

E + Jean Monnet Module: Multi-disciplinary Education for Improving Quality of Nuclear Medicine Practice Based on the European Union Regulations and the International Atomic Energy Agency Programs (EDUQUAN), ERASMUS-JMO-2021-HEI-TCH-RSCH

Prof. Dr. Vera Artiko Prof. Dr. Dragana Šobić Šaranović

**Summary**

As a part of the integration into the EU, the national healthcare system, regulatory bodies, insurers and other third-party entities in Serbia are mandating the implementation of the quality indicators in medical practice, adherence to quality standards and compliance with the directions provided by the EU regulatory bodies. Meeting such mandates is essential for medical fields that employ advanced technology and a multi-disciplinary team who have to exercise top safety precautions. Therefore, specialized education on effective and continuous quality improvement (QI) strategies is essential for the nuclear medicine practice since it utilizes radionuclides and radiopharmaceuticals for diagnosis and treatment of different diseases in multidisciplinary settings comprising nuclear medicine physicians, medical physicists, radiopharmacists, electronic engineers, nuclear medicine technologists and nurses. European Association of Nuclear Medicine (EANM) has developed an education aimed at ensuring continuous QI of the entire multidisciplinary team in all areas of the nuclear medicine practice. International Atomic Energy Agency (IAEA) has also been supporting the nuclear medicine education in order to bring them up to the international standards. The two entities have joined efforts by the agreement signed in 2017. Through the finalized Jean Monnet project (586750-2017) we have been conducting education of medical students and nuclear medicine physicians according to the EANM guidelines. To fully meet the EU and IAEA standards, there is a need to broaden such education to other professionals involved in the nuclear medicine practice, namely, nuclear medicine trainees, medical physicists, electronic engineers, radiopharmacists, technologists and nurses. Specialized education and introduction of quality audit and improvement activities are the two essential missing components for elevating the nuclear medicine practice in our region to the level of the EU standards.

**Rezime**

U okviru integracije u EU, nacionalni zdravstveni sistem, regulatorna tela, osiguravači i druga treća lica u Srbiji su u obavezi da primene indikatore kvaliteta u medicinskoj praksi, poštuju standarde kvaliteta i usklađuju sa uputstvima regulatornih tela EU. Ispunjavanje takvih zahteva je od suštinskog značaja za medicinske oblasti koje koriste naprednu tehnologiju kao i za multidisciplinarni tim koji mora da sprovodi vrhunske mere kontrole kvaliteta i sigurnosti. Zbog toga je specijalizovana edukacija o efikasnim i kontinuiranim strategijama poboljšanja kvaliteta (KV) od suštinskog značaja za pramenu u nuklearnoj medicini. Ovo najpre zbog činjenice da se koriste radionuklidi i radiofarmaci za dijagnozu i lečenje različitih bolesti u čemu učestvuju multidisciplinarni timovi koje čine lekari specijalisti nuklearne medicine, medicinski fizičari, radiofarmaceuti, elektro inženjeri, tehničari nuklearne medicine i medicinske sestre. Evropsko udruženje za nuklearnu medicinu (EANM) je razvilo edukaciju koja ima za cilj da obezbedi kontinuirani KV celokupnog multidisciplinarnog tima u svim oblastima nuklearne medicine. Međunarodna agencija za atomsku energiju (IAEA) takođe podržava edukaciju u oblasti nuklearne medicine kako bi znanja dovela do međunarodnih standarda. Ova dva entiteta su udružila napore sporazumom potpisanim 2017. godine. Kroz završeni projekat Žan Mone (586750-2017) sprovedena je edukacija studenata medicine i lekara specijalista nuklearne medicine prema EANM smernicama. Da bi se u potpunosti ispunili standardi EU i IAEA, postoji potreba da se takvo obrazovanje proširi i na druge profesionalce uključene u praksu nuklearne medicine, naime, na volontere i specijalizante u nuklearnoj medicini, medicinske fizičare, elektroinženjere, radiofarmaceute, tehničare i medicinske sestre. Specijalizovana edukacija i uvođenje kontrole unapređenja kvaliteta su dve suštinske nedostajuće komponente za podizanje kvaliteta prakse nuklearne medicine u našem regionu na nivo standarda EU.