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Implementation of the Bologna process in the Czech Republic

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History of Bologna process. On June 19. 1999 the ministers responsible for higher education in 29 European countries signed the Joint Declaration on the European Higher Education Area, known as the Bologna Declaration (1999). They, thereby, started the process for developing a coherent European Higher Education Area, a goal to be reached by 2010. The initiative for the Bologna Declaration was taken one year before by France, Italy, the United Kingdom and Germany with the Sorbonne Declaration (1938). By 2007, the Bologna Declaration was signed by 47 countries. The fundamental principle of Bologna is the recognition that, in spite of the valuable differences among partners, European higher education systems face identical internal and external goals and challenges. Each signatory country committed itself to reform its own higher education system in order to create overall convergence at European level to meet these goals and tackle these challenges.

Practical points. On initial inspection the two-cycle system, advocated by the Bologna Declaration, does not appear to fit naturally with current medical education practice in Europe. Harmonisation of higher education in Europe may be beneficial for medical education, but Bologna's two-cycle system rather evoked discussion and diversification. There is a great lack of knowledge about the Bologna Declaration on an educational as well as a political level across Europe. At present the pros and contras of the two-cycle system need to be discussed on a European level before sensible decisions to adopt or reject it can be taken.

Qualifications frameworks/three-cycle system: mobility, quality assurance, employability, European higher education in a global context, joint degrees, recognition of qualifications, social dimension, lifelong learning, stocktaking.

Two cycle system in medicine. Since information on facts concerning the implementation of the two-cycle system is lacking, the objective is to clarify the progress of the Bologna Process in medical studies with respect to the implementation of a two-cycle system. There is a lack of

information, for example about the extent to which European nations force their medical schools to adopt a two-cycle system.

Three cycle system. Arguments for: The two-cycle system could force countries to compare curricula and develop international standards. Mobility of students is complex with integrated but different curricula. To define a bachelor level could help student mobility. The medical students may develop science interest and choose for a Master of science career after a bachelor diploma – rather than drop out of medical school without any diploma. Graduate entry in a medical master phase with a non-medical bachelor diploma, i.e. a biology or other health sciences diploma could serve both students wishes and the need in some countries to train more doctors.

Three cycle system. Arguments contra: Coherent, horizontally and vertically integrated medical curricula have been painstakingly achieved in recent decades. No agreement between ministers of education should force medical education back in history to a division between pre-clinical basic sciences and clinical training. Early clinical exposure is meant for those students who become a medical doctor, not for those who plan a different career after a bachelor degree. Medical education is primarily a long, expensive professional training. Stimulating to finish after three years is a waste of resources. As the Bologna Declaration defines the bachelor diploma to be relevant for the labour market, awarding medical student with bachelor does not make sense: it has no value for those who finish their medical course, and little for those who don't. Society needs doctors, not medical bachelors.

Situation in the Czech Republic. 7 medical faculties – 5 faculties at the Charles University in Prague and one faculty at the Masaryk University in Brno as well as one faculty at the Palacký University in Olomouc.

Programme of medical curriculum. In the first three years is very specialized to prepare the students for next two or three years of the clinical studies. In case of the other healthcare specializations, two cycle education is in place. The professional qualification is given by graduation in studies in the field of medicine. The studies last 6 years and are completed with an advanced Master's state examination. The higher education diploma and diploma supplement serve as documents attesting to the closure of studies and the awarding of an academic degree. The academic degree in the field of medicine is „*Doktor medicíny*“ („Doctor of Medicine“, abbreviated as „MUDr.“ – Medicine Universae Doctor used in front of the name). The graduate is not allowed to work independently. For independent work the specialisation studies finished by the special examination is necessary.

Three cycle structure. There was a pilot project of the Masaryk University to introduce three cycle structure, however this programmes were not awarded an accreditation. At the time being there is no other pilot of this nature.

Specialised education in medicine. The specialised education in medicine is realised in more than 40 specialities. In dentistry there are 2 specialities. These programmes involve the requirements concerning mainly their length, range of practical and theoretical knowledge, length of practical training and places where this could be realised, etc. The duration is usually 5 years. The training is completed with a specialisation examination. The successful graduate is awarded a diploma stating his/her specialisation.

As mentioned above, our legislation enables to provide medical studies in a two – cycle system. So far there is no such programme accredited. If there were such a case it would have to fulfil the content of the EU directive and the general Czech legislative requirements given by the Higher education Act as stated below. The big problem, the Association of the deans of the medical faculties are afraid of is the employability of the Bachelors from medical curriculum. They would not be **educated** for nursing and other health care jobs.

Diplomas and degrees. The term „doctor of medicine“ has, for a long time, been subject to different interpretations. Being a university title signifying a successful defence of a dissertation, it is now often used identical for a „physician“, whether or not the candidate has completed a dissertation. Some countries still require this, others do not, while still others reserve this term for physicians with a PhD degree. It would be helpful to clarify and harmonise terminology in this field.

In Europe there are not so many medical faculties in which the three cycle system is applied. This system is very well elaborated in all five faculties of medicine in Switzerland. As an very good example is the organisation of medical curriculum at the Medical Faculty at the University of Basel.

The duration of bachelor study is during first three year and is organised by themes like nervous system, heart and circulation, respiration, reproduction, endocrinology etc. In this different themes are participated basic and preclinical disciplines: anatomy, histology and embryology, biochemistry, physiology, pathological anatomy and pathological physiology. All these themes are closed with the examinations in one of the three years.

The master's study is effectuated in next three years (4, 5, 6). The themes are the same as in the bachelor study. This is concluded by clinical practice at the end of fifth and the beginning of six year. In the six year there the presentation of the master theses and presentation of acute

falls. In my faculty e.i. **Third Faculty of Medicine, Charles University in Prague** we introduced the new curriculum in 1997 with three cycles:

- 1) **Cycle 1: Basic biomedical sciences.** In this cycle there are the themes like **The structure and function of the human body** in which are taught the different systems of human body from the aspects of anatomy, histology and embryology, biochemistry and physiology with one exam at the end of the second year. The other subject in the first cycle are: cell biology and genetics, biophysics and informatics needs of the patients.
- 2) **Second cycle: Principles of clinical medicine** (third and fourth years). In this cycle is used the principle of evidence based learning and teaching on the basic of different syndromes and symptoms. The examinations are from: theoretical foundations of clinical medicine, clinical propaedeutics, basic clinical problems.
- 3) **Third cycle: Clinical preparation.** Is the clinical practice which started with bedside training. It is ended by the state examination from internal disciplines, surgical disciplines (general surgery, orthopaedic surgery, plastic and burn surgery), gynaecology and obstetrics, paediatric, neurosciences (neurology and psychiatry), preventive medicine.

It is the curriculum with the level of integration and cooperation between different disciplines.

The coordination of medical curriculum of different European countries on the basis of Bologna Process needs the profound and high quality open discussion before accept all items of Bologna Declaration by majority of European medical faculties.