FEBS Workshop on Molecular Life Sciences: Training Tomorrow's Scientists

Materials and Methods: Research was a descriptive and cross-sectional study; data were collected from 31 midwifery students of post-graduate who trained between June 2018 and August 2018 in a Manisa Celal Bayar University, Institute of Health Sciences, Department of Midwifery. The data of the study were collected using the "Introductory Information Form" and the "Student's Self-efficacy for Clinical Evaluation Scale". Data were evaluated by number, percentage, mean and correlation test. Results: The mean age of the students were 29.83 ± 6.78. It was found that 67.7% of midwifery students who took lessons were post-graduate students with thesis, 41% of them were working in secondary health services and 51.6% of them had clinical experience of five years or more. All of the students stated that the courses are necessary and that they contribute professionally. The total score of the self-efficacy perception subscale of the scale was 126.67 ± 14.72 (91-150), while the total score of the perceived confidence subscale was 137.22 ± 13.68 (98-150); it has been found that students with postgraduate abstinence are more confident in providing care for patients with chronic illnesses and pay enough attention to a given practice. There was a significant relationship between perceived confidence scores and clinical self-efficacy of students. Conclusions: The lessons given in midwifery of post-graduate education have positively affected the clinical skills of the students. With self-efficacy theory, students can learn clinical skills more effectively so that they can incorporate these skills into clinical practice. Keywords: Midwifery, post-graduate student, self-efficacy.

PP-012 DEVELOPING RESEARCH SKILLS IN BIOMEDICAL SCIENCES DURING UNDERGRADUATE MEDICAL EDUCATION

AB Demir¹, M Kartal-Yandım¹, Z Fırtına-Karagonlar², D Ünay³, Metiner Tosun⁴
¹Department of Medical Biology, Faculty of Medicine, İzmir University of Economics, İzmir, Turkey
²Bioengineering and Genetics, Faculty of Engineering, İzmir University of Economics, İzmir, Turkey
³Biomedical Engineering, Faculty of Engineering, İzmir University of Economics, İzmir, Turkey
⁴Department of Pharmacology, Faculty of Medicine, İzmir University of Economics, İzmir, Turkey
metiner.tosun@ieu.edu.tr

Background: While a physician should be an expert in a certain medical practice, a researcher should have a core of knowledge in his/her scientific area. However, for a clinical investigator, these areas overlap. Taking advantage of being in a centralized working environment with numerous faculty members with different expertise, we held two-step workshops to gather academics to share ideas and then, initiated a novel life sciences curriculum supported by biomedical research training for undergraduate medical education at İzmir University of Economics. This multidisciplinary program consists of two consequential core curriculums, focused lectures by experts and 3-semester mentored research activities called Research Track, which offers students a multidisciplinary scientific research environment. Material and Methods: The program is designed to meet requirements of the Bologna Process (http://www.ehea.info/) to create a ‘European Higher Education Area’ of complementary national systems in 48 countries to ensure comparability of higher education qualifications. This process involves the implementation of three levels of a qualification framework across courses with standardized learning outcomes, all including aspects of research skills and related qualifications. The Tuning Project (http://www.uniedousto/tuning/), indicating “a need for students to have developed skills related to using evidence to inform practice”, was also considered in the curriculum. Conclusion: Our program is expected to create an interactive research environment for medical, bio- and biomedical engineering students. Student’s performances evaluated through a peer-reviewed process employing rubrics-driven assessment of research proposals will also determine each student’s qualification for the Research Track. Keywords: scientific research, education, curriculum

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PP-013 INTRODUCING THE NEXT GENERATION MEDICAL EDUCATION FROM THE STUDENT’S PERSPECTIVE

Nurgül Yavuz, Bircel Ataş, Elif Sıdal Gülektekin, Emre Asker, Begüm Cula, Uğur Kıçıkgözü, Yakın Ural, Turhan Akbulut, Dilara Gür, Kerem Nakay, Zyeyn Taşkın
School of Medicine, İzmir University of Economics, İzmir, Turkey

Background: Every medical education system has similar goals in terms of teaching and improvement. In our medical school, İzmir University of Economics (IUE) Faculty of Medicine, the aim was to create a new and more effective system called “next generation medical education”. This system was planned to provide us a modernized education, which can cover the students’ needs, and to be able to be adjust itself according to the necessities. We prepare this poster to present how the students of the faculty perceive this system. Materials and Methods: We searched for other educational systems in different faculties to determine what makes our education different and “the next generation medical education”. We determined the central aim of the system and classified its characteristic features. Afterwards, to assess students’ perspective on these characteristic features, we have carried out a survey for the students of IUE Faculty of Medicine. Conclusion: As medical students, we believe the educational system of the faculty covers essential requirements to train professionals who can keep up-to-date with the latest developments in medicine and physicians who can see humans not only as biological systems but also as a whole with sociological and cultural aspects. We have classified the characteristic features of the educational system in five groups: E-Med (e-learning), learning to learn, advisory system, integrated lesson structure and feedback-based learning. Survey results as well as individual comments suggest that the system is effective in what it is designed for according to the students of the faculty. Key words: medical education, integrated medical curriculum, learning to learn, student advisorship.

PP-014 BIOINFORMATICS TOOLS IN THE DEVELOPMENT OF CANCER VACCINES: AN EASY, FREE AND INNOVATIVE WAY TO PROMOTE AWARENESS IN SCIENCE EDUCATION

Elif Ciriçi¹, Levent Çavaş², Dökuz Eylül University, Faculty of Science, Department of Chemistry, Biochemistry Division, Kaynaklar Campus, İzmir-Turkey
¹Corresponding Author: cirici@deu.edu.tr

Bioinformatics has developed in last decade and now it is considered as an important area for life sciences in the recent years. Many computational tools and databases have so far been developed to find solutions for the problems on the fast, accurate and robust evaluation of the increasing data in life sciences. Most of the bioinformatics tools are available online and requires no payment, therefore they can be implemented in the curriculum for little to no cost, if student computers are available. Introducing bioinformatics tools to the students who are interested in life sciences can be an effective way to get them more involved with the trending topics in science and motivate the students about how they can incorporate their knowledge and technology to find solutions for current questions and problems in life sciences such as cancer. One of the important tools in the bioinformatics has been developed for in silico designing of peptide based cancer vaccines that can reduce the time by filtering the unnecessary wet lab applications. In this study, developed in silico tools on designing of cancer vaccines are present and the results are compared on a sample study. In conclusion, as the integration of technology in education is essential in 21st century, the tools developed for designing cancer vaccines might be included in life science based courses.

Key words: bioinformatics, cancer vaccines, MHC I and II.

¹Elif Ciriçi is a high school student in Robert College, Istanbul. This study was based on a 3-months summer stage.