

Summary

Introduction

The aim of the project concerns the harmonization of the undergraduate training in the medical discipline dermato-venereology in Europe.

About 20-25% of all physician consultations refer to problems of the skin. Thus Dermato-Venereology reflects a very important core component in the undergraduate training of medical students. However, after graduation less than 3% of doctors in Europe are going to specialize in the field of Dermato-Venereology. Therefore, the better the medical undergraduate training at the university level, the better the diagnostic and therapeutic decisions and the interdisciplinary consultation at the time when the student has reached the level of a licensed doctor in daily practice at the private office or in the hospital. Currently, an undesirable disproportion of contents and of teaching hours at the level of universities across Europe exists. The Undergraduate Training Commission of the European Dermatology Forum (EDF) as an association of teaching professors in this discipline has figured out that the differences in lecture hours vary between 40 and 130 from country to country. Therefore, there is a need to harmonize the contents (catalogue of diagnoses and special contents), the amount of teaching time and ways of lecturing (frames) and combining it with advanced didactic e-learning facilities.

Number and profile of participants

The eight university partners are representatives of Dermato-Venereology from northern, eastern, southern and central European countries (Belgium, Croatia, Finland, France, Germany, Italy and Spain). The partner for the informatic part (swiss4ward) brought in more than 15 years experience in e-learning and running different platforms for e-learning on the national and international level.

Objectives of the project

The aims of the Harmonized European Dermatology Undergraduate Training by Strategic Partnership (HEDU_LEARN_IT)-Program are:

- 1) elaboration of standards for an harmonized undergraduate Dermato-Venereology-training in 8 European partner-universities;
- 2) establishing a harmonized content of diagnoses, symptoms, signs and syndromes and basics in dermatology & venereology written in a long version text form as a webbook (3-4 pages each) and as a short version (2 wikistyle pages each) installed on the Cyberderm platform for easy access and fast orientation. The webbook is connected to the thesaurus of the cyberderm platform to have access to the clinical pictures.
- 3) promoting an innovative blended learning concept by combining classical teaching strategies with interactive e-learning tools (DOIT; www.cyberderm.net) in an inverted (flipped) classroom setting .
- 4) Accompanying evaluation. 249 students from all partner universities were involved in testing the contents and evaluating per electronic questionnaire the short and long versions with regard to learning practicability in general, usefulness for following the content structure during the semester, preparation for clausuras and final examen, general content and style.
- 5) disseminating of the project results and promoting harmonisation of undergraduate training in Dermato-Venereology in Europe after finishing the funded-project-phase.
- 6) sustaining the concept beyond the sponsored time frame via EDF and national EDF representatives (country coordinators).

Main Outcomes:

In the traditional teaching setting at our universities lectures are presented in overcrowded lecture halls in front of a heterogeneous group of students, regardless of their different level of knowledge, language skills, or of their individual intellectual learning capacities. Little feedback is given neither to the teachers nor to the students. (The situation became even more complicated and of importance during the project time in the Corona pandemic with loss of life presentation of patients and life seminars, lectures and workshops).

In the first part of the project in order to cope with the disharmonized teaching content and hours in Europe, the curriculum for medical undergraduate training in Dermato-Venereology was reviewed renewed, revised and restructured. A new basic and harmonized European Catalogue of Learning Objectives EHC-DV with a completely rewritten content of 146 diagnoses incl. a [grading system of importance](#) and time frame for daily practice, 14 chapters on cutaneous signs, symptoms and syndromes and 14 chapters on basics in dermatovenereology in the form of a webbook and on the Cyberderm platform has been worked out. The results are presented in a [webbook](#) and on the [Cyberderm e-learning platform](#) of the associate partner DOIT (www.cyberderm.net).

The second part concerns the „Blended learning“ as the combination of classical teaching and learning tools (front lectures, practical courses, bedside teaching) with modern e-learning tools for self-directed learning, independent from time and space. In the “flipped or inverted classroom“the teacher acts as moderator and mentor, receiving feedbacks and guiding the individual student according to his/her individual requirements. Dermato-Venereology is a visual discipline and, therefore ,especially suitable for the use of computer-based technologies which -depending on mutual consent- can reflect the knowledge profile of the individual user (student). The following structure of lecturing (45 or 60 minutes) is continuously repeatable ([see graph](#)).

Students confirmed during their evaluation of the project material the usefulness of the elaborated new catalogue of contents and the [practicability](#).

Furthermore a recalculated amount of lectures, seminars, bedside teaching, [workshops](#) and recommendation of the new curriculum format, is presented as a [structure recommendation](#).

The implementation first will take place at the project partner universities and will be accompanied by a follow up by the students questionnaires and teachers feedback.

All members of the [European Dermatology Forum](#) (200 teaching professors from 27 European countries) have committed their sincere interest in the project from the initiation phase of the project to the upcoming future. Therefore, sustainability and maintenance will be managed and guaranteed by the undergraduate commission of the European Dermatology Forum, the association of chairpersons and teachers in Europe in next years.

Continuous updates on the Erasmus platform and on the Cyberderm platform is obligatory.