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**BIRUNI ENGLISH MEDICAL SCHOOL: A DIFFERENT APPROACH  
IN MEDICAL EDUCATION**

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**Abstract**

The importance of medical education which equips the competent future doctors has been recognized in academic life which leads to major changes in the educational models. Integrated curriculums with clearly defined learning outcomes, student-centered approach and more reliable and valid assesment have been formed globally (1).

International dimensions of medical education and advances in medicine fostered the need of change in our existing curriculum and Biruni English Medical School was started in 2019 with a mission to provide the highest quality medical education in Turkey. It is an undergraduate 6-year program with a system based approach integrating basic and clinical sciences. The clinical skills are also embedded across the first 3 years, that emphasize the competencies in history taking, physical examination and clinical reasoning. The program has been enriched by flipped classroom model, early clinical exposure, problem based learning and research opportunities for the students.

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The main goal is to see our students as the top competent future doctors in Turkey and the world by prioritising the patient's needs and understanding the health systems locally and globally.

**Keywords:** medical education, medical curriculum, flipped classroom.

**Program Highlights**

Biruni English Medical School was started in 2019 with a mission to provide the highest quality medical education in Turkey. The MD program was designed by a mixture of futuristic, advanced, innovative and evidence-based methodologies.

It is an undergraduate 6-year program with a system based approach integrating basic and clinical sciences, which enhances the learning process by showing the students the link between the basic knowledge and its use in practice and provides a better understanding with a higher quality in education (2).

In our committees in first 3 years, each body system is introduced by starting with its anatomy, physiology, histology, embryology, biochemistry, then continues with the pathology, pharmacology and the most commonly seen clinical diseases, which are all integrated horizontally and vertically. The committees are enriched with Problem-Based Learning (PBL) sessions, that enables the students discuss many cases in small groups with a facilitator, and create an active learning process (2).

The clinical skills are also integrated across the first 3 years and emphasize the competencies in history taking, physical examination and clinical reasoning. Objective Structured Clinical Examination (OSCE), which is accepted as the gold standard in the assesment of these skills, is performed with a debriefing to each student after the exam (3).

Medical Humanities, ethics, politics and economics of medicine take part in our curriculum to be able to train our students as competent and compassionate future medical doctors globally. Self and active learning is also supported by flipped classroom model in which the students are expected to read before their class and use their time during the class for discussion (4).

The clinical visits begin earlier in the curriculum. This is the first curriculum in Turkey which allows the students observe and take part in clinical settings, starting from the first day. The early clinical exposure has been shown to improve motivation and promote deep learning

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along with better retention of the knowledge (5). Clinical skills are also taught in Introduction to Clinical Practice (ICP) classes on manikins and simulated environments.

Medical research has also been integrated in the curriculum to create the research environment for the students both by teaching the theoretical knowledge on research projects and practice in the research center. Each student is expected to prepare a project proposal and complete it until the end of the 3<sup>rd</sup> year.

Student-centered approach and facilitation of learning enable the students participate the classes actively. The feedbacks we got from student surveys and focus group interviews about our curriculum revealed a higher competency and motivation. The curriculum of our Turkish medical school has also been updated.

The main goal is to see our students as the top competent future doctors in Turkey and the world by prioritising the patient's needs and understanding the health systems locally and globally.

**A Medical Student's Perspective on Our Medical Education Model**

In our university, it is expected us to become both theoretically and clinically equipped physicians. In order to do that, clinical and basic sciences are taught along with integration. For effective learning, flipped classroom model is used. We first study ourselves, then share our knowledge in the classroom by actively participating. After having the required knowledge, we check our understanding of the topic by classroom activities and problem based learning (PBL) sessions. During this process both academicians and students consider each others' feedbacks and this situation helps for filling the gaps both in communication and in knowledge. The importance of flipped classroom model and PBL have been underlined by multiple articles ( 6, 7, 8, 9). By this model, instead of just memorizing the given knowledge, we get the chance of having a deep understanding of the topic and transferring it into our long term memory. Also, we gain the confidence by participating in teamwork, and having courses in leadership and time management.

Our education system also allows to have early clinical exposure (ECE) by visiting clinics as observants starting from the first year. By this way, we get the chance to associate theoretical knowledge with the clinical cases. The necessity of ECE for a complete learning have been shown in the literature (10, 11). As suggested, it allows us to complete the puzzle in our minds, instead of having just the core knowledge. By ECE, we also have been able to understand the

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challenge of being a physician, which allows us to question if we still want to become physicians or not after having the clinical experience with a complete transparency. Thus, we have the chance of making the correct decision about our lives at an early stage.

This educational style makes us feel like physicians starting from the first day of medical school and allows us to gain the knowledge in an effective way. By observing the appropriate way of education, we also get better at independent learning, which is also crucial in life-long learning process of a medical doctor.

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