Department of Family Medicine
NWGMU named after I.I. Mechnikov. First 25 years

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The article describes the history of the creation of the Department of Family Medicine of the NWGMU named after I.I. Mechnikov, notes the role of international projects in its establishment and development of the main areas of activity. Examples of successful long-term cooperation are given, in particular, with the University of Iowa (USA). The main stages of the formation of teaching the specialty “General Practice (Family Medicine)” within the framework of professional retraining of primary health care doctors and residency are described. The importance of using various interactive technologies in the learning process is emphasized, including the development of skills in simulation conditions, which were introduced at the department long before their use in the process of accreditation of specialists. The features of teaching the discipline “Poly-clinic Therapy” for the 6th year students of the medical faculty, as well as the experience of leading scientific research that was carried out by participants of the student scientific society are noted. The main directions of scientific research carried out at the department in recent years are described, aimed at a comprehensive study of the features of the management of elderly patients in general medical practice and the prevalence of chronic obstructive pulmonary disease (COPD) in St. Petersburg and Arkhangelsk. The role of international cooperation in the implementation of large-scale scientific projects, in particular with the Catholic University of Leuven (Belgium), is emphasized. The perspectives for the development of the Department of Family Medicine in the near future are outlined.

Keywords: family medicine; training; publishing; international projects; research.

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В статье изложена история создания кафедры семейной медицины СЗГМУ им. И.И. Мечникова, отмечена роль международных проектов в ее учреждении и развитии основных направлений деятельности. Приведены примеры успешного долгосрочного сотрудничества, в частности с университетом Айовы (США). Описаны основные этапы становления преподавания специальности «Общая врачебная практика (семейная медицина)» в рамках профессиональной переподготовки врачей первичного звена здравоохранения и ординатуры. Подчеркнута важность использования различных интерактивных технологий в процессе обучения, включая отработку навыков в симуляционных условиях, которые были внедрены на кафедре задолго до начала их использования в процессе аккредитации специалистов. Отмечены особенности преподавания дисциплины «Поликлиническая терапия» для студентов 6-го курса лечебного факультета, а также представлен опыт руководства научными исследованиями, которые были выполнены участниками студенческого научного общества. Рассмотрены основные направления научных исследований, реализуемых на кафедре в последние годы, направленных на всестороннее изучение особенностей ведения пожилых пациентов в общей врачебной практике и распространенности хронической обструктивной болезни легких в Санкт-Петербурге и Архангельске. Выделена роль международного взаимодействия при реализации масштабных научных проектов, в частности с Католическим университетом Левена (Бельгия). Обозначены перспективы развития кафедры семейной медицины в ближайшем будущем.

Ключевые слова: семейная медицина; обучение; издательская деятельность; международные проекты; научные исследования.

The Department of Family Medicine was founded in 1996 due to cooperation between the Saint Petersburg Medical Academy of Postgraduate Studies (SPbMAPS) and the University of Iowa (USA). [1]. O.Yu. Kuznetsova (Honored Worker of Higher Education of the Russian Federation, MD, PhD, and DSc) is the head of the Department since its foundation. The Russian-American project aims to train a new generation of family medicine teachers. Therefore, a new department was organized to combine the Russian traditions of training doctors at the postgraduate level and modern educational technologies used by Western universities. Family doctor residency training at the University of Iowa occurs primarily by participation in the management of patients observed by a teacher at a university outpatient clinic. The Family Medicine Center, which became the clinical base of the Department, was created and equipped to implement this practice in the Russian context.

The first grant received by SPbMAPS initiated numerous international projects that are still being implemented by the Department of Family Medicine, which has already become part of the Therapeutic Faculty of the I.I. Mechnikov North-Western State Medical University (NWSMU). The success of interaction with international partners is evidenced by Professor Gerald Jogerst. He led the training of our young doctors in the USA; and has been coming to Saint Petersburg for 24 years [2]. His interactive seminars and brilliant reports at conferences organized by the Department always attract the attention of the participants in these events. He takes particular pleasure in interacting with the Department’s residents and young family doctors (Fig. 1).

The Department of Family Medicine has been part of the Therapeutic Faculty from the first days of the organization of the NWSMU. Given the experience of teaching primary care physicians, the university administration entrusted the Department with a very responsible task, i.e., to train 6th-year medical students in the “Outpatient Therapy” program. Eventually, the program has been significantly expanded due to updating the educational standard and transitioning to a system of accreditation of specialists. The changes made to the program were aimed both at preparing the graduates to pass the primary accreditation successfully and forming specialists ready and able to work independently as primary care physicians. In this regard, the Department was required to expand the training of students in the outpatient setting, work out a system of on-the-job training under the guidance of mentoring physicians, and ensure control over mastering the necessary competencies. This work begins during the summer internship after the 5th year when students work side by side as assistants of a general practitioner or primary care physician for a month and gradually learn the specifics of providing care in the outpatient setting. All these tasks would be impracticable without the participation of teachers from among the representatives of practical healthcare.

In addition to traditional teaching in the form of lectures and practical classes, the Department’s staff has been actively using the capabilities of the Accreditation and Simulation Center of the University since 2017, which allows preparing students for primary accreditation effectively.

Among the students, we annually meet talented young people who are ready to engage in scientific research. Since 2012, a Student Research Society (SRS) has been functioning in the Department. Initially, the SRS consisted of a few graduate students, whereas in recent years, it has had 30 to 40 members, including students of the 5th year. Based on students’ research papers, articles are published, and reports are prepared for the annual “Mechnikov Readings” conference. In 2020, two SRS participants (Yu. Petrosyan and R. Dumbadze) became prize-winners of the All-Russian Contest of Young Scientists within the framework of the All-Russian Congress on Gerontology and Geriatrics with international participation (headed by Prof. Ye.V. Frolova).

Training of students is conducted in parallel with extensive work on training general practitioners, primary care physicians, and other specialists who work in the primary healthcare system. A total of 5438 specialists were trained at different courses since 2011 up to the present time, including 18 nurses and 207 physicians, who have undergone professional retraining on specialty “General Medical Practice (Family Medicine).”

An important area of work is the training of residents. A total of 84 residents have been trained, most of whom work in various state medical organizations in their chosen specialty.

The Department widely uses simulation technologies, and due to international cooperation, a small simulation class was equipped with manikins and phantoms (Figs. 2 and 3).

The teachers of the Department conduct comprehensive resuscitation courses for both general practitioners and...
university residents. Currently, this training program has become a compulsory element of residency training. A total of 2880 residents were trained, primarily from the departments that are part of the Therapeutic Faculty.

The Department’s staff tries to respond to the educational needs of primary care physicians. In this regard, 23 new educational programs have been prepared for over nine years. Our team participated in the pilot project of the Ministry of Health of the Russian Federation on testing the principles of continuous medical education. Subsequently, programs were developed for 15 courses of 36 academic hours, which are in demand by general practitioners in the city and other regions as part of the periodic accreditation program. The work of the regional Saint Petersburg Association of Family Medicine (founded in 1999), whose president is D.N. Zelenukha (Department’s Assistant, MD, PhD), also contributes to implementing the continuing medical education program.

Scientific work of the Department of Family Medicine for all years of its existence was performed in the fields and areas, which were close to the activities of a general practitioner. These were large scientific projects that proved the effectiveness of patient education and the prevention of risk factors for cardiovascular diseases at the primary care stage. The projects were devoted to analyzing and examining the quality of the general practitioner’s activities, the social determinants of women’s reproductive health, the problem of domestic violence, and ways to overcome its negative consequences. These projects were conducted within international cooperation with universities in the USA (Iowa), Norway, Finland, and Great Britain (Fig. 4).

Within the framework of integrated research work, two scientific projects are currently ongoing, i.e., “The Elderly Patient in General Practice” based on the Crystal and the Eucalyptus studies and “Research on the Prevalence and the Diagnosis of Chronic Obstructive Pulmonary Disease and its Tobacco-Related Etiology in Two Cities of the North-West of Russia.” A distinctive feature of the Department’s studies is a close relationship with practical healthcare and the participation of primary healthcare physicians in conducting research and analyzing the results.

A total of 14 PhD theses and four doctoral theses have been defended since the Department was founded. Currently, one doctorate thesis and two PhD theses are being prepared. Three doctors of sciences work at the University. The Department’s staff actively introduces the results of scientific activity by publishing papers in journals, program manuals, textbooks, and monographs. Thus, three national guidelines (in general medical practice and geriatrics), three editions of selected lectures on family medicine, guidelines on patient education, preventive medicine, practical skills, and palliative care were prepared. The first national manual, “General Medical Practice” (ed. by Prof. I.N. Denisov and Acad. of RAMS, Prof. O.M. Lesniak), was published in 2013. This manual was translated into the Kazakh language in 2016 and published as an updated and supplemented edition (ed. by O.Yu. Kuznetsova, O.M. Lesnyak, and Ye.V. Frolova) in 2020.
The national guidelines on geriatrics (ed. by O.N. Tkacheva, Ye.V. Frolova, and N.N. Yakhno) were published in 2018. The Department prepared 47 educational and teaching manuals for advanced training courses and students, and 42 training films were made. A total of 19 monographs were published, and 71 chapters in monographs were written. In addition, 179 articles were published in journals from the list of the Higher Attestation Commission, and 30 articles were published in foreign journals.

At the initiative of the Department, a scientific and practical journal, “Russian Family Doctor” (editor-in-chief — O.Yu. Kuznetsova), has been published. It is included in the core of the Russian Science Citation Index since 1997.

The Department's staff are members of the Russian Association of General Practitioners (vice-president — O.Yu. Kuznetsova). They organize all-Russian events, i.e., congresses and forums of general practitioners, and provide a scientific program and publications of materials. Since 2015, the Annual Spring School of Practical Geriatrics has been held. It attracts geriatricians and general practitioners from all regions of the Russian Federation. Representatives of foreign universities and clinics are involved in teaching.

Many scientific achievements of the Department’s staff resulted from joint international projects. The Department cooperates with universities in the USA (Fig. 5), Belgium, Norway, Israel, and Kazakhstan.

The clinical practice of the Department’s staff is performed at the Family Medicine Center of the NWSMU (headed by Zh.V. Pleshanova). Under the guidance of teachers, residents receive patients of different age groups, conduct clinical examinations, and introduce new technologies for diagnosing and treating diseases.

During the COVID-19 pandemic in 2020, the residents of the Department actively participated in the activities aimed at preventing the spread of coronavirus infection in four university dormitories under the supervision of the Head of the Department, Professor O.Yu. Kuznetsova and the Head of the Center of Family Medicine Zh.V. Pleshanova. Since April 2020, daily thermometry was performed. The symptoms characteristic of COVID-19 were detected to isolate patients with mild forms of this infection and contact persons in the observation facility, which was opened at the dormitory located at 45 Prosveshcheniya Ave. Residents of the departments of family medicine, infectious diseases, and clinical laboratory diagnostics worked here within 24 hours until July 17, 2020. This work prevented the spread of infection among university students living in the dormitories (about 700 people for this period).

Fig. 5. Professor O.Yu. Kuznetsova (head of the Department of Family Medicine) with professors of the University of Texas after the joint conference (2019)
The comprehensive and successful work of the Department would not be possible without the team of like-minded people that formed in recent years. The staffing of the Department is 12.75 teachers, who are represented by five professors, nine associate professors, and six assistants. Many teachers conduct important extracurricular activities. Thus, the head of the Department, professor O.Yu. Kuznetsova is a Chief External Expert in General Medical Practice of the Health Committee of Saint Petersburg and the Ministry of Health of the Russian Federation for the North-Western Federal District (NWFD); Professor Ye.V. Frolova is a Chief External Expert in Geriatrics of the Ministry of Health of the Russian Federation for the NWFD and Vice-President of the Russian Association of Geriatricians; Professor O.M. Lesnyak is a President of the Russian Association on Osteoporosis; Associate Professor L.N. Degtyareva is a member of the commission for primary and specialized accreditation in the specialty “General Medical Practice (Family Medicine)”; and Associate Professor I.Ye. Moiseeva is an executive secretary of the scientific and practical journal “Russian Family Doctor.”

Development prospects of the Department. The Department has sufficient premises and equipment to train students and physicians at a current level. In the near future, student training will be expanded by teaching foreign citizens the course “Outpatient Therapy” in English. In addition, the SRS expansion plans include fourth- and fifth-year students. This will allow implementing larger-scale scientific projects, the results of which will be published in journals recommended by the Higher Attestation Commission and international periodicals. The scientific potential of the Department’s staff in conducting clinical trials and research in accordance with the state assignment and participating in complex research topics with other federal institutions has not been fully realized.

Thus, our team has plans for further development, hoping that the Department will not suffer from stagnation in the next quarter-century, which means that we have a future.

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