

On the history of student scientific societies in public health: scientific circles at the Department of Social Hygiene

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Abstract

This paper examines key aspects of the formation and work of student scientific circles at the Department of Social Hygiene and the Department of Public Health and Healthcare of Sechenov University. Russia's first scientific circles were established at Imperial Moscow University. Learned societies, such as the Moscow Society of Naturalists and the Moscow Society of History and Russian Antiquities, also emerged. Staff at the Department of Social Hygiene, established in 1922 at the Faculty of Medicine of First Moscow State University, began addressing issues relating to the health of workers and mitigation of adverse social factors affecting workers' health. One of the tasks facing the student scientific circle created at the Department of Social Hygiene on 3 November 1922 was to familiarise students with the research and practical work of the department's staff and to introduce them to research work. Today, the primary tasks of the student scientific circle at the Department of Public Health and Healthcare of I.M. Sechenov First Moscow State Medical University are: improving the level of training of medical professionals, preserving, maintaining, and advancing the traditions of domestic medical education, creating an environment to foster young talent, promoting creative thinking, interest in the profession and research among students, facilitating the practical implementation of research, popularising scientific knowledge, and providing career guidance to students interested in research for their subsequent enrolment for fellowship. The make-up of the student scientific circle changes every year. Its members carry out their first scientific research, which they present as papers.

Keywords

history of Russian healthcare, student scientific circle, Russian medical education, social hygiene, preventive medicine, public health

The significance of student research for the professional development of future scientists and practitioners cannot be overstated. Many scientists and health professionals began their research work in student scientific societies, where, under the guidance of mentors, they conducted their first research and presented their results for evaluation by colleagues. The first medical student scientific circle

on social hygiene was created at the Department of Social Hygiene of the Faculty of Medicine of First Moscow State University,¹ which was formed in 1922 (Gorelova and Kasimovskaia 2015).

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The first student scientific societies were established at Imperial Moscow University. In 1781, Professor I.G. Schwartz formed Russia's first student scientific circle, named the "Assembly of University Students for Essay and Translation Practice". In large measure, the University of Dorpat served as an example for the Russian student research movement. In 1818, it was Russia's only institute of higher education that was a member of the Society for Book Exchange between German Universities (Kazakova and Zhukovskaya 2018).

During the reign of Alexander I, student scientific circles were thriving in Saint Petersburg, Kazan, Kharkov, and Vilna, and were an integral part of university life in Russia. According to the University Charter of 1804, close ties were established between professors and students. This paved the way for creating learned societies at universities, where the very best students attended their meetings with the dean's permission. From 1808, the Ministry of National Education decided to send the ablest of students abroad to "prepare for professorship", which played a significant role in organising student scientific circles in the spirit of "free science" (Odin 2020).

Learned societies such as the Moscow Society of Naturalists and the Moscow Society of History and Russian Antiquities were created at Imperial Moscow University. Every month, meetings were held to discuss student scientific discoveries and experimental results. This approach enabled students and lecturers to work together to solve educational and scientific problems (Logunova and Vasileva 2021).

The student research movement was also flourishing at the Faculty of Medicine of Imperial Moscow University. By the early 20th century, student scientific circles had opened at the departments of histology, pathological anatomy, pathological physiology, and physiology. In 1903, the dean of the Faculty of Medicine of Imperial Moscow University, G.I. Rosolimo, merged the student scientific circles in various departments into the Student Scientific Society, which was named after N.I. Pirogov

in 1903 (Reshetnikov, Tregubov, Pereverzina 2019).

The Department of Social Hygiene was established at the Faculty of Medicine of First Moscow State University in 1922. It laid the foundation for addressing issues related to workers' health, the mitigation of adverse social factors and the implementation of measures to create a healthy and energetic workforce. The student scientific circle at the Department of Social Hygiene was created on 3 November 1922. Its primary goal was to familiarise students with the issues being addressed by the department staff and involve students in the theoretical and practical solving of those issues. This student circle included sixty students from First Moscow State University and Second Moscow State University. Soon after, a student scientific circle was formed at First Moscow Medical Institute² (Reshetnikov and Tregubov 2021).

The circle conducted its research in several areas. It studied living conditions that affect health during normal times and periods of various social upheavals (wars, revolutions, etc.), the reasons behind the spread of social diseases (tuberculosis, syphilis, alcoholism, etc.), as well as the methods, means and history of tackling them. Students were introduced to measures aimed at raising a healthy generation (maternity and child welfare, healthcare for school-aged children and youths) and public health awareness activities. They also attended classes on physical education and factory worker welfare.

One of the techniques the circles employed in their early years was the survey of factories and tuberculosis dispensaries. The materials obtained were the subject of subsequent discussions, during which factory management factors that affect workers' health were identified, and the existing and possible occupational safety methods were examined (Pashintsev 1923). The student scientific circles established at the Department of Social Hygiene of First Moscow State University and other preventive medi-

Medical University of the Ministry of Healthcare of the Russian Federation (Sechenov University).

² Following the Decree of the Central Executive Committee and the Council of People's Commissars of the USSR No. 237 of 23 July 1930 "On the reorganisation of universities, vocational schools and workers' schools", medical faculty ceased to be part of First Moscow State University and was renamed First Moscow Medical Institute.

cine departments enabled to rectify a number of teaching shortcomings, which were primarily due to an insufficient resource base and a large number of learning circles. They also enabled students to concentrate on the critical development of such an area of healthcare as prevention (improvement of work sanitary conditions, living conditions, medical check-ups), solve the problem of training not only general practitioners but also public health doctors, and teach students the skills of raising public health awareness and working in health departments of local councils.

The purpose of the student scientific circle at the Department of Social Hygiene of First Moscow State University was to involve the most active students in terms of research and social work in the work conducted by the department staff. It also sought to give students in-depth theoretical and practical knowledge, familiarise students with basic hygiene research methods, engage students in social work via cooperation with professional societies and organisations, and ultimately create an environment to encourage them to tie their future professional work to preventive medicine. To this end, extra lectures, colloquia, and presentations on certain extra-curricula issues were planned. Members of the circle were assigned certain topics and questions for independent research, and the results were presented in the form of reports or library research papers. Additional trips to preventive healthcare institutions were scheduled to acquaint students with their work in greater detail. In-depth lessons on the public health and social hygiene research method and laboratory practicals on experimental hygiene were conducted. Classes were held at the social and occupational disease clinic and in anthropometric and statistical offices. Members of the circle participated in public health and social hygiene research (public catering, housing, sex life, maternity welfare). They were also involved in committees on the improvement of living and work sanitary conditions of public health awareness establishments, congresses and conferences dealing with preventive issues and attended meetings of professional societies. Any student could be a member of the circle, provided they were actively involved in its work. The engagement of students studying dis-

ciplines relevant to the circle's work was considered most effective. For instance, fifth-year students were mostly involved in the social hygiene circle, and fourth-year students in the occupational hygiene circle (*225 let...* 1990). The circle was led by a member of the department (lecturer/research worker), who was a member of the circle's bureau (Pashintsev 1925).

From 1922 to the beginning of the Great Patriotic War, student research was carried out in very difficult social, material, and financial circumstances. However, the volume and degree of elaboration of the material researched by circle members at that time deserve the utmost respect. Research topics during this period included “The history of the fight against tuberculosis”, “The history of medicine in Russia”, “Tasks facing a doctor in school-age child welfare”, “Tuberculosis and the school” (Pashintsev 1925).

In 1941, in the run-up to the Great Patriotic War, the Department of Social Hygiene was renamed the Department of Healthcare Organisation by order of the People's Commissar of Public Health G.A. Mityerov. The department's focus shifted towards practical organisation – the creation of teams to conduct sanitary and anti-epidemic work. Against this backdrop, social hygiene research stagnated (Siburina and Miroshnikova 2015).

The 1960–1980s were the next crucial period in the development of the student scientific circle. A new area of public health research and practical work emerged during this period. The priority in scientific research shifted to the development and improvement of preventive medicine. Social hygiene was reinstated as a scientific discipline following the order of the Ministry of Health of the USSR of 28 February 1966. During this period, the research and curricular work of the Department of Healthcare Organisation of First Moscow Medical Institute covered a whole host of issues pertaining to social hygiene and healthcare organisation. Circle members were actively involved in research on outpatient work and hospital care, public health services, organisation of specialised medical care, prevention and medical checkup, and maternity and child welfare. The Department of Healthcare Organisation became an advisory centre for social hygiene research and

sanitary statistics, which determined the range of research issues addressed by the student scientific society (research on fertility, maternal and child welfare, reproductive loss).

The student research movement continued and still continues the research and cultural traditions of past generations. Public health and healthcare departments at all universities now have student scientific circles. Their primary tasks are: improving the level of training of medical professionals, preserving, maintaining and advancing the traditions of domestic medical education, creating an environment to foster young talent, promoting creative thinking and professional skills among students, introducing them to research, preparing them for independent research, popularising scientific knowledge, and providing career guidance to students interested in research for their subsequent enrolment for fellowship, etc.³

Working in student scientific circles aids the development of student cognitive activity and professional skills, personal responsibility, interest in the work of colleagues, respect and attention to patients. It also develops interpersonal skills, improves skills of interacting not only with colleagues but also patients and their relatives. Emphasis is placed on the practical application of the knowledge gained. For future healthcare organisers, this is an opportunity to see how various solutions are implemented in practice and gain an insight into the cost of potential mistakes. Studying the history of healthcare enables to establish current patterns and learn the lessons of the past.

Reports and library research papers, which must be discussed at student scientific circle meetings, remain the primary form of student research work. The best works are sent to research and practical conferences. Students attend lectures on the scientific research methodology and are introduced to research areas associated with the work of the department staff. As part of interdisciplinary interaction,

they attend master classes conducted by leading experts in various clinical fields and participate in various cultural and research and practical events (annual “Preventive Medicine Week”, “Management and Leadership in Healthcare” international student Olympiad, etc.).

The key to the success of a student scientific circle is its leader. This is usually an academic – a respected doctor and scientist. The leader’s central task is to instil an interest in research among students and familiarise them with the opportunities and prospects of research work (Fedina et al. 2018; Semenov and Gorbonosov 2012). The research work of students at the N.A. Semashko Department of Public Health and Healthcare of Sechenov University is carefully planned. The leader determines the range of research topics and mentors from among the teaching staff who will help students work on the chosen topic, schedules meetings and plans where and when the results of student research will be published (Tregubov and Shapovalova 2015).

Like many years ago, engaging students to conduct research in the department’s core research areas remains the primary goal of the student scientific circle at the N.A. Semashko Department of Public Health and Healthcare of Sechenov University. Classes in the student scientific circle promote an in-depth understanding of research issues among students. They are also an effective way of providing career guidance for would-be healthcare leaders, who can enrol for residency training (“Healthcare Organisation and Public Health” speciality) or fellowship (speciality 14.02.03 – “Public Health and Healthcare”) upon completing specialist programmes.

N.A. Semashko believed that one of the critical tasks of student scientific societies and circles is character building among students, ensuring an honest attitude of each student towards their duties (Semashko 1945). Today, thanks to modern technologies, student scientific circle meetings and research and practical events can be held remotely (Tregubov 2015). Hence, students from different universities across different cities, and even countries, can participate. In student scientific circles, students are able to interact in an informal setting with the best lecturers, who are also top experts.

³ See Aznabaeva L.M. Work in a student scientific circle as a way of realising the intellectual potential of students. *Mezhdunarodnyy zhurnal eksperimental'nogo obrazovaniya* [International journal of experimental education]. 2013, 3: 33 (In Russ.). Also see: (Kompaniets 2016; Malysh, Romashov, Grechkin 2014).

Therefore, just like in the days of N.A. Semashko, by working in student scientific circles, students not only acquire knowledge but also learn

to apply it, work with it independently, and analyse situations. All this ultimately promotes clinical thinking among students.

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