## CHAIRMAN OF THE ASSOCIATION OF CARDIOLOGY OF UZBEKISTAN, DIRECTOR OF THE REPUBLICAN SPECIALIZED CENTER OF CARDIOLOGY, LAUREATE OF THE STATE PREMIUM OF THE I DEGREE, HERO OF UZBEKISTAN,

## PROFESSOR RAVSHANBEK DAVLETOVICH KURBANOV – 70 YEARS!



Kurbanov Ravshanbek Davletovich was born on December 5, 1947 in Khiva, in the family of employees. After graduating from high school with a gold medal, in 1966 he entered the Samarkand Medical Institute, graduated it with honors in 1972 and until 1976 worked as a doctor therapist in the city of Khiva. Scientific school – clinical residency (1976-78), postgraduate study (1978-1981), doctoral studies (1986-1987) he completed in the Scientific Center of Cardiology (formerly All-Russian Cardiological Scientific Center and now – Scientific Medical Research Center of Cardiology, Moscow) under the guidance of prof. N.A. Mazur and academician Ye.I. Chazov, in 1981 he defended the candidate's, and in 1987 – doctoral dissertation on "the diagnosis and treatment of ventricular arrhythmias".

Опыт и знания, приобретённые в кардиоцентре, позволилиExperience and knowledge ,acquired in the cardiology center, allowed Ravshanbek Davletovich from 1981, for the first time in Central Asia and Uzbekistan, allowed to establish a new direction – arrhythmology in the Republican Scientific Research Institute of Cardiology.

The cycle of scientific research, that were started under direction of R.D. Kurbanov in the early 80's of the last century, is the study of new anti-arrhythmic and cardiotropic drugs, including those developed by scientists of the Institute of Chemistry of Plant Substances of Uzbekistan such as allapinin, alezin, ecdysthene, aksaritmine, etc. These drugs, and in particular allapinin, have been tested for "strength" by scientists of CIS(especially, by All-Russian Cardiological Scientific Center), the United States and several other countries. Allapinin took his worthy place among the export goods of Uzbekistan. By the decree of the President of the Republic of Uzbekistan dated August 24, 2007, a group of

scientists of the Republic, including R.D. Kurbanov, for the cycle of works "Development and creation of a new domestic drug of antiarrhythmic action (Allapinin), its introduction into clinical practice and organization of its mass production" was awarded a State premium pf the first degree in science and technology.

Since 1990, the main subject of scientific research development of P.D. Kurbanov becomes a problem of sudden cardiac death in patients with coronary heart disease, in particular, those who had myocardial infarction. Such monographs of Kurbanov R.D., such as "Myocardial infarction, Life prognosis", "Atrial fibrillation", "Cardiology manual", "Manual on ventricular arrhythmias", "Arterial hypertension", "VentricularArrhytmias", published in the USA, gained wide recognition among scientists and doctors in Uzbekistan and CIS countries. Kurbanov R.D. is the author of 9 inventions and over 500 publications.

Under his leadership, the scientific research institute of cardiology is carrying out large-scale scientific research works, including international multicenter studies on sotalol and nebivolol (ENECA), the results of which are reported at the congresses of the European Association of Cardiologists.

Since 1987, R.D. Kurbanov combines research activity with organizational activity. The leadership of the Ministry of Health nominates him to work in the Academic Medical Council, and then appoints him as the chief therapist of the country. He adequately copes with all duties, which leads to his appointment as the first rector of the Urgench branch of TashGosMI (1992). Four years in the post of rector brought P. D. Kurbanov universal recognition of the medical community of the Republic, followed by his reputation as a major organizer, which allowed to nominate him in 1997 to the position of Director of Cardiology Research Institute of the Republic of Uzbekistan.

All these years the Cardiology Research Institute, performing the functions of the scientific, organizational and methodological center of the cardio service of the Republic, did not have its own clinical base and huddled on two floors and in the basement of the 11th building of TashGosMi, which practically did not allow to performe the assigned tasks. Organizational talent and energy of the young scientist allowed him to create a school of pupils and followers in a short time. In 1999, the Institute of Cardiology was transferred to the base 15 of the City Clinical Hospital, and in 2003 was awarded the honor of being among the four best medical institutes of the country by the Decree of the President to be transformed into the Republican Specialized Center of Cardiology.

Centers received large privileges at the state level – they were completely exempted from taxes, a large-scale reconstruction was done with significant budgetary investments, they were equipped with modern high-tech equipment, salaries of

medical staff and doctors increased in 2-2.5 times, specialists of the Centers got an opportunity to complete training in leading hospitals of the world.

In the Republican specialized center of Cardiology for the first time in the Republic was organized 7 specialized cardiology departments: emergency cardiology and acute myocardial infarction, coronary heart disease and atherosclerosis, arterial hypertension, cardiocerebral pathology, cardiac arrhythmias, rehabilitation, chronic heart failure and noncoronary myocardial diseases. The creation of specialized departments, their equipping with modern medical diagnostic equipment made it possible to solve the problem of providing high quality cardiac care to the population of the Republic at the level of international standards. Improving the quality of cardiovascular care made it possible to reduce hospital mortality in 2-3 times in comparison with indicators of 2002.

At the head of the branches stood associates and students of R.D. Kurbanov, who grew up in leading specialists in their areas. The main achievement of the new center was the idea of synthesizing the scientific potential of the Schientific Research Institute of Cardiology: 12 doctors and 37 candidates of sciences with clinical practice. This allowed to create a mobile cardiological research and production complex and to reduce the path of advanced scientific achievements from theory to practice. Fundamental and scientific developments have been realized not only in the units of the Center, but also in its branches - regional cardiological dispensaries that provide organizational, methodological and therapeutic assistance to the population of the regions of the Republic. With the creation of the Cardiology Center, the task of establishing a single cardiovascular service was finally solved: the Republican Center - regional cardio dispensaries - district offices capable of solving complex problems related to the diagnosis, prevention and treatment of cardiovascular diseases.

Under the direct supervision of Kurbanov Ravshanbek Davletovitch, the III Congress of the Association of Cardiologists of Central Asia (1997), the IY-Y-YIIC Cardiology Congress of Uzbekistan (2000-2015), the 5th Congress of Cardiologists of the CIS countries (2005) were successfully conducted. A high level of these events was provided by the active participation of the leading cardiologists of Russia, Belarus, Ukraine, Kazakhstan, Azerbaijan, Armenia, Kyrgyzstan, Tajikistan, Turkmenistan, other CIS countries and far abroad.

Ravshanbek Davletovich actively participates in strengthening both bilateral and multilateral relations between cardiologists of CIS countries. He becomes a member of the editorial board of well-known magazines: "Cardiology", "Eurasian Cardiology Journal", "Russian Cardiology Journal", "Medical Journal of Uzbekistan", "Bulletin of the Association of Doctors of the Republic of Uzbekistan". On his initiative since 2006 the journal "Cardiology of Uzbekistan" was founded, in which he is still the main editor.

RSCC becomes the largest forge of personnel for the cardio service of the Republic: starting from 2014, the RSCC regularly conducts out-of-town workshops in the regions, since 2011, together with TashlUVim, 93 cardiologists have been trained with the issuance of a certified certificate, for 5 years in clinical residency (2 years) – 108 clinical residents in the specialty of cardiology.

One of the most important activities of the RSCC, following arrhythmology, became epidemiology and prevention. In 2005, according to the prospective observation, employees of the RSCM Ministry of Health of the Republic of Uzbekistan verified the cause of death for the 25-year period from 1979 to 2005 of 799 people (who had primary examination), the structure of the overall mortality, the main risk factors and the real possibility of reducing the death rate among the population.

In 2008, the Laboratory of Molecular Genetic Studies was set up in the RSSC, equipped with modern equipment. for the first time research has been initiated to create genetic passports of hypertension, coronary heart disease among the population of Uzbekistan, which was recognized and published in leading international cardiology publications. With the creation of the Center, the introduction of scientific achievements into practice was simplified. So, for example, in the field of coronary artery disease and atherosclerosis treatment, the effectiveness of domestic cholesterol-lowering drugs, such as oligvon, curetzin, flateron, flanorine, which are then introduced into practice, was investigated.

Because of well-planned policy of the head of the Center, in recent years, the potential for high-tech interventions steadily increased, performed in RSCC:

- In 2008, the RSCC, for the first time in Central Asia, opened a new high-tech department of interventional arrhythmology, mastered the methods of electrophysiological diagnostics and minimally invasive treatment of arrhythmias. In recent years, two-chamber pacemakers, implantable cardioverter-defibrillators, and cardiac resynchronization therapy have been successfully performed. At the same time, the cost of interventions is significantly lower than abroad, they are well tolerated by patients, saving them from the risk of sudden death and the need for lifelong reception of antiarrhythmic drugs.
- In 2010, at the expense of budget and own funds (sponsorship and Bank loan), a consultative polyclinic was built for 250 visits per day and put into operation in 2011.
- In 2010, for the RSSC, a universal cardioangiographic system was procured at the expense of the state budget, a new high-tech department of X-ray endovascular surgery and interventional interventions on the main arteries (including coronary, carotid, renal, peripheral) was opened. In 2015, 1396 coronary angiography was performed, stenting of the

coronary and carotid arteries was performed to 776 patients. In 2016, under the tender of the Ministry of Health, a new cardioangiographic system was purchased, which allows to double the number of interventions, including patients with myocardial infarction. Since 2014, implantation of biological soluble stents were introduced, as well as new types of care on carotid and other major and peripheral vessels.

- In April 2015, on the initiative and under the direct supervision of R. Kurbanov. The Cardiology Center opened a new high-tech department of cardiac surgery, in which aortocoronary bypass surgery is performed on a working heart and in conditions of artificial circulation, as well as interference with congenital and acquired heart defects.

At the initiative of the Director of the Center, funds were found: the leading specialists of the Center were trained both in Uzbekistan and abroad – at the Republican Specialized Center for Surgery named after, acad. Vakhidov, as well as in the Federal state budgetary institutions of the Ministry of Health of the Russian Federation: "The Scientific Center for Cardiovascular Surgery named after academician A.N. Bakuleva" (Moscow), "North-West Federal Medical Research Center named after academician V.A. Almazova" (St. Petersburg), "National Medical Research Center of Cardiology " (Moscow), "Siberian Federal Biomedical Research Center named after Academician E. Meshalkin" (Novosibirsk), "Research Institute of Cardiology of Tomsk Scientific Center of Siberian Branch of the Russian Academy of Sciences" (Tomsk). The managers of the operating unit were also trained in the RSCC. acad. Vahidov. The nurses of the operating unit were also trained in the RSCC named after academician Vakhidov. Leading specialists from Russia - professors and academicians conduct their master classes at the Center on a regular basis in 2015-2017: Sigayev I.Yu., Popov A.V., Osiev A.G., Boboshko A.V., Redkin D.A., and also professors: Robert Gil (Poland), President of the Foundation "EurAsia Heart Foundation" (Zurich, Switzerland), prof. Paul Robert Vogt, prof. Olaf Walter Franzen (Zurich, Switzerland). This greatly contributes to the growth of skills of young professionals, including those involved in the RSCC.

Over the past year, over 200 of arterial coronary artery bypass graft operations have been performed, 90% of which are on the working heart, and over 100 other surgical procedures, including congenital and acquired heart defects. At the same time, due to professional skills and high technological equipment, the statistical results on the effectiveness and safety of this most complex contingent of patients exceed the average European level.

To meet the growing need for high-tech medical care, in 2015-2016, a new building of high-tech diagnostic and treatment methods is being built in the RSCC. It gradually installs new high-tech equipment, which is purchased under the loan of KfW-Bank, Germany due to project "Equipping"

the Republican Specialized Cardiology Center with high-tech medical equipment "for the amount of 3.0 million euros. The opening of new operating rooms in the new building of the RSSC will significantly increase the volume of affordable high-tech cardio surgical care in the RSSC.

In 2017, the construction of the Main Building started, in which the administration of the Center, the Department of Cardiovascular Pathology for 40 beds, the sleep laboratory, service and educational units will be located.

Annually more than 40 000 patients with different forms of cardiovascular diseases from all regions (over 50%) are sent to the Center for outpatient and inpatient treatment. 80% of patients are patients with coronary artery disease and arrhythmia. Angiography and interventional interventions that completely restore blood flow in the coronary arteries, eliminate cardiac arrhythmia and restore work capacity, coronary artery bypass grafting on the "beating" heart, and interventions for congenital and acquired defects are performed in more than 20 percent of patients. The Center has successfully mastered the methods of transcatheter transplantation of the intra-aortic valve, radiofrequency isolation of the mouth of pulmonary vein in AF, the installation of an artificial cardioverter-defibrillator cardiac resynchronizing therapy, transthoracic microcoronary shunting, stenting of carotid and vertebral arteries, combined and hybrid cardiovascular operations.

Under the guidance of R.D. Kurbanov, the Center's staff develops adapted standards for the diagnosis and treatment of cardiac patients in the regions and other regulatory documents for the successful functioning of the Republican Specialized Center of Cardiology and cardiological network of the Republic. Under the government's decision, large-scale works are being carried out to establish RSCC branches in the regions, with the organization of high-tech departments of X-ray endovascular surgery, cardiosurgery. RSCC is working on their staffing, which allows to administrate high-tech interventions on the ground. Turning back in the past and looking to the future, it is difficult to overestimate the long-term contribution of Professor Kurbanov R.D. in the construction of the vertical of the cardiological service on a national scale.

Creative, organizational, pedagogical and therapeutic activity of R.D. Kurbanov was highly appreciated by the state: he was awarded the honorary title "The Honored Worker of Health of the Republic of Uzbekistan" (1997), the State Award of the 1st degree in Science and Technology (2007), the Medal "For Selfless Service" (2010), the title "Hero of Uzbekistan" with the presentation of the Gold Medal (2016). The path passed by the RSCC under the leadership of R. Kurbanov, from the Scientific Institute, completely cut off from practice, to the modern cardiological research and production complex, that has mastered completely the process of necessary interventions in the hardest contingent of patients: from outpatient

diagnostics to aortocoronary shunting on the working heart, is an evidence of vitality of the State health policy and the realization of inexhaustible staff potential of the Republic.

Dear Ravshanbek Davletovich! Congratulations on your 70th birthday! Accept our most sincere and heartfelt congratulations. We wish you new creative successes in your professional work, optimism and inexhaustible self-confidence, good health for the implementation of the most ambitious plans, well-being and personal happiness!

On behalf of, Association of Cardiologists of the Republic of Uzbekistan,

the staff of the Republican Specialized Cardiology Center, the editorial board of the journal "Cardiology of Uzbekistan" and the "Eurasian Cardiology Journal"