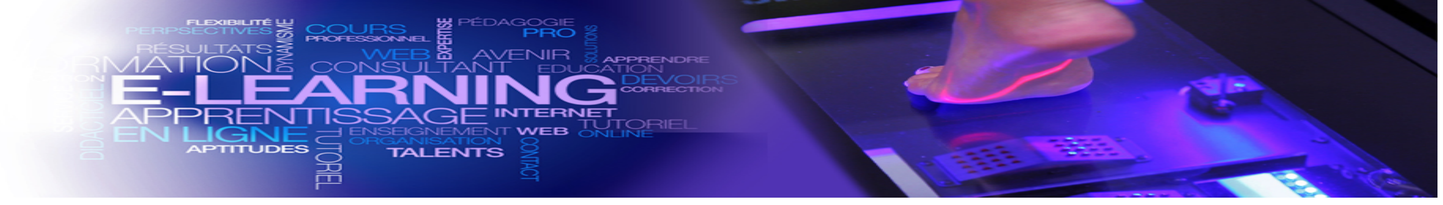
PODIATRAIN

Open online course in new technologies for diagnosis and treatment of foot pathologies



INTERNATIONAL E-LEARNING IN NEW TECHNOLOGIES FOR DIAGNOSIS AND TREATMENT OF FOOT PATHOLOGIES - PODIATRAIN

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BACKGROUND

As European society ages, healthcare and related social services are becoming increasingly important. This growing demand is creating unprecedented demands of skilled professionals on health and social care systems. In consequence, states are facing skills shortages in healthcare disciplines such as podiatry. Although podiatry has undertaken a significant transformation from the traditional practice to the integration and use of the latest technologies for user assessment, resources are needed to transform foot health care into a modern clinical speciality. In addition, stimulating and maintaining an adequate level of interest in podiatry will be of vital importance to contribute to its professionals' progression and reward.

In this context arises PODIATRAIN project, with the aim to contribute to open pathways to the modernisation of the podiatry sector. PODIATRAIN - *Open online course in new technologies for diagnosis and treatment of foot pathologies* - is an international project which aim is to create a European high educational framework to homogenize and improve knowledge in advanced techniques and treatments as well as bring to bear the newest technologies for user assessment, covering the gap between foot care professionals and the continuous advances in the sector. PODIATRAIN will generate an e-learning tool available in two languages (English and Spanish).

This poster presents the first project research outcomes, focused on three aspects: 1) training needs of podiatrists in different European countries, 2) the conceptual structure of the e-learning course, 3) the definition of the tools and methods for knowledge assessment, according to users' expectations.

GOALS

PODIATRAIN arises to generate a learning offer addressed to podiatrists and foot health professionals to complement the learning outcomes of current high educational programmes with training in new technologies for diagnoses and treatment of patients.

METHODS

The questionnaire structure included 5 sections: personal data; experience in podiatry; course features; training expectations and preferences; training contents needs.

The questionnaire included questions regarding: relevance of evaluations, preferences for global and periodic knowledge verification, preferences for the final knowledge verification (i.e. exam in time restriction), impact on the attractiveness of the course

The questionnaire was performed among respondents with following characteristics: respondents were active people when it comes to gaining knowledge; they were also participants of different kind of degrees' studies; they were professionally active for professionally working; they possessed knowledge about usability of e-learning platform. All questionnaires outcomes were processed with the use of descriptible statistics methods.

RESULTS

In total, 109 questionnaires were gathered among professionals from different European countries, 62% of them were women. These results obtained, are expected to be shown at European level, do not differ between the countries that have participated in the study.

The professional profiles of the respondents are presented in the Fig. 1.

In the Fig. 2 it is presented the distribution of respondents regarding years of experience in their profession. The majority of respondents have indicated more than 5 years of experience.

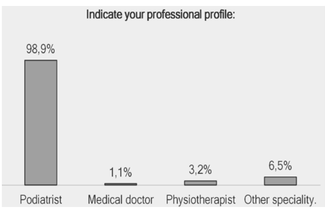

Fig. 1 Professional profile

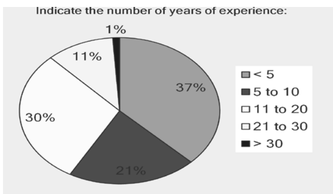

Fig. 2 Years of respondents' experience

Less than half of the participants in the survey state to have suitable or very suitable training regarding new technologies for the diagnosis and treatment of foot pathologies at the time of joining their first job, as it is showed in the Fig. 3.

The main topic proposed by PODIATRAIN initiative corresponds to a knowledge area assessed as suitable or very suitable by 74% of the participants in the survey (see Figure 4).

The results obtained from the survey show that, although an online course is an appropriate format for imparting the proposed course, complementary actions are needed to support learning of practical skills. In this sense, most of the respondents highlight that training contents must be focused on practice and increase of the professional skills in order to redound in improved and more efficient working activities. In this sense, the use of information technologies like computer simulations, video lessons or interactive games are formats suggested to incorporate practical aspects into the e-learning process.

Fig. 3 Have podiatrists received any training related to new technologies of diagnosis and treatment of foot pathologies?

Fig.4 Podiatrists' opinion about appropriateness of proposed training course

Regarding the preferred duration of the course, the opinion of the participants in the survey indicate that the course should have a maximum duration of 60 hours including both theoretical and practical contents (see Figure 5).

The participants in the survey evaluated the learning topics initially proposed according to their relevance for the development of the professional activity (Figure 6) and their interest in receiving training about each topic (Figure 7). Most of the proposed topics are considered as essential for the professional activity by more than 50% of the participants. The only exception is the topic *New trends in podiatry*.

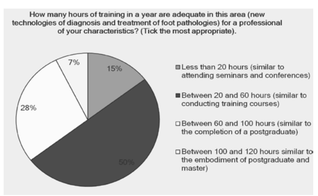

Fig. 5 Preferred duration of the e-learning course

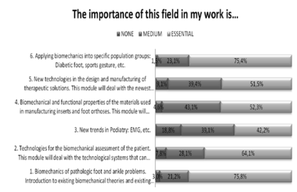

Fig. 6 Relevance of the topics for the professional activity

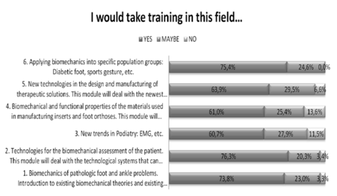

Fig. 7 Importance of contents

From the results provided by the survey, the learning contents of PODIATRAIN course have been configured according to the following index: 1. Functional anatomy and complete body assessment. 2. Biomechanics. 3. Basic training in technology. 4. Technology with diagnostic application: method of validation. 5. Technology with therapeutic application/therapeutic options. 6. Image diagnosis. 7. Data analysis. 7. Materials. 8. New trends. 9. New technologies in the design and manufacturing. 10. Application of biomechanics in special groups.

CONCLUSIONS

Training in new technologies for diagnosis and treatment of foot pathologies is a topic generally not included into the educational programs of most of the European universities. Therefore, professionals in foot health care, mainly podiatrists, demand training in this field.

The research findings obtained by the expert panel sessions and surveys have allowed defining an index of contents agreed with a representative simple of European professionals in the field of foot health care.

PODIATRAIN Project means an opportunity for developing a global and international e-learning course on new technologies for diagnosis and treatment of foot pathologies.

ACKNOWLEDGMENTS

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