



Presentation of the Arrhythmias Working Group of the Association of Cardiologists of Uzbekistan



UZBEKISTAN

Uzbekistan, located in Central Asia, is home to a population of approximately 37 million (as of April 2024), making it the third most populated Post-Soviet Union country. The Ministry of Healthcare plays a central role in regulating and implementing healthcare services for the population. Healthcare in Uzbekistan is provided by both public and private organizations, with funding coming from out-of-pocket payments and social insurance for those in need.

Cardiologic care is a crucial aspect of the healthcare system in Uzbekistan. According to the official statistics, cardiovascular mortality consists 61% of total mortality in 2023. The Republican Specialized Scientific Practical Medical Centre of Cardiology, situated in the capital city of Tashkent, serves as the primary provider of public health services for cardiac care. Additionally, the center operates 12 branches across the country, ensuring geographic accessibility to specialized cardiac care services for individuals in all regions of Uzbekistan.

The Republican Specialized Scientific Practical Medical Centre of Cardiology offers a comprehensive range of services aimed at addressing various cardiac conditions. Through continuous advancements and dedicated efforts, the center strives to enhance cardiac care standards and improve outcomes for patients across Uzbekistan.



Cardiac electrophysiology in Uzbekistan

The introduction of cardiac device implantations (pacemaker) in 2000 marked a significant advancement in cardiac care in Uzbekistan. Building upon this foundation, first cardiac electrophysiological procedures were initiated in 2009, further expanding the scope of specialized cardiac services available to the population.

As of the beginning of 2023, Uzbekistan is proud to have a team of 29 cardiac electrophysiologists who are dedicated intervention cardiologists specializing in the diagnosis and treatment of cardiac arrhythmias. However, it is important to note that there is currently no specialized national certification for electrophysiology (EP) in Uzbekistan. Nevertheless, these professionals have undergone extensive training through internships at leading clinics in Russia, Turkey, Kazakhstan, Germany, and Belarus.

Furthermore, Uzbekistan's clinics host masterclasses conducted by renowned specialists from Switzerland, Russia, and Kazakhstan, among others. This demonstrates the country's commitment to advancing cardiac care and ensuring that its citizens have access to the latest medical interventions and expertise in managing cardiac arrhythmias.

The presence of cardiac electrophysiology specialists in Uzbekistan has had a profound impact on patient care, enabling timely diagnosis and treatment of various cardiac rhythm disorders. By providing these specialized services locally, patients can receive comprehensive care without the need for extensive travel or seeking treatment abroad.

Looking ahead, Uzbekistan continues to prioritize the development and expansion of cardiac electrophysiology services. Efforts are underway to further train and equip healthcare professionals in this field, ensuring that the population has access to the latest advancements in cardiac arrhythmia management.

Number of procedures for years 2019 and 2022

(According to survey conducted for 3rd and 4th versions of ESC Atlas)

Procedures	2019	2022
Pacemaker implantations	597	736
ICD implantations	6	34
CRT implantations	6	36
EP Procedures	671	1258
AF ablations	661*	304
SVT ablations		1008
VT ablations		356

*data about ablation procedures were collected without specific entities



ARRHYTHMIAS WORKING GROUP OF THE ASSOCIATION OF CARDIOLOGISTS OF UZBEKISTAN



The Association of Cardiologists of Uzbekistan (ACU) was established on November 1, 2004, with the aim of fostering collaboration and advancement in the field of cardiology in Uzbekistan. Since its inception, the ACU has played a pivotal role in promoting cardiovascular health and enhancing cardiac care services throughout the country. As part of its organizational structure, the ACU comprises several working groups dedicated to specific areas of cardiology. Among these is the Arrhythmias Working Group (Arrhythmias WG), founded to address the challenges associated with cardiac arrhythmias, electrophysiological procedures, and cardiac implantable devices.

Chairman:

Professor Nodir Zakirov

Vice-chairman:

Amrikulov Bakhtiyor

Chair of young group and Young EP ambassador in EHRA:

Mirakhmadjon Mirmaksudov

The main goals. The Arrhythmias Working Group of the ACU is dedicated to advancing the management of cardiac arrhythmias in Uzbekistan through a series of focused initiatives:

- **Reduce Burden of Cardiac Arrhythmias:** The WG aims to implement strategies aimed at reducing the burden of cardiac arrhythmias across Uzbekistan through improved prevention, diagnosis, and treatment measures.
- **Develop Electrophysiological Procedures and Cardiac Implantable Device Therapy:** The WG is committed to advancing the development and accessibility of electrophysiological procedures and cardiac implantable device therapy within Uzbekistan's healthcare system, ensuring that patients have access to state-of-the-art treatment modalities.
- **Enhance Research Field in Cardiac Arrhythmias:** By fostering a supportive environment for research, the WG seeks to enhance the understanding of





cardiac arrhythmias through local research initiatives, academic collaborations, and participation in international research forums.

- **Update Knowledge on Cardiac Arrhythmias:** The WG aims to provide continuous education and professional development opportunities for cardiologists in Uzbekistan, ensuring that they remain updated on the latest advancements and best practices in the field of cardiac arrhythmia management.
- **Facilitate Collaboration with International Organizations:** Through collaboration with esteemed organizations such as the European Heart Rhythm Association (EHRA), the WG endeavors to facilitate knowledge exchange, promote best practices, and foster international partnerships to further enhance cardiac arrhythmia management in Uzbekistan.

Activities. To achieve its goals, the WG of ACU conducts a range of activities focused on advancing the management of cardiac arrhythmias in Uzbekistan:

- **Scientific Sessions:** The WG organizes scientific sessions, including joint sessions with esteemed organizations such as the European Heart Rhythm Association (EHRA) (October, 2023) and other international societies, during the annual scientific meetings of the Association of Cardiologists of Uzbekistan. These sessions provide opportunities for knowledge exchange and collaboration on the latest advancements in cardiac arrhythmia management.
- **Education:** Throughout the year, the WG facilitates proctor sessions conducted by cardiac electrophysiologists from around the world, with a particular emphasis on these sessions during the annual scientific meetings of the ACU. These sessions aim to enhance the skills and knowledge of healthcare professionals in Uzbekistan through interactive learning experiences and hands-on training.
- **Guideline Translation and Adoption:** National recommendations and clinical protocols have been developed, adapted to local conditions, for the management of patients with atrial fibrillation, ventricular arrhythmias and sudden cardiac death, SVT, bradycardia and syncope based on the relevant ESC recommendations.
- **Research:** Members of the WG engage in various scientific projects funded by the Ministry of Innovation and Higher Education of Uzbekistan. These projects focus on areas such as atrial fibrillation and sudden cardiac death, aiming to advance understanding, diagnosis, and treatment modalities for cardiac arrhythmias through innovative research endeavors.



- **Development of EP in Rural Areas:** The WG facilitates the development of electrophysiology (EP) services in rural areas by organizing proctor sessions conducted by EP specialists from main centers across Uzbekistan. Through these sessions, rural hospitals receive training and support in establishing EP services; with some centers already equipped with EP stations and others, utilizing portable EP stations to expand access to specialized cardiac care in remote regions.