

Celebrating the 50th Anniversary of Nuclear Medicine in Türkiye Along with the 100th Anniversary of Turkish Republic

Türkiye'de Nükleer Tıbbın 50. Yılını, Türkiye Cumhuriyetinin 100. Yıldönümü ile Birlikte Kutluyoruz

Murat Fani Bozkurt

Hacettepe University Faculty of Medicine, Department of Nuclear Medicine, Ankara, Türkiye

Keywords: Nuclear medicine, Türkiye, Turkish Republic, anniversary

Anahtar kelimeler: Nükleer tıp, Türkiye, Türkiye Cumhuriyeti, yıldönümü

October 2023 is definitely a very special and unique time for Turkish nuclear medicine professionals, as both the 100th anniversary of the foundation of Turkish Republic will be proudly celebrated with great honour and excitement on the 29th of October and the 50th anniversary of nuclear medicine as an independent medical branch and residency program in Türkiye will be celebrated as well; on the best occasion to host such a special birthday party at the nuclear medicine week in October.

Looking back to history of nuclear medicine in Türkiye, such an honour to state that nuclear medicine had been recognised as an individual medical branch and moreover an independent residency program officially years before many countries in different parts of the world. In the year 1973, nuclear medicine had been officially recognised as a separate and independent medical branch of internal medicine and an individual residency program by Ministry of Health of Republic of Türkiye (Figure 1). This recognition gave rise to a rapid development of nuclear medicine practice, which at the first time avaliable in major cities of Türkiye, such as istanbul, Ankara and izmir and eventually showed a wide distribution all around the country. The first routine medical practice in the area of nuclear medicine mostly involved diagnostic

radioisotopic scans with rectilinear scanners, radionuclide therapy mostly with radioiodine for thyroid disease and plenty of *in vitro* studies, most of which are replaced by non-isotopic counters by time and not being applied currently. The wide use of radioisotopic diagnostic and therapeutic applications as well as the meticulous assays for various hormones, metabolites, vitamines and others with radioimmunoassay and immunoradiometric assay methods gained wide acceptance throughout the medical professionals and absolutely provided strong roots to bloom as modern nuclear medicine practice in Türkiye at the upcoming years (1,2).

As the earlier nuclear medicine practice in Türkiye gave rise to a more established and wide use of radioisotopes both *in vivo* and *in vitro* studies, there came a time to be united under a society and to support this beneficial discipline and the needs of all professionals in the field of nuclear medicine. For such main initiatives and many more, the Turkish Society of Nuclear Medicine (TSNM) was founded in the year of 1975. The headquarter office tor TSNM was chosen to be located in Ankara, the capital of Türkiye and the city where Republic of Türkiye had been founded on 29th of October 1923 (1,2).

Address for Correspondence: Prof. Murat Fani Bozkurt, MD, Hacettepe University Faculty of Medicine, Department of Nuclear Medicine, Ankara, Türkiye E-mail: fanibozkurt@gmail.com ORCID ID: orcid.org/0000-0003-2016-2624

Received: 03.10.2023 Accepted: 03.10.2023





Figure 1. The official recognition of nuclear medicine as an individual residency program in Türkiye, documented on the official paper of the Turkish Republic issued on 18th April 1973

Nuclear medicine has evolved to a more clinical manner in Türkiye like elsewhere in the world where this medical practice was taking place. As parallel to the developments and achievements in the technology and industrial production of both radiopharmaceuticals and imaging systems, clinical nuclear medicine has made its way to rapid rise among other clinical disciplines. Nuclear medicine is so unique that it is not a pure basic or a clinical discipline, but contains naturally basic science and clinical science within its intrinsic structure. This feature as bridging between basic and clinical science for nuclear medicine is also unique in a way that it does not only apply for academic work but also daily routine practice.

How Nuclear Medicine Started in Türkiye?: A Short History Back in Time

The first nuclear medicine practice in Türkiye started with extraordinary personal efforts of Prof. Suphi Artunkal (Figure 2), an internal medicine specialist in the beginning of 1950s in İstanbul. Prof. Artunkal and his team had first used I-131 to treat hyperthyroidism in the Radioisotope Laboratory within Haseki Hospital in İstanbul, of which he was the founder. This success was a real turning point for the rapid development of nuclear medicine practice in Türkiye in the following years.

Türkiye is not only among a few countries in which nuclear medicine applications had found use in routine



Figure 2. Professor Suphi Artunkal, the founder of nuclear medicine in Türkiye

clinical practice but also one of the first countries in which nuclear medicine supplies mainly radionuclides and radiopharmaceuticals had been locally produced. The first local radionuclide production in Türkiye took place at Çekmece Nuclear Training and Research Center in İstanbul in the year 1961, by which Türkiye became one of the first countries to use locally produced Tc-99m-pertechnetate.

Prof. Fevzi Renda and his team founded Radiobiology Institute within Ankara University in Ankara, with support from International Agency of Atomic Energy in the year 1962. Just a few years after, the first rectilinear scanner was installed in Radioisotope Laboratory at İstanbul University in 1965, which gave rise to the foundation of Nuclear Medicine Institute in the following years. Prof. Fevzi Renda in Ankara, Prof. İrfan Urgancıoğlu in İstanbul, Prof. Nail Tartaroğlu in İzmir and Prof. Coşkun Bekdik in Ankara are among the pioneer medical doctors who started nuclear medicine applications in 1960s in Türkiye (1-3).

Short History of TSNM

TSNM was founded by the following nuclear medicine physicians on 9th May 1975:

Prof. Fevzi Renda

Prof. A. İrfan Urgancıoğlu

Prof. Ali Tan Işıtman

Prof. Ali Nail Tartaroğlu

Prof. Coskun Bekdik

Prof. Münir Telatar

Prof. Asım Akın

Dr. Güner Tokuz

Dr. Ergun Ergun

Dr. Behçet İzbırak

Presidents of TSNM

Prof.	Fevzi Renda	1975-1990
Prof.	Coşkun Bekdik	1990-1994
Prof.	İrfan Urgancıoğlu	1994-1996
Prof.	Sema Cantez	1996-1998
Prof.	Ali Tan Işıtman	1998-2002
Prof.	Hatice Durak	2002-2006
Prof.	Haluk B. Sayman	2006-2008
Prof.	Mustafa Ünlü	2008-2010
Prof.	Ömer Uğur	2010-2014
Prof.	Zehra Özcan	2014-2018
Prof.	Gamze Çapa Kaya	2018-2021
Prof.	Tevfik Fikret Çermik	2021-2023
Prof.	Murat Fani Bozkurt	2023-current

Short History of Annual Congresses of TSNM

The first annual congress of TSNM was held as "The 1st National Nuclear Medicine and Biological Sciences Congress" on 28-29 October 1981 in İstanbul and the first congress president was Prof. İrfan Urgancıoğlu.

Türkiye is one of the few countries in which European Association of Nuclear Medicine (EANM) Congress was

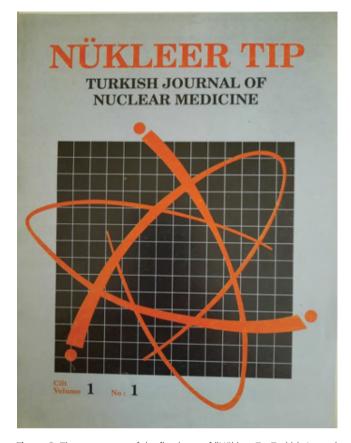


Figure 3. The cover page of the first issue of "Nükleer Tıp-Turkish Journal of Nuclear Medicine", published in 1992

held. The EANM Congress was hosted in İstanbul by the congress president Prof. Hatice Durak in the year of 2005 with great success.

Since the first annual congress in 1981, a total of 35 congresses were held by TSNM until present time.

The Offical Journals of TSNM: Historical Look-back from Molecular Imaging and Radionuclide Imaging

The first official journal of TSNM was published as "Nükleer Tip-Turkish Journal of Nuclear Medicine" (Figure 3) on 30th March 1992 by then-president of TSNM Prof. Coşkun Bekdik as the owner and Prof. Hikmet Bayhan as the first editor. In the year 2011, the name of the Journal was changed as "Molecular Imaging and Radionuclide Imaging (MIRT)" (Figure 4) and went on regular-based publication fully in English language as an international journal by the editor Prof. Hatice Durak of that period. MIRT Journal was indexed in Pub-Med Medline Central as the first time in 2014 and has increased its range of citation indexes at both national and international level since then. Prof. Belkis Erbaş and Prof. Zehra Özcan were the editors-in-chief before the current editor-in-chief Prof. M. Fani Bozkurt.



Figure 4. The cover page of the first issue of "Molecular Imaging and Radionuclide Therapy (MIRT)" in 2011

In addition to MIRT, another journal of TSNM with the name of "Nükleer Tip Seminerleri (Nuclear Medicine Seminars)" (Figure 5) started its publication in Turkish language in the year 2015, on the occasion of 40th anniversary of TSNM and is still being published on regular basis in order to support nuclear medicine training in Türkiye. The first editor of this journal was Prof. Zeynep Burak, followed with Prof. Tamer Özülker as the current editor-in-chief.

Last Words from the TSNM President

Nuclear medicine in Türkiye has a long history for more than 70 years back from the first medical use of radioisotopes and nuclear medicine professionals in Türkiye are so proud to celebrate the 50th anniversary of official recognition of nuclear medicine as an individual medical branch and a residency program along with a very nice occasion of celebrating the 100th anniversary of the Turkish Republic in October 2023. Nuclear medicine in Türkiye will definitely proceed its journey with great achievements in future too, owing to enormous efforts and dedication of not only nuclear medicine physicians but also a great team of

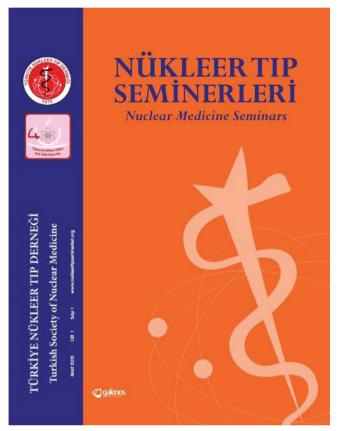


Figure 5. The cover page of the first issue of "Nükleer Tıp Seminerleri Nuclear Medicine Seminars" in 2015

radiochemists, radiopharmacists, physicists, technologists and industry.

On behalf of TSNM Executive Board, I would like to express my sincere gratitude to all of our senior pioneers, colleagues and all team members for their great contributions to nuclear medicine in Türkiye.

Long live Turkish Nuclear Medicine, long live Turkish Republic!

References

- Bozkurt MF, Çermik TF, Sarı O, Çapa Kaya G, Sayit Bilgin E, Güngör F, Özcan Z. Türkiye'de Nükleer Tıp "Tarihsel Yolculuğumuzda Dönüm Noktaları". Nükleer Tıp Seminerleri / Nuclear Medicine Seminars 2015;1(Supplement).
- Ozcan Z, Bozkurt MF, Erbaş B, Durak H. Nuclear medicine training and practice in Türkiye. Eur J Nucl Med Mol Imaging 2017;44:903-908.
- 3. Bozkurt MF. Nuclear Theranostics in Türkiye. Nucl Med Mol Imaging 2019;53:11-13.