EVIDENCE-BASED MEDICINE COURSE AS PART OF AN INTERNATIONAL MEDICAL EDUCATION CURRICULUM IN A RUSSIAN MEDICAL SCHOOL

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Abstracts

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Objectives Russian medical schools are currently incorporating evidence-based medicine (EBM) principles into their curricula. However, many medical schools still lack ancillary courses on research methods, epidemiology, biostatistics, etc., that result in reportedly poor quality of medical research in Russia. Many reasons for the difficulties have been identified, including linguistic barriers, lack of expertise, limited international collaboration, and inadequate allocation of resources. We hypothesized that the addition of an elective EBM curriculum to students in a Russian medical school would develop skills in searching, interpreting and evaluating medical literature, essential components of EBM.

As part of an international collaborative education program between two departments of anesthesiology, the EBM elective curriculum was created and introduced to all medical students (years 1-6). We then assessed the value of the course, students’ attitude towards EBM, the extent to which they are engaged with evidence-based methodology, and the ability to incorporate EBM principles into future practice.

Method The collaborative education program was created between the Department of Anesthesiology, Keck School of Medicine at the University of Southern California (KSOM, USA) and the Department of Anesthesiology, School of Medicine and Psychology at the Novosibirsk State University (NSU, Russia). The EBM course included 18 seminars and journal clubs on biostatistics, clinical epidemiology, research methodology and other aspects of EBM. Classes were transmitted through video chat from KSOM to NSU, were voluntary and held in English. The course evaluation took place at the conclusion of the first year and consisted of two questionnaires. The first (Qs#1) was for the course participants and a second (Qs#2) was generally distributed among all students to learn about the potential course benefits and their understanding of EBM principles and importance. The questionnaires were distributed online as a GoogleForm (all questions were mandatory, one response per IP) and responses were anonymous.

Results Twenty-five students participated in the course. From 152 responses on Qs#1, only 76% agreed that clinical decision-making should be based on scientific evidence. A median frequency of reading medical literature was reported as once a week in their native language and once a month in English. On a scale from 1 to 10, respondents ranked their understanding of scientific manuscripts as 6.3 ± 1.8, their confidence in assessing the quality of research as 5.5 ± 2.1. Respondents rated their interest in staying current with literature as 9.0 ± 1.5, and a potential benefit from learning critical thinking as 8.8 ± 1.6.

In a set of matched questions in Qs#2, course participants reported that the course was valuable, helped build confidence in assessing research articles, and improved critical thinking. Participants vs. non-participants are more familiar with EBM (8.2 ± 2.2 vs. 6.6 ± 2.8, p-value=0.002) and read medical literature more frequently (native language p-value=0.039, English p-value=0.003).

Conclusions Based on prior publications, some Russian medical schools lack an EBM curriculum. By surveying a general medical student population, we found a discrepancy between the current and desired level of understanding of EBM indicating an unmet need. Currently, students feel insecure in applying EBM principles and have a deficiency in reading medical literature, especially in English. The EBM course, one component of an international education program, was established to create a scientific-centered learning environment, to provide expertise in EBM, and to help students overcome linguistic barrier. The participant evaluations showed that the course addressed positively the demonstrated needs of students and improved their reading and understanding of medical literature. We present evidence that reflects need for and benefits of including EBM in the medical curriculum. These findings indicate that international collaboration enhanced the medical students’ educational experience by augmenting previously unavailable curricular content and should be continued.

REFERENCES


TEACHING EVIDENCE BASED PRACTICE – IT’S TIME TO TACKLE THE ‘APPLY’ DOMAIN

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Objectives In 2017 Evidence Based Practice Ireland (EBPI) was established to promote the use of evidence-based practice in the healthcare system in Ireland with the ultimate goal of improving patient outcomes. One of the challenges to the widespread adoption of the EBP paradigm is the lack of teaching of EBP to healthcare professionals. The teaching taking place rarely addresses the domain of how to apply evidence in practice. To address this deficit a three-day workshop in EBP was held in Ireland in March 2019 for practicing healthcare professionals with an emphasis on putting evidence into practice. The aims of the workshop were to develop and deliver a teaching module on ‘evidence into practice’. To empower healthcare professionals to become evidence-based practitioners. To build capacity in teaching EBP and to create international links by inviting speakers form the Centre for Evidence Based Medicine (CEBM) in Oxford.