now, concrete subject, where this requirement should be realized, is missing.

Certain compensation was and still is represented by students' scientific and professional activity (ŠVOČ). This activity was undervalued, resulting in fact that ŠVOČ didn't become an obligatory subject, although ŠVOČ plays an important role as a separate subject “scientific education” (which is established for example at schools of medicine in the US), and supervising and education of young research workers is not included in teacher's credits. Present requirement for ŠVOČ, a voluntary and high standard scientific education uniting an individualized approach of the teacher, student's targeting at his field of interest and talent, self/study and presentation and publication of the results, is to become an obligatory subject. This transformation brings both many positives and negatives. Basic scientific work is given to every student, but the system has to be established in a way not to decrease the individual cooperation between teacher and student and to strengthen financial support for students' research (up till now mostly covered from teacher's grant).

## Conclusion

Asserting Bologna Declaration into university education is a long-term and challenging process. New features have to be asserted sensitively in order to develop school system and to strengthen the baseline for Declaration. Slovakia has started the restructuring of university system and study programs undergoing the process of accreditation, however marked support (or reform) for covering the costs of university education is missing

(expressed as % of gross domestic product, Slovakia is still not comparable to other EU countries). At present, not satisfactory economic conditions prevent from reaching the content, personal and equipment preconditions at universities.

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