EXPERIENCE OF REORGANIZING THE EDUCATIONAL SYSTEM
OF THE SECOND MOSCOW MEDICAL INSTITUTE IMENI
N. I. PIROGOV AND OUR IMMEDIATE TASKS

- USSR -

by M. G. Sirotkina
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Following is a translation of an article by Docent M. G. Sirotkina, Director of the Second
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The professorial teaching staff of the Second Moscow Medical Institute im N. I. Pirogov was guided in its activities during the 1958/59 school year by the resolutions of the 21st Congress of the Communist Party of the Soviet Union, by the resolutions of the Plenum of the Central Committee of the Communist Party of the Soviet Union, and above all by the resolutions of the November Plenum of the Central Committee of the Communist Part on the strengthening of ties between school and life and the reorganization of the public educational system of the country.

In accordance with the new tasks facing the higher schools, proposals were worked out at the Institute for introducing a number of changes in the curricula of the medical and pediatric faculties. The revised curricula were approved by the Ministry of Health USSR, which gave our Institute permission to base its teaching process upon them in the nature of an experiment beginning with the 1959/60 school year.

The revised curricula make possible the organization of uninterrupted practical training at both faculties during a six-year course of instruction. The plans also make provisions for a consecutive and longer (nine semesters instead of seven) study of social disciplines, a development extremely important in shaping the thinking of the physician.

The revised curriculum of the medical faculty insures a more rational distribution of subjects throughout the courses; it eliminates the interruption by summer vacations in the teaching of a number of disciplines (diseases of the ear, nose, and throat, surgery, nervous diseases and hygiene). The volume of subjects is somewhat increased in such leading chairs as propedeutics of internal diseases, facultative therapy, and pediatrics.
The curriculum for the pediatric Faculty envisages a consistent study of pediatric disciplines: propedeutics of children's diseases in the fourth course, facultative pediatrics in the fifth, clinical pediatrics at the sixth. The sixth course is earmarked by the curriculum only for an intensive study of childhood diseases.

Instruction based upon the new revised plan at the Second Moscow Medical Institute im N. I. Pirogov for the 1959/60 school year is envisaged for the first, second and third courses. In order to avoid transitional curricula, which have an extremely unfavorable effect upon all phases of the work of a higher education institution, teaching on the basis of the new plans will be introduced gradually and will be completed in the 1962/63 school year.

The staff of the Institute has devoted a great deal of attention during 1958/59 to the elaboration of an organizational system and methods for the realization of uninterrupted practical training for a six-year course of studies, organized as follows: at the first and second course the students serve as assistant nurses, at the third course -- as nurses, at the fourth (a practice which has already been in effect for many years) as assistant physicians. At the fifth course polyclinic medical practice is conducted.

The organizing of practical training in junior courses has required the introduction of corrections in planning the teaching process. The schedule of subjects was made up in such a way that the lectures and practical studies would be completed, as a rule, by 1500 hours. This has provided for a normal rhythm of the students' working days; it made it possible for them to engage productively and systematically during their extra-curricular time and to work in the clinics without detriment to their theoretical studies. Practice in the first and second courses was conducted in the form of tours of duty in the therapeutic, surgical and pediatric clinics, six tours of duty during a semester, from 1700 to 2000 hours. Practical training in the junior courses familiarizes the student beginning with the first course with the conditions of his future activity; it contributes towards the development of the proper approach to the patient, towards understanding the significance of the regimen of a hospital and the role of the junior and intermediary personnel and the organization of patients' treatment.

Supervision of practical training by the instructors of the clinical chairs is of great importance for the successful conduct of this work in the junior courses. It is necessary to recognize as essential for this purpose that the professors and docents visit clinics periodically during the evening hours; that they familiarize themselves with the work of the students and conduct appropriate inter-
views with them. This is of great educational value.

While favorable evaluating the practical training in the first and second courses carried out in 1958/59, one should also note the shortcomings which turned up in the process. In certain clinics the students discharged the duties of baby-nurses and maids and were isolated from direct care of the patients. In other clinics, students who did not have any medical training as yet, were at times entrusted with making subcutaneous and intramuscular injections. These and many other shortcomings of an organizational character must be eliminated next year.

Practical training at the first and second courses (as well as at the others) is part and parcel of the instruction process and should be approached with all strictness and exactingness in evaluating the students work during their turn of duty at the clinics. Tests in practical training should by their importance be given equal status, while evaluating the students' progress in practical studies.

In 1958/59, for the first time our Institute carried out a three-week nursing practice upon completion of the first course, and a four-week physician's practice upon completion of the fourth course. The students of the third course work in cycles of nine days in the therapeutic and surgical departments of the hospitals (which have gone over to a two-stage service system). The students have mastered the routine of taking care of the sick as well as certain nurses' and physicians' procedures. But it must be pointed out that many students turned out to be inadequately prepared by the clinical chairs of the third course for the demands of practical training. The students, therefore, found themselves in a difficult situation in those hospitals in which not enough attention was devoted to this practice and where the students had no opportunity to learn how to give injections properly and how to make duodenal and gastric soundings as well as other manipulations. The basic shortcoming in carrying out the practical training of the third course lies in the fact that the students carried out certain procedures mechanically rather than consciously. To eliminate this shortcoming, the surgical and therapeutic chairs of the third course must devote special attention not only to the technique of the manipulations carried out by the students, but -- what is primary -- to their theoretical substantiation and comprehension. Only under such conditions will the practical training of the third course help in molding a broad-minded and educated physician.

We will not dwell on the importance and order of carrying out practical training after the fourth course, since its significance and methods of realization have long ago been
favorably evaluated

All the students who were exempt from supplementary special studies participated in practical training after the fifth course. Of the students of the Institute, 75 percent worked in Moscow and the remaining 25 percent worked in Moskovskaya Oblast during 1958/59. The received patients three hours daily at the polyclinic. After their clinic duties, they visited the patients of their district at their homes. The students of the Therapeutic Faculty worked in paid positions as district therapists and the students of the Pediatric Faculty worked as district pediatricians. The trust placed in them and their self-reliance have enhanced the students' sense of responsibility in regard to the work entrusted to them. This organizational form of practical training after the fifth course seems to us to be the most expedient and acceptable one. In the first place, it makes it possible to eliminate the shortcomings which are often observed in preparing a young physician (insufficient knowledge of the polyclinic division of work); secondly, the students working as district therapists and pediatricians render a great deal of assistance to public-health care.

The introduction of uninterrupted practical training in all courses makes it necessary for us to work out simplified forms for crediting students for all kinds of practical work in the shortest possible period of time.

During the 1958/59 school year, the methods of delivering the lecture courses in both the theoretical and clinical chairs were revised and improved. As a result of coordination among the individual chairs (for example, the chairs of facultative therapy and surgery of both faculties), it became possible in the expounding of lecture materials to elucidate more deeply and thoroughly the problems of the etiology, pathogenesis, clinic, and methods of treatment of a number of ailments, e.g., stomach, liver, gall-duct and cardiovascular diseases.

However, this is only the first stage of the big job that must be accomplished at the Institute. In the post, the necessary continuity and consistency in teaching the various aspects of the same problem by chairs that are related in this respect have not always been observed. For example, we assume that instruction in the various forms of a pathologic process should be preceded by the elucidation of the theoretical side of the problem by the appropriate chairs. While considering the main duty of those in charge of the chairs to consist in instructing the students of the basic divisions of the lecture courses (to our regret this is, so far, not being accomplished by all chairs), one must also devote attention to perfecting the lecturing skill of
the young docents. The delivery of individual lectures by young docents should be practiced on a wider scale, and this should be followed up by broad discussions of their lectures at chair consultations.

Various shortcomings have come to light in the process of training, in taking state examinations, in the theoretical preparation of the students, in their ability to utilize the data, of normal and pathological physiology, pathological anatomy, etc., and in evaluating clinical symptoms. The students' inability to approach medical problems from a broad viewpoint testifies to shortcomings in organizing the teaching process and in formulating and delivering the lecture material. Apparently, little attention is being given in lecture courses to the biological foundation of any particular discipline.

The experience of the chair in pathological anatomy merits attention in regard to the problem of eliminating this shortcoming. During the 1958/59 school year, the staff of this chair carried out important work in revising the system of lecture courses. As a result, the topics of atrophy and hypertrophy, as treated from the aspect of compensatory processes, were united into the general theme of the regeneration and the course and healing of a wound, etc. This can lead to a better understanding of the biological essence of the processes.

In setting forth the lecture material on clinical disciplines, we assume that it is necessary to dwell, to a much larger extent than in the past, on the biological essence of pathological processes. The clinics should make wider use of the data of the theoretical disciplines. Only then will the efforts the students are making in the first year of training to master the subjects which constitute the biological foundations of medicine be justified.

The new curriculum should provide for the need to organize facultative courses on the main problems of theoretical medicine in the senior courses.

Practical training was organized by the chairs in 1958/59 while searching for ways to eliminate the isolation of study from life and in the course of striving to secure the combination of a high level of theoretical knowledge with good practical training. The instructors have striven to stimulate their students to a high level of creative activity in order to ensure the acquisition of a profound and solid order of knowledge. The method which proved best in this respect consists of giving the students independent in work, possibly under the control of the instructors. Systematic textbooks and practical manuals play an important role in organizing the teaching process while granting the
students independence in their work. Individual chairs and collectives have accomplished a great deal of work in this direction. Thus, manuals have already been published for practical training in skin and venereal diseases; at the same time, textbooks have been published as aids in the independent execution of practical work in normal and pathological physiology and in general chemistry courses. These practical aids, which were of great help to the students, have been very favorably evaluated by instructors' collectives of other institutes; they constitute a manifestation of the tangible aid rendered by higher educational institutes in the capital to the students of the periphery.

At the present time, a number of chairs (nervous diseases, prepaeutics of internal diseases, organic chemistry, operative surgery, general biology, etc.) have compiled appropriate practical manuals and given orders for their publication. The staff of the chair of prepaeutics of internal diseases of the medical faculty under the direction of Prof. A. A. Shelagurov has produced an original manual on the methods of investigating internal diseases in the clinic.

The clinical chairs have also achieved significant results in the task of improving the methods of practical training. A list of routine practices which every student should master was developed for almost every subject. The appropriate documentation is subsequently handed from one chair, concerned with given aspect, to another chair; this enables the instructors to exercise individual control over the mastery of practical habits.

Beginning with the fourth course, students at the clinics were given a much greater opportunity for independent work, particularly in the sixth course.

As a result, graduates of both faculties have given evidence of adequate practical preparation at state examinations and have shown a good orientation at the patient's bedside.

Polyclinic work is of essential significance in the medical-training system. The need for polyclinic work is determined by the requirements of practical public health care, and there is a need for considerable additions to the polyclinic network. However, we must admit that a considerable number of graduates are very reluctant to take jobs as district therapists and pediatricians. This is partly the fault of those in charge of practical public health care, who have not as yet provided the proper conditions for the physicians in the district polyclinical network; but the workers of the higher educational institutions are equally responsible for this situation. We have left large gaps in
training as well as in educating students in the field of their future activity.

In the extensive teaching, scientific, and medical work performed by a chair, not enough attention is devoted to polyclinical problems. As a rule, scientific work is carried out on the basis of data provided by the hospitals. The practical work of the students in the polyclinics is quite often under the direction of assistants with insufficient experience. The professors and docents have done little to provide highly-qualified patients' care in the polyclinics in which students are undergoing training.

The work methods of the chairs of eye, ear, nose and throat ailments (where the students' work in the hospitals is indissolubly connected with the performance of polyclinical duties) deserve high praise.

The experiment of the chair of hospital pediatrics also merits attention. This chair organized scientific-practical conferences with the students of the sixth course based on the data of the polyclinic and the district.

In the current school year the clinical chairs -- primarily those in the fields of therapeutics and pediatrics -- will revise and improve their system of work with students on a polyclinical basis. It is essential that students at the polyclinics broaden and strengthen the foundations of their clinical thinking, which is developed in the course of working in the hospitals. Polyclinic training should be put on a well-organized polyclinical basis, with a system of polyclinical treatment and prophylaxis measures set up in an exemplary manner.

Special attention should be given to improving the organization of polyclinical work of the chairs of the sixth course; for, during the current school year students have already been performing independent work as district therapists and pediatricians in the course of their summer practice period.

The scientific work of the students is of great importance in improving their training. The work of the students in the scientific circles contributes to the development of future scientific workers, cultivates in them an understanding of the proper correlation and reciprocal connection between science and practice, and meets the individual requirements of the students.

The scientific work of the student body of the Second Moscow Medical Institute imeni N. I. Pirogov has received wide publicity. Approximately 1,000 students take part in the work of the circles. Three all-institute conferences of the Student Scientific Society (NSO) took place in 1958/59. The results of the activity of the NSO were also favorably evaluated beyond the confines of our higher educational institute: at the All-Russian Conference of Student Circles.
of Pediatric Chairs, at the Third All-Union Conference of Student Scientific Circles at chairs of children's surgery, at the Exposition of Scientific Works dedicated to the 40th anniversary of the All-Union Komsomol.

While evaluating favorably the activity of NSO, we must, however, observe that its work still does not satisfy the newly increased demands made on NSO in its capacity as one of the mass student organizations which are called upon to play an important role in the communistic education of the youth. This applies primarily to the chairs of the therapeutic type, which still attract too few students to scientific research work. Although it is true that scientific circles should be recruited from among students who have manifested a desire to engage in scientific work, we assume that the effort to actively lure individual students into scientific work should be decisively strengthened. This work should be carried out by the assistants.

Only chair professors and the most experienced docents should be appointed to direct students' scientific circles.

In conformity with the resolutions of the 21st Congress of the Communist Party of the Soviet Union, the communistic education of students in the higher educational institutions acquires exceptionally great importance and becomes the central problem of the entire practical activity of the professorial-pedagogical collective.

The conscientious attitude of most of the students towards their studies, their serious and active study of the social sciences and of the discipline of medicine -- all testify to the fact that the ideological-educational work of the staff of our institute has had positive results.

However, despite considerable successes in the work of our institute, we must note with regret a number of shortcomings in this leading segment of the work of the staffs of the chairs. Cases of not carrying out practical work cycles at the set time and of irregular lecture attendance are still frequently encountered. Many docents and assistants presenting the necessary, high requirements of the students' studies, not do at the same time strengthen their work by engaging in systematic educational work with each and every one of them. In trying to impart as much information as possible in each discipline, we are overlooking something which is of equal importance -- the fastening of high moral qualities in the students and a sense of responsibility for the patient and the profession.

We should constantly bear in mind that our entire pedagogical process must be permeated with the elements of educational work and a socialistic attitude toward work, and that the students must be imbued with a sense of re-
sponsibility for the lofty calling of a Soviet physician. The personal example set by the teacher is of great importance as one of the valuable educational tools in fostering these qualities in the student. The students must regard the members of our professorial-teaching staff as worthy of respect and emulation. The chair collectives must be more sociable with the students in off-study periods; they must know their needs, qualities, and shortcomings. The chairs of social sciences should play a leading role in organizing the ideological-educational work among the students.

The improvement and reorganization of the pedagogic process require the revision and improvement of all the links of the work of the higher educational institutions, e.g., the scientific work, the teaching ranks, and their training, equipment, material-technical base, etc. All of these large and complicated problems require special discussion.

The professorial-teaching collective of our Institute has expressed its firm conviction that the great tasks of the reorganization of education and strengthening the ties between school and life, which the Communist Party and the Soviet Government have assigned to the institutes of higher education, will be honorably fulfilled.
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