

Dentistry in Late Tsarist Russia

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DENTISTRY IN LATE TSARIST RUSSIA

Very little is known about dentistry in pre-Soviet Russia. Yet dentistry is an important medical specialty. The health of the teeth and mouth affect general health. Conversely, diseases of the teeth and mouth often reflect general diseases such as syphilis. Thus, the quality of dentistry is another indicator of the caliber of health care before the Great October Revolution. More materials need to be uncovered, but a survey of dentistry in late Tsarist Russia reveals interesting information. First, there were very few dentists in Russia. Second, Russian dentists were striving to increase professionalism in their field. Third, dentistry was an avenue of upward mobility for women and Jewish meshchanstvo. Fourth, odontological concerns in the second half of the nineteenth and early twentieth centuries were about the same as today; two key areas of interest were dental hygiene and orthodontia. This paper will concentrate on the first three topics with brief attention to contemporary writings on odontology. Because of dearth of date we can scarcely do more than mention a fifth important area--the availability of dental care and, more particularly, dental care under the zemstvos.

Until the early 1890s, the Russian government certified dentists according to regulations established in 1857.¹ Until 1881 almost all Russian dentists trained through an apprentice system; they were allowed to practice after taking examinations held in the seven universities with medical faculties or the Military Medical Academy in St. Petersburg.²

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According to a report of the Medical Department of the Ministry of Internal affairs in 1888 there were 468 dantisty in Russia. At this time all dentists were called dantist; in 1891 a dentists who had received academic education were given separate designation from those who had trained as apprentices. Dentists were concentrated in major cities. There were 42 in Warsaw, 120 in Moscow, 106 in Petersburg, and 21 in Odessa. The report claimed there were no dentists in Arkhangel'sk, Plotsk, Sedletsk, and Olonetsk provinces. But there was hope for the future because 372 students were studying as apprentices with Russian dentists.³ By 1891 the number of dentists in Russia had increased to 508 and dental students numbered 435. One hundred twenty-two were apprenticed to 10 Vilna dentists, 45 to 43 Warsaw dentists, 40 to 53 Moscow dentists, and 42 to 21 Odessa dentists. There were now 113 dentists in Petersburg but, apparently, they had no students.⁴ By 1892, according to official information, there were 640 zubnye vrachi or dental doctors practicing in Russia, the introduction of this title having appeared in 1891.⁵ By 1897, according to the American Doctor of Dentistry James Levi, who had founded a dental school in Warsaw, there were 1,200 zubnye vrachi (dentists who had attended dental schools) and dantisty (dentists who had merely apprenticed and taken a qualifying exam).⁶ Thus, very obviously, the number of dentists in late nineteenth-century Russian consistently and constantly expanded.

However, despite the increase, Russia lagged behind both

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Germany and the United States in numbers of dentists. James Levi claimed in 1897 that in New York there were as many dentists as in the whole of Russia.⁷ This disparity, no doubt, was explained by the fact that it was easier to become a dentist in the United States than in Russia.⁸ Nevertheless, Russia also found herself outdistanced by Germany, where the government paid close attention to the quality of dentists, if not dental technicians.⁹ In Germany in 1894 there were 1046 doctors of dentistry and 2463 dental technicians.¹⁰ By 1905 the Russian Government's Report on the State of the Nation's Health listed 4,377 zubnye vrachi and dantisty.¹¹ This was far fewer than the number of physicians in Russia--about 23,000--and inadequate for the 144,600,000 inhabitants of the Empire, 118,900,000 of whom lived west of the Ural mountains.¹²

The fact that some physicians practiced dentistry partly alleviated the shortage of dentists.¹³ But dentists themselves were self-critical and, without waiting for government intervention, attempted to increase both the number and quality of dentists.

The first dental journal, Zubnovrachebnyi vestnik appeared in 1885. That same year the first Russian Society of Dentists was inaugurated.¹⁴ The establishment of corporate association indicated a new assertiveness on the part of dentists. However, their chief concern now became upgrading training in the profession. In May, 1885, an editorial in the new journal complained of the poor quality of Russian dentists' education,

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alleging that they learned their profession haphazardly, "abroad, in dental offices, by means of self-study, and simply 'with their own mind'." Upholding the American dentist James Levi's contention that dentistry was a branch of surgery, the editorial lamented that it was "devoid of government and social support" and asserted that dentistry should be "taught by medical specialists."¹⁵ An 1894 article considered the education of German dentists a model for Russia. German dentists, as opposed to technicians, trained in institutes affiliated with German universities; their education was on a par with that of "general" doctors, jurists, and other professionals.¹⁶

Russian dentists' attempt to elevate their profession resulted in the establishment of private or proprietary dental schools. Dentist F. I. Vazhinskii established the first dental school in St. Petersburg in 1881. The prerequisite for admission was completion of four or five years of the then seven-year gymnasium, the same requirement as that for student pharmacists.¹⁷ Course of study in the new dental school was three years. To acquire the title dentist, students completing the program were required to take an examination in the seven Russian universities which had medical faculties or in the Military Medical Academy in St. Petersburg.¹⁸ In 1891, the tenth anniversary of the Vazhinskii school, dental schools opened in Mogilev,¹⁹ Odessa,²⁰ and Warsaw.²¹ In that year dental schools were proposed for Moscow and Kiev; the school in Moscow opened in 1892.²² In 1896 a dental school opened in Khar'kov.²³ By 1897 the Vazhinskii

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school either had passed under new management or a second school had opened in Petersburg, since there now appeared notice of the St. Petersburg dental school of E. S. Vongl'.²⁴ In 1898 a second dental school opened in Moscow.²⁵ Thus, by the turn of the century there were seven and possibly eight dental schools in Russia. The dental school in Kiev was operating by the eve of World War I. By this time a dental school existed in Harbin, Russian-occupied Manchuria.²⁶

All these schools were privately owned. In the 1890s that in Odessa was the enterprise of Dr. P. A. Tychinskii; a Dr. Popov managed the school. On the eve of World War I Dr. I. I. Margolin was proprietor of the Odessa school.²⁷ Dentist V. P. Gref founded the school in Moscow. The American dentist James Levi founded the school in Warsaw; it was under the management of Doctor of Medicine M. A. Vasil'ev. As noted, the schools of Vzhinksii and Vongl' operated in Petersburg.²⁸ In 1914 Dr. Golovchin was the proprietor of the dental school in Kiev, the Zeliiskii school operated in Khar'kov; Dr. Von Argeev was the proprietor of the dental school in Harbin; in 1914, Dr. I. I. Margolin owned the school in Odessa.²⁹

Russian universities also began to teach the "dental arts" in 1885 and by 1894 odontology courses existed in the Military Medical Academy and at the universities of Moscow and Yur'ev. However, one commentator, P. F. Fedorov, considered dental courses in the universities and Military Medical Academy unsatisfactory because they were not comprehensive.³⁰

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Although the number of Russian dentists trailed those in Germany and the United States, the number of dental schools in Russia compared favorably with numbers in continental European countries. In 1891 there were seven and in 1894 nine dental institutes in Germany. Dental medicine was taught at four universities in the Austro-Hungarian Empire. France and Sweden each had two dental schools; Denmark had only one.³¹ There were far more dental schools in the United States and England where requirements for dentistry undoubtedly were more lenient, if they followed the pattern for medicine and pharmacy.³² In 1885 in the United States there already were 21 dental colleges and dental departments in universities; by 1891 there were 30 dental schools in America. In England at the same time there were 21. Japan and Australia each had one dental school in 1891.³³ Furthermore the dental field was greatly expanding by the eve of World War I. Enrollments at the Margolin school in Odessa alone amounted to 867 for the academic year 1914-1915.³⁴

However, the proprietary nature of dental education in Russia disturbed some dentists. This may have reflected a bias against private education in general or dissatisfaction with the Vzhinskii school in particular. Articles in Zubovrachebnyi vestnik during 1885 opined that there could be no guarantee of the caliber of teachers in the Vzhinskii school since the founder had invited them to teach and their tenure depended upon him. These articles also questioned the quality of students enrolled in the school since the very existence of the school

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depended upon their tuition. Critics advocated that in place of proprietary schools, dentistry should be taught in the medical faculty of universities, with a four-year curriculum; furthermore, dental students should be required to have a school-leaving certificate.³⁵

Some dentists were not content to better education and advance professionalism in the field but desired that dentists be equal to physicians. One of the aforementioned articles asserted that after finishing a four-year, university-level course, successfully passing the qualifying examination, and possibly two additional years' practical training, the dental graduate should receive the title zubnoi vrach which would be on the level of lekar, the lowest designation for physician.³⁶ The latter title, bestowed after a five-year, ten semester, university medical course and successful completion of a comprehensive examination, enabled the holder to practice medicine.³⁷ The author further proposed that the title zubnoi vrach was to carry "all rights and privileges of the medical profession."³⁸

This suggestion generated controversy. "Why," queried an editorial in Zubivracebnyi vestnik, "would someone with a school-leaving certificate choose to take a four-year course of study to receive the title zubnoi vrach when, with one additional year of study, the student could achieve the title lekar?" The editorial also questioned the validity of the terminology "all rights accruing to the medical profession." Did this mean, the

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editorial asked, that the zubnoi vrach had the right to treat all diseases of the sick? Further, the editorial noted that although dentists hoped to prevent physicians from practicing dentistry this was not appropriate; doctors were and should be occupied with dentistry. And although some dentists recommended that the title zubnoi vrach supersede that of dantist, because of the shortage of doctors the lesser title dantist should be retained. Persons bearing this title could be analogous to fel'dshers or paramedics and midwives in the field of medicine.³⁹

In 1885, simultaneous with discussion in the dental press on the direction dentistry ought to take, the Medical Council of the Ministry of Internal Affairs established a special commission to review dental education in Russia. The commission was composed of four dentists, two from each of the two dental societies in St. Petersburg, and two physicians.⁴⁰ The commission's deliberations lasted six years, another example of the thoroughness, but also the dilatoriness of the Russian government's mode of operation. The legislation which resulted from the commission's deliberations retained the concept of private dental schools but brought them firmly under control of the Medical Council of the Ministry of Internal Affairs. In addition, this legislation provided a new designation for dentists who had received a formal education and made acquisition of the old title dantist more stringent.

The State Council approved the statutes; they were signed by Alexander III and issued in May and June, 1891. Supplementary

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regulations appeared in 1892. The new dental statutes supplanted those of 1857. They contained several innovations. Henceforth, there were to be two titles for Russian dentists. The traditional title, dantist (sometimes spelled dentist) now referred to those who had apprenticed with dentists. The title zubnoi vrach applied to those who had received education in dental schools. The Ministry of Internal Affairs strictly regulated the acquisition of both titles and also prescribed entrance requirements and curricula for the proprietary dental schools.

According to the statutes of May and June, 1891, dental schools could be established only in university cities, with the approval of the local medical inspector of the Ministry of Internal Affairs. The trustees of the local educational district had to concur. Only those who had at least a middle school education [classical gymnasia or real school] were eligible to be managers of the schools; the founder could be manager of the school only if he or she fulfilled this requirement. Only persons with "educational degrees" could be teachers in the schools; the local medical inspector had to approve the teachers. Students of either sex were eligible for admittance if they were seventeen years of age and had finished six years of middle school. Entering students were required to present birth and baptismal certificates--in the case of non-Christians only birth certificates--and passports proving that they had a right to live in the locality in which the school was located.

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The course of study was shortened to two and one-half years or five semesters. The prescribed curriculum appeared thorough. Subjects of study included physics, chemistry (general and dental), anatomy, special histology and physiology, growth of teeth, general pathology and pathological anatomy, therapy of diseases of the teeth and gums, pharmacology and prescriptions, prosthetic and operative dentistry, filling and hygiene of the teeth. Dental schools were to include clinics of various sorts for practical training. These were to teach operating with the use of narcotics or anesthesiology.

According to the statutes, the founder could establish tuition in the dental school but could not raise tuition during the academic year. Pedagogical councils, comprised of instructors (prepodavately) in the school, were to supervise all educational matters. The manager of the school had the right to attend and participate in meetings of the council if he possessed the title of Doctor or Dentist. The pedagogical council was empowered to pass students each semester, approve changes in the curriculum and hours allotted to all subjects, expel students. The Medical Council of the Ministry of Internal Affairs had final jurisdiction over these matters.

The 1891 statutes emphasized accountability. The manager of the school was required to make an annual report to the medical inspector regarding teachers, numbers of lessons per subject, hours of practical work on technique and surgery, and the number of students completing each course. The statutes also stipulated

the physical layout of the schools. There were to be laboratories with operating chairs--one to every four students--and special rooms for narcotics. The schools were to hold clinics and receive patients for at least six hours per day.

Students finishing the course of study at dental schools were required to take examinations at the Military Medical Academy or seven universities with medical faculties which existed at that time. Upon successfully passing the examination, students were awarded the title zubnoi vrach.⁴¹

Greater professionalism also invaded the realm of the apprentice-trained dantist. The 1892 circular of the Medical Department of the Ministry of Internal Affairs updated and made more stringent 1889 regulations for becoming a dantist. The local medical inspector now was to approve all dentists with whom students wished to apprentice. The suitability of the dentists was determined, in part, by the number of their patients. Dental apprentices were to be at least seventeen years of age. Dentists were to report annually on the progress of their pupils; students for whom no report was made were considered to have terminated their apprenticeship. Students themselves were responsible for ascertaining whether dentists had made the required reports. After three years' apprenticeship students were to undergo preliminary examination by a committee formed of one or two local physicians and one or two local dentists under chairmanship of the local medical inspector. The fee for this exam was five rubles. The student who successfully passed the preliminary

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examination had the right to sit for the examination which actually conferred the title dantist. This latter examination was held at the Military Medical Academy in St. Petersburg or the medical faculty of universities. Students who did not pass the examinations were allowed to re-take them after one-half year period. If the second preliminary examination was not successful the student was not permitted to try further. Students from one guberniya were allowed to take the final examination in another province.

The major examination for the title dantist appeared comprehensive and demanding. Students were required to make diagnoses of teeth and inflammation of root membranes and to display knowledge of the following specialized areas: orthodontia, filling teeth, cleaning teeth, root canal work, pulling teeth, capping teeth, preparation of false teeth, and application of "prosthetic" devices.⁴²

Subsequent decisions of the Russian government emphasized the distinction between academically trained and apprentice dentists. In 1897 the Governing Senate ruled on a complaint from the First Society of Russian Dentists. The Senate forbade dantists to be called zubnoi vrach or to prescribe medicine.⁴³ In 1898 those wishing to acquire the title dantist were forbidden to audit courses in dental school, for the purpose of these schools was to prepare the zubnoi vrach.⁴⁴

How thoroughly were these regulations implemented? Recurrent amendments the last decade of the nineteenth century

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and the first years of the twentieth indicate some problems. In 1891 Zubovrachebnyi vestnik had criticized the Vzhinskii school, alleging that its first graduates were deficient in theory and practice. The journal admitted that current graduates of the school, then celebrating its tenth anniversary, were better prepared.⁴⁵ The Vzhinskii school defended itself, claiming that, in addition to dentists, its instructors included doctors of medicine, dotseuty at the Military Medical Academy, candidates of physico-medical science, and magistry of pharmacy (the "learned" pharmacy degree requiring university education and a dissertation).⁴⁶ However, a few years later, in 1893, a footnote to the new regulations issued by the Ministry of Internal Affairs stated that some of the new curriculum was not being taught at the Vzhinskii school and that the practical work was not broad enough.⁴⁷

On the other hand, reports from the new dental school in Odessa, in 1891,⁴⁸ and James Levi's school in Warsaw, in 1892, indicated that these schools were adhering to the prescribed curriculum, laboratory facilities and work, clinics and general procedure which the government had stipulated in 1891. For example, the Warsaw school had courses in physics, chemistry, anatomy, histology, and prosthetic dentistry. There was practical work in prosthetics and clinics; examinations followed each semester. Students had treated 11,461 patients in the clinics between October 1891 and May, 1892; all treatment and operations were free although patients paid a materials fee for

filling and prosthetics.⁴⁹

Yet, some reformers still were distressed that dentistry was taught outside the universities in privately-supported schools. They lamented that there were no treasury (state) schools for dentists as there were for fel'shers and midwives.⁵⁰

In 1898 the Medical Department of the Ministry of Internal Affairs claimed that some managers of the dental schools had not fulfilled the requirement of completing middle school.⁵¹ In 1901 the Department asserted that some students in the dental schools had not completed six years of middle school and the Medical Inspector was ordered to check all dental school documents.⁵²

A 1902 rule implied that there had been attempts to cheat on the dental examinations. As noted, students were allowed to take the examinations outside the provinces in which they had studied. This apparently allowed the possibility of substitutes sitting for the examinations. The 1902 rule stipulated that those sitting for examination "in the dental arts" and specifically for the title dantist were required to bring two photographs in addition to birth certificates and other relevant documents.⁵³

A further problem, albeit a minor one, resulting from the establishment of the new degree zubnoi vrach was the need to alter titles and statutes of dental societies to reflect the change.⁵⁴

Decisions of the Ruling Senate and amendments by the Medical Council of the Ministry of Internal Affairs led to an updated edition of the dental regulations in 1907. Dentists now were

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nearly equivalent to lekars. The diploma zubnoi vrach entitled the bearer to "the right of medical practice according to this specialty." The normal way to achieve the title zubnoi vrach was through completing the five semester course in a dental school.⁵⁵ followed by examinations on both the theoretical and practical portions of study. A student who received an unsatisfactory mark in one subject was allowed to take the examination in that subject after three months; a student who received an unsatisfactory mark in two subjects was allowed to take the examination in these areas after six months. If the student received two unsatisfactory marks a second time he or she was not allowed to take the examination again.⁵⁶ After 1903 the apprentice system was phased out; zubnye vrachi and dantisty no longer were to accept students.⁵⁷ In 1903 dantisty who wanted to upgrade their position to zubnoi vrach were allowed to do so by taking an examination on all subjects taught in the dental schools.⁵⁸ As of 1907, students who had been taught at home, by tutors, no longer were allowed to enter the dental schools.⁵⁹

The detailed course of study which the 1907 regulations prescribed appeared first-rate--comprehensive and modern.

In the first year program students were to study physics, chemistry, physiology and histology, and dental technique. The physics course was to cover atoms and molecules, the laws of inertia, weights, viscosity, gases. The course on chemistry was to include chemical reactions, atomic theory, knowledge of elements and compounds germane to dentistry such as oxygen,

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nitrous oxide, phosphorous, and arsenic. Physiology and histology were to address such topics as the structure of bone and muscle tissue; chemical compounds of muscles, the nervous system, the spinal cord; anatomy and histology of the heart, the structure of mucous membranes, structure of the tongue, intestines, glands, trachea, bronchial tubes, and lungs; changes of gases in the blood through breathing; and, of course, all facets of the bones. In practical areas, during the first year, students were to be familiar with dental techniques, make plaster casts of the jaws, and various types of crowns, learn to work with gold, prepare the mouth, and so on.⁶⁰ The third, fourth and fifth semesters included special courses in anatomy of the face with attention to structure of enamel, pharmacology and prescriptions, general surgery, special surgery of the region of the mouth, general pathology, therapy, treatment of patients, and work with prostheses.⁶¹

Tuition in the dental schools was very high--as high or higher than that for medical education in the universities. The British medical journal The Lancet reported in 1897 that after an initial five-ruble fee, tuition per semester in Russian universities was one ruble for each lecture attended. Tuition per semester usually varied from eighteen to thirty rubles.⁶² Since the course of instruction for lekár lasted five years, the highest total tuition for medical students would have been about 300 rubles. Tuition in the Vazhinskii dental school in 1885 was 100 rubles per year.⁶³ Prior to 1891 the course of study in the

Vzhinskii school was three years; thus, total tuition amounted to 300 rubles. Tuition at the Odessa school of dentistry was 200 rubles per year in 1891.⁶⁴ Tuition in James Levi's Warsaw dental school amounted to seventy-five rubles a semester in 1892.⁶⁵ Since the program which qualified one to take the exam for zubnoi vrach lasted two and one-half years tuition for dental students ranged from 250 to 375 rubles. Thus, tuition to obtain the degree of zubnoi vrach was as costly or more costly than that for lekar. The trade-off was that it was somewhat easier to acquire the dental degree since aspirants did not have to complete secondary school. But the title lekar was more prestigious.

Despite the expense, the dental schools were magnets for women and the Jewish meshchanstvo. Enrollments at most schools were small but during the 1880 and 1890s women either predominated or comprised nearly half the student body of the Vzhinskii school in Petersburg, the Tychinskii school in Odessa, and James Levi's school in Warsaw. In the Vzhinskii school's first graduating class of 1884 eighteen of the twenty-eight graduates were women.⁶⁶ In the second class of 1885 women numbered eleven out of twenty-four.⁶⁷ At the same time, it was claimed that there were only sixty women out of 12,500 dentists practicing in the United States.⁶⁸ By 1891 135 women versus 84 men had graduated from the Vzhinskii school.⁶⁹ In 1892 there were twelve women out of twenty-five students enrolled in the Odessa school of P. A. Tychinskii.⁷⁰ In 1892 there were eighty-

three students, remaining from the original ninety-four; forty of these were women.⁷¹ In 1897 an all-women's dental school was slated to open in Warsaw. The proprietor was a woman who had received a medical degree in Geneva eight years before and practiced dentistry in Paris and London.⁷² The Margolin school in Odessa had 867 students in 1914-15. Women amounted to at least three-fourths of the student body. From a preliminary survey of 438 students, women equalled 339. Most of the women were single; a few were wives.⁷³ Their social strata will be discussed below.

Jews amounted to only one-half of one percent of the population of the Russian Empire outside the Pale. Judging from surnames and given names, four students of twenty-eight in the 1884 class of the Vzhinskii school appeared to be Jewish.⁷⁴ Dentistry had been attractive to Jews even while the apprenticeship method obtained, prior to 1903. In 1895 a fully-certified pharmacist or provizor complained to the provincial administration of a certain guberniya that a privately-practicing dentist had rejected his daughter as an apprentice. The dentist had seven apprentices; six were Jewish and one Christian. This was interesting. Even more interesting was the Senate decision on the matter, which implied that there was no quota for Jewish apprentices. The Senate ruled that the local medical inspector could certify the quality of the apprentice's training but could not judge the appropriateness of an apprentice.⁷⁵

Jews were limited to three percent of dental school

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enrollments in St. Petersburg and Moscow.⁷⁶ But, Jews, particularly from the meshchanstvo, flooded the dental schools in the Polish provinces and the Pale. Jews amounted to eleven percent of the population in the Pale in the late nineteenth century.⁷⁷ However, James Levi alleged in 1897 that there were only twelve to eighteen percent Christian students in his Warsaw dental school.⁷⁸ A preliminary survey of 438 of the 867 students enrolled at the Margolin school in Odessa during the academic year 1914-15 reveals that all but a handful were Jewish. There were a few Orthodox, Roman Catholic, Armenian Christian.⁷⁹

There are no data on Jewish students at the Vazhinskii or Warsaw school, but the overwhelming majority of Jewish students--indeed all students--at the Margolin school were from the meshchanstvo or lower urban soslovie. Of 438 students there were 19 children of merchants. A few students were children of bureaucrats or military officers, several high-ranking: there were 3 children of State Councilors, a daughter of a major general and 2 daughters of officers. A few students were "upper-class": there were 4 daughters of nobles, including 1 Georgian, and three sons of landowners, one Jewish; there was one daughter and one son of Honored Citizens. The medical professions were represented by one daughter of a dentist and one wife of a zubnoi vrach, two wives of doctors--both Jewish, one son of a Jewish doctor, and a daughter and a son of fel'dshers. There were 4 daughters of peasants,--two were Jewish and from Siberia (Chita and Irkutsk) and one was from Kutais. There was one wife of a

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student. In this sample there were three Armenians and two Bulgarians, and one person from a Turkic-sounding nationality--a Karaimsk or Oksus.

A few of the women students hovered around thirty years of age but most students were between eighteen and twenty-four years of age. As would be expected, most students came from Odessa province or the southern provinces near Odessa, but, some came from the northwest provinces, such as Grodno, two were from Sofia, and, as noted some came from as far as Siberia. In addition to the daughter of the Jewish peasant from Irkutsk there also was a merchant's daughter from this city.⁸⁰

A survey of these students indicates not only a desire for upward mobility, but also that a certain upward mobility had already occurred in the Russian Empire. Most students were meshchanin, a few were peasants. Nevertheless, as required, all students, most of them female, had attended six years of middle school. Most had attended male or female gymnasia; a few male students had attended real schools. Some of the gymnasii were public, some were private. The women from Kutais had attended St. Nina's women's educational institute. There were Jewish peasants living in Siberia who were wealthy enough to send their daughters long distances to school. A survey of the student body also testifies to the high quality of the school and the attraction of dentistry for gentiles came, sometimes long distances, to a preponderantly Jewish school.

An amendment to the regulations for becoming a zubnoi vrach

and dantist, issued in 1905, stated that South Slavs could enter Russian dental schools with less than six years' middle school education if they did not subsequently practice in Russia.⁸¹ As noted, two or three of the students at the Margolin school were from the Balkans.

A review of the odontological issues concerning Russian dentists in the 1880s and 1890s substantiate the old adage that there is nothing new under the sun. Then, as now, a major topic in dental articles and books was dental hygiene and informing laymen of the importance of taking proper care of their teeth.⁸² A spate of books on this subject appeared from 1889. Most were informative but inexpensive and, thus, readily attainable by the public. The average length of the dental hygiene books was 20 to 40 pages--really pamphlet size. The average price of these publications was 20 kopeks. Thus, they were affordable and readable for the newly literate public.⁸³ Dentists also advocated increased dental care in the schools.⁸⁴ They conducted a number of statistical surveys on the condition of schoolchildren and peasants' teeth.⁸⁵ These surveys indicated the necessity of dental hygiene in the schools. In Kursk guberniya in 1901 only 18 percent of children examined had dental caries. However, in the Tula commercial school in 1903 90 percent of 176 children examined had rotten teeth. Only 5 percent cleaned their teeth daily, 20 percent cleaned their teeth occasionally, and 75 percent had never cleaned their teeth!⁸⁶

Conclusion

An examination of dentistry in late tsarist Russia permits some tentative conclusions, not only about this medical specialty but about politics and society as well. There were too few dentists in Russia and most were concentrated in cities. However, the number of dentists rapidly expanded between the 1880s and World War I. Movements to upgrade dentistry emphasize the vitality of grass-roots movements in late tsarist Russia. Dentists themselves initiated improvements in their profession. The Russian government, through the Medical Council and Department of the Ministry of Internal Affairs had always certified dentists. However, individuals founded the first dental schools. Yet, inherent fear of unregulated education led dentists to question this situation. Subsequently, if not in response to their complaints, the Russian government brought dental education under its control. Still, a certain amount of latitude remained for private enterprise. Dentists were successful in professionalizing their field. By the early twentieth century formally-educated dentists were nearly on a par with the lowest tier of physicians. On paper, dental education in late tsarist Russia was of high quality.

Dentistry offered a golden opportunity to woman and minorities. The Ruling Senate contributed by refusing to sanction local authorities' judgment on the appropriateness of dental apprentices. The number of women dental students was very high--far higher than in pharmacy or medicine. In 1913, only about 1.8 percent of pharmacists were women.⁸⁷ Apparently, there

were no quotas for Jewish dental students within the Pale; thus the Jewish meshchanstvo also was heavily represented. We can only marvel at sacrifices of lower income families to pay relatively high tuition fees. The enrollment of at least one dental school, the Margolin school in Odessa, illustrates a trend toward increased education and upward mobility among the lower urban classes.

1. See below, page 9, note 41.

2. See below, page 4, note 18. Some dentists acquired foreign degrees. "Ispytanie na zvanie zubnago vracha," Ispytaniya na stepeni lekarya, zubnago vracha, povival'noi babki, provizora, aptekarskago pomoshchnika i aptekarskago uchenika (St. Petersburg, 1907), p. 111.

3. "Khronika i smes'," Zubovrachebnyi vestnik, 1891, 13, 4 (April): 166.

4. "Khronika i smes'," Zubnovrachebnyi vestnik, 1892, 14, 1 (January): 41.

5. "Khronika i smes'," Zubovrachebnyi vestnik, 1892, 14, 5 (May): 206.

6. James Levi, "Pis'ma v redaktsiyu," Zubovrachebnyi vestnik, 1897, 19, 8 (August): 598.

7. Levi, loc. cit.

8. In "Polozhenie zubovrachebniya u nas i za granistei," Vrach, 1894, 15, 7: 200. P. F. Fedorov asserted that "in America a [dental] diploma was easily acquired for a little money."

9. Fedorov, ibid., p. 201.

10. Loc. cit.

11. Russia: Upravlenie glavnago vrachebnago inspektora, Otchet o sostoyanii narodnago zdравиya i organizatsii vrachebnoi pomoshchi v Rossii za 1905 god (St. Petersburg, 1907), p. vi.

12. Ibid., p. vii.

13. See below, page 39, note 8.
14. "Khronika i smes'," Zubovrachebnyi vestnik, 1885, 1, 1 (January): 45.
15. A. S-na, "K voprosu o dantistakh," Zubovrachebnyi vestnik, 1885, 1, 5 (May): 132-133, 135.
16. P. F. Fedorov, "Polozhenie zubovrachebniya u nas i za granitsej," Vrach, 1894, 15, 8: 233.
17. See Mary Schaeffer Conroy, "Pharmacy in Pre-Soviet Russia," Pharmacy in History, 1985, 27, 3: 123-124.
18. "Khronika i smes'," Zubovrachebnyi vestnik, 1885, 1, 4 (April): 89; "Khronika i smes'," ibid., 1891, 13, 11 (November): 429-430.
19. "Khronika i smes'," Zubovrachebnyi vestnik, 1891, 13, 1 (January): 41.
20. "Khronika i smes'," Zubovrachebnyi vestnik 1891, 13, 11 (November): 429 and "Otchet o deyatel'nosti zubovrachebnoi shkoli vracha P. A. Tychinskago v g. Odesse v 1891/92 akad. godu," ibid., 1892, 14, 9 (September): 373.
21. "Khronika i smes'," Zubovrachebnyi vestnik, 1891, 13, 10 (October): 424.
22. "Khronika i smes'," Zubovrachebnyi vestnik, 1892, 14, 6 (June): 241.
23. "Khronika," Zubovrachebnyi vestnik, 1897, 19, 4 (April): 206.
24. Ibid., pp. 99-100.
25. Zubovrachebnyi sbornik, 1898, 1, 1 (January): 51.
26. Spisok uchenikov i uchenits zubovrachebnoi shkoli I. I. Margolina v Odesse za 1914-1915 uchebnyi god (Odessa, 1914), pp. 5, 59. Russia obtained a sphere of influence in Manchuria in the 1890s; Russians were living in Manchuria in the early 20th century.
27. Spisok uchenikov i uchenits zubovrachebnoi shkoly I. I. Margolina v Odesse za 1914-1915 uchebnyi god (Odessa, 1914).
28. See above, notes
29. Spisok uchenikov i uchenits zubovrachebnoi shkoly vracha I. I. Margolina, pp. 5, 53. On p. 59 the proprietor of the Kiev school is listed as Dr. Golovchiner.

30. Fedorov, "Polozhenie zubovrachevaniya u nas i za granitsej," Vrach, 1894, 15, 9: 264.

31. "Khronika i smes'," Zubovrachebnyi vestnik, 1891, 13, 1 (January): 40-41; Fedorov, "Polozhenie zubovrachevaniya u nas i za granitsej," Vrach, 1894, 15, 8: 233.

32. See Mary Schaeffer Conroy, "Pharmacy in Pre-Soviet Russia," Pharmacy in History, 1985, 27, 3:120 and Conroy, "Women Pharmacists in Nineteenth- and Early Twentieth-Century Russia," ibid., 1987, 29, 4:159.

33. "Zubnoe delo v Soed. Shtatakh Ameriki," Zubovrachebnyi vestnik, 1885, 1, : 77-78; "Khronika i smes'," ibid., 1891, 13, 1: 40.

34. Spisok uchenikov i uchenits zubovrachebnoi shkoly vracha I. I. Margolina v Odessa za 1914-1915 uchebnyi god.

35. "Khronika i smes'," Zubovrachebnyi vestnik, 1885, 1, 4 (April):90; S-na, "K voprosu o dantistakh," ibid., 5 (May): 134; "Khronika i smes'," ibid., 1885, 2, 10 (October): 152-153.

36. "Khronika i smes'," Zubovrachebnyi vestnik, 1885, 1, 4 (April):90-91.

37. Those aspiring to the degree, Doctor of Medicine, had to take an additional examination and write a dissertation. The degree Doctor of Medicine and Surgery was higher still. "Medicine. Past and Present, in Russia." The Lancet, 1897, (August 7):367. See also Nancy Mandelker Frieden, Russian Physicians in an Era of Reform and Revolution, 1856-1905 (Princeton, 1981), passim. Fel'dshers or paramedics were not, of course, physicians although trained or shkol'nye fel'dshers attended special schools and also took qualifying exams. Their education, judging from texts and the examination, appeared to be quite thorough. See Mary Schaeffer Conroy, "Pharmacy in Pre-Soviet Russia," Pharmacy in History, 1985, 27, 3: 124.

38. "Khronika i smes'," ibid.:90-91.

39. S-na, "K voprosu," Zubovrachebnyi vestnik, 1885, 1, 5 (May): 136-137, 139. For information on fel'dshers see above, note 30. There also were special courses for trained midwives.

40. "Khronika i smes'," Zubovrachebnyi vestnik, 1885, 1, 4 (April): 89.

41. "Khronika i smes'," Zubovrachebnyi vestnik, 1891, 13, 7 (July): 290-292. also, "Normal'nyi ustav zubovrachebnykh shkol'," ibid., 8 (August): 323-332.

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42. "Novyi tsirkulyar' Medits. Departamenta 13 Fevr 1892, No. 1601 ...ob ustavlenii pri obremeniya zvaniya dantista," cited in Zubovrachebnyi vestnik, 1892, 14, 3 (March): 122-125. As was usual, the Tsar approved the opinion of the State Council about the ustavlenie pertaining to the the acquisition of the title dantist.
43. "Khronika," Zubovrachebnyi vestnik, 1897, 19, 7 (July): 367.
44. "Khronika," Zubovrachebnyi sbornik, 1898, 1, 4 (April): 184.
45. Zubovrachebnyi vestnik, 1891, 13, 3 (March): 125-126.
46. "Khronika," Zubovrachebnyi vestnik, 1891, 13, 11 (November): 429-430. For the Magister of Pharmacy degree see Conroy, "Pharmacy in Pre-Soviet Russia," p. 122.
47. Cited in "Pravila o poryadke ispitaniya na zvanie zubnago vracha," in Ispitaniya na zvaniya i stepeni lekara, zubnago vracha, povival'noi babki, provizora, aptekarskago pomoshchnika i aptekarskago uchenika, ed. N. Malinovskii (St. Petersburg, 1907), p. 121.
48. "Khronika i smes'," Zubovrachebnyi vestnik, 1891, 13, 11 (November): 429; "Otchet of deyatel'nosti zubovrachebnoi shkoli vracha P. A. Tychinskago v Odesse v 1891/92 akad. godu," pp. 373-374.
49. "Khronika i smes'," Zubovrachebnyi vestnik, 1892, 14, 8 (August): 331-332.
50. Fedorov, "Polozhenie," p. 264; also Zubovrachebnyi vestnik, 1897, 19, 12 (December): 640.
51. Ispytaniya, p. 119.
52. Ispytaniya, pp. 114-115.
53. Ispytaniya, p. 118.
54. "Khronika i smes'," Zubovrachebnyi vestnik, 1891, 13, 2 (February): 83; Zubovrachebnyi vestnik, 1892, 14, 5 (May): 206.
55. "Ispytanie na zvanie subnago vracha," Ispytaniya, p. 109.
56. Ispytaniya, pp. 122-123.
57. Ispytaniya, p. 114.
58. Ispytaniya, p. 112.
59. Ispytaniya, p. 115.

60. Ispytaniya, pp. 125-141.
61. Ispytaniya, pp. 142-163.
62. "Medicine. Past and Present, in Russia," p. 366.
63. "Khronika i smes'," Zubovrachebnyi vestnik, 1885, 2, 10 (October): 153.
64. "Khronika i smes'," Zubovrachebnyi vestnik, 1891, 13, 11 (November): 429.
65. "Khronika i smes'," Zubovrachebnyi vestnik, 1892, 14, 8 (August): 332.
66. "Khronika i smes'," Zubovrachebnyi vestnik, 1885, 2: 231.
67. Loc. cit.
68. "Zhenshchin-dantisty," Zubovrachebnyi vestnik, 1885, 1, 5 (May): 142.
69. "Khronika i smes'," Zubovrachebnyi vestnik, 1892, 14, 10 (October): 419.
70. "Otchet o deyatel'nosti zubovrachebnoi shkoli vracha P. A. Tychinskago v g. Odesse v 1891/92 akad. godu," p. 373.
71. "Khronika i smes'," Zubovrachebnyi vestnik, 1892, 14, 8 (August): 331.
72. "Khronika," Zubovrachebnyi vestnik, 1897, 19, 6 (June): 312.
73. Spisok...zubovrachebnoi shkoly...Margolina, pp. 1-89.
74. "Khronika i smes'," Zubovrachebnyi vestnik, 1885, 2: 231.
75. Ispytaniya, p. 113.
76. Loc. cit.
77. Thomas E. Sawyer, The Jewish Minority in the Soviet Union (Boulder: Westview Press, 1979), p. 107.
78. "Pis'ma v redaktsiyu," Zubovrachebnyi vestnik, 1897, 19, 11 (November): 598.
79. Spisok...zubovrachebnoi shkoly...Margolina, pp. 1-89.
80. Spisok...zubovrachebnoi shkoly...Margolina, pp. 1-89.
81. Ispytaniya, p. 120.

82. See, for example, A. K. Karav'ya Predokhranenie zubov ot porchi (Odessa, 1897), 18 pp., 20 kopeks; V. E. Nurik, Nashi zuby i ikh rol' i znachenie v dele pravil'noi funktsii vsego organizma (Odessa, 1889), 32 pp.; I. V. Troitskii, Vtoroe prorezyvanie zubov, ili vykhod pervykh bol'shikh korenykh (Kiev, 1889), 19 pp.--the pamphlet was very scholarly, the author was a docent at the University of Kiev; A. M. Popov, Domashnee lechenie zubov i mery, preduprezhdayushchiya porchu ikh (St. Petersburg, 1890), 46 pp, 20 kopeks; and I. M. Laufer, Iskusstvennye zuby i populyarnoe izlozhenie boleznei zubov i desen (Kiev, 1891), 45 pp. Also, Zubovrachebnyi vestnik (1885-1898), passim and Zubovrachebnyi sbornik (1898-1899), passim.

83. For more on literacy in late Tsarist Russia see Jeffrey Brooks, When Russia Learned to Read (Princeton, 1985), passim and Ben Eklof, Russian Peasant Schools (University of California Press, 1986), passim.

84. A. A. Nikolaev, "K statistike zubov uchashchikksya," Zubovrachebnyi vestnik, 1897, 19, 8 (August): 378-380; ibid., 6 (June): 310.

85. For example, see S. Okilhov, "O sostoyanii zubnago apparata krest'yanskom naselenii," Zamskii vrach, 1890, 8 (February 23): 208-212.

86. On school hygiene in general, as well as dental hygiene, see Mary Schaeffer Conroy, "School Hygiene in Late Tsarist Russia," Slavic and European Education Review, 1982, 2:17-26. The quality of students' teeth varied greatly. D. N. Zhbakov found that in Soligalish uezd or district in the 1880s peasant children's teeth were better than those of children of the clergy. In 1889 the Kursk students had had 58 percent cavities; no explanation was given in the contemporary report for this change. ibid., p. 25.

87. D. M. Toropov, "Dvizhenie i rost aptechnago dela v Imperii za poslednee desyatiletie (1901-1910 g.g.)," Vestnik obshchestvennoi gigieny, sudebnoi i prakt. meditsiny, 1911: 1298. For more on women pharmacists in tsarist Russia see Mary Schaeffer Conroy, "Women Pharmacists in Nineteenth-, and Early Twentieth-Century Russia," Pharmacy in History, 1987, 29, 4: 155-164.