Diaries of S.P. Botkin, Physician-in-Ordinary to the Tzar Family, as encyclopedia of medicine of the Russian Imperial Court

Sergei G. Zhuravskii
The Pavlov First Saint Petersburg State Medical University
68, L'va Tolstogo St., Saint Petersburg, 197022, Russia

Russian archives retain three diary books by a renowned Russian physician S.P. Botkin (1832−1889), containing information relating to his service as Physician-in-Ordinary to the Tzar Family in 1872−1889. Botkin’s work notes provide an important source revealing the practical arrangement of the royal court medical care as pertaining to internal diseases and laboratory diagnostics. Their central theme is the health status of Alexander II (1818−1881) and his spouse, Empress Maria Alexandrovna (1824−1880), in the last decade of their life. The everyday professional life of a court doctor is described in great detail: circumstances of medical examinations, physical examination results, clinical summaries, pharmaceutical prescriptions, guidelines on clinical nutrition, mineral water intake, climate therapy. The archive of the “elite” inscriptions contained in the diary books tracks the origins of contemporary clinical pharmacology with its patient-centered approach. Throughout the pages of the source, the author reveals himself in the little-known capacity of an empirical clinical psychologist. Diary entries show understanding of the pathogenic importance of the psychological background against which the internal abnormality develops and are indicative of the compliance level among the august patients. A number of fragments of daily comments along with a detailed post-mortem report of Empress Maria Alexandrovna constitute a unique material for consideration of the topic of deontological aspects of the service of the physician-in-ordinary to the Imperial family. Botkin’s notes provide an invaluable source of specific information exposing some private facts of life of the Imperial family in the described period of time. A targeted scientific study of the documents enables to consider the august personages’ individual health status as an independent factor in the historical process.

Keywords: history of medicine, service diaries, court medicine, physician-in-ordinary S.P. Botkin, S.P. Botkin as clinical psychologist, health and diseases of the Romanov dynasty, “everyday life history”


About the author
Sergei G. Zhuravskii – Doctor of Medical Sciences, Leading Researcher at the Laboratory for hearing and speech of the First Pavlov State Medical University of Saint Petersburg, the Ministry of Health of the Russian Federation (Saint Petersburg). E-mail: s.jour@mail.ru

During the 27 years that S.P. Botkin devoted to clinical practice and teaching work at the Medical-Surgical Academy, 17 years were spent as house physician to the families of two Russian emperors – Alexander II and Alexander III. However, Botkin’s service as a physician-in-ordinary to the imperial family still remains an insufficiently studied aspect of his professional career.

Very little was mentioned about this side of Botkin’s career in the years following the demise of the “main patients” of the Winter Palace and of Botkin himself. Contemporaries who witnessed the events [1–3] could not touch on this issue in their memoirs. The reason was not so much the sensitivity of health-related topics concerning the august personages – the next of kin of the reigning Emperor Nicholas II – but the involuntary involvement of the physician-in-ordinary in the domestic dramas of Alexander II.

At the end of the 1860s, the Empress Maria Alexandrovna began to develop pulmonary tuberculosis. Botkin became honorable physician-in-ordinary in 1870 ¹ (the title presupposes

the obligation to be on call at the palace for individual consultations), and was called upon at the beginning of 1872 to constantly attend to the empress2 (Fig. 1).

From this point on the physician-in-ordinary spent almost every day for nearly a decade tending to the medical demands of the royal family. During those years, the court doctor was a witness, and sometimes unwitting participant, in the double family life of Emperor Alexander II. Since the subsequent monarchs were supporters of patriarchal values, after 1881 the court tacitly followed a “moral rehabilitation” rule – the circumstances surrounding the many years of Alexander II’s morganatic relationship were suppressed. That which was connected with it was ignored and consigned to oblivion, or loyalty was demonstrated. “...The new court immediately dismissed all those who were caught up in the old [court]...” was how Sergei Makovsky, the son of the imperial portrait artist, characterized the position of former courtiers [4, p. 59].

In the Soviet period, his successful career as “the leading doctor” of the empire did not fit with the creation of an iconic image of a clinician innovator and founder of the Russian school of scientific medicine [5‒8]. The official ideology of class resistance to enemies of the state ignored the fact that Botkin was the father of the physician-in-ordinary to the next generation of the Romanovs – Evgeny Botkin, who refused to abandon his oath of allegiance to the royal family and was executed along with them. For almost a century, there was no demand for scientific and historical research on the topic of S.P. Botkin’s court service.

Interest in studying this period in the life of this famous Russian figure appeared only after the socio-political situation in the country changed. Materials became available from the court medical archive of the RSHA and the personal archives of the doctor and people close to him [9‒12]. At the same time, a primary source – Botkin’s official diaries – were unfairly ignored. Their information is unique, as they are objective and at the same time very specific – professional (medical) information concerning the members of the royal family. The entries reveal descriptions of the illnesses for which the physician-in-ordinary was summoned to the court. The severity of a physical condition required either a one-time consultation or constant observation, sometimes lasting many months. Illness-free periods are revealed by gaps in diaries’ entries. As a result, there are three notebooks – in general a well-dated, continuous and detailed medical history of the royal family. Scientific materials and personal matters can be found in them, but to a much lesser extent, however [13]. These “inclusions” indirectly indicate that there were not any other personal Botkin documents of a memorable character.

Turning to the diary’s characteristic entries, it becomes clear that Botkin served at the court from 1870 to 1889. Prior to him, supervision of the empress’s health was the responsibility of the doctor of medicine and surgery, physician-in-ordinary K. von Haartman (1819‒1888). There is reason to believe that the German doctor, who received his education in the pre-Virchow period and who had a great reputation as an obstetrician, was insufficiently versed in internal diseases.3

---

Speaking of the diaries’ content, we begin by denoting the sources as Diary of 1872–1874, Diary of 1872–1877, and Diary of 1877–1899 (Fig. 2). The first is a 120-page book of the author’s texts. The document is in the Botkin archive, in the archive of rare and valuable books of the main library of the C.M. Kirov Military Medical Academy (ML MMA) (Saint Petersburg). The second consists of 187 pages, of which 133 are filled in by the author. This source is stored in the manuscript department of Pushkin House (PH) (Saint Petersburg). The third is the principle document of the S.P. Botkin archive in the department of manuscripts of the Russian National Library (Saint Petersburg). It contains 220 pages, of which the last four were left unfilled. With an entry on May 6, 1889, the account of events is interrupted. (Six months later, Botkin passed away).

Starting in 1872 and over the subsequent eight years, Botkin single-handedly created and conducted a treatment strategy for the empress. During periods of the disease’s remission, observations were conducted by his deputies, students and successors, doctors E.A. Golovin (honorable physician-in-ordinary from 1875) and V.Ya. Alyshevsky (honorable physician-in-ordinary from 1880).

Speaking of the diaries’ content, we begin by denoting the sources as Diary of 1872–1874, Diary of 1872–1877, and Diary of 1877–1899 (Fig. 2). The first is a 120-page book of the author’s texts. The document is in the Botkin archive, in the archive of rare and valuable books of the main library of the C.M. Kirov Military Medical Academy (ML MMA) (Saint Petersburg). The second consists of 187 pages, of which 133 are filled in by the author. This source is stored in the manuscript department of Pushkin House (PH) (Saint Petersburg). The third is the principle document of the S.P. Botkin archive in the department of manuscripts of the Russian National Library (Saint Petersburg). It contains 220 pages, of which the last four were left unfilled. With an entry on May 6, 1889, the account of events is interrupted. (Six months later, Botkin passed away).

Note that the diaries’ material covers the entire period of Botkin’s service at the court, except at the very start — from February to October 1872. The main topic of these documents is the state of Alexander II’s health (1818–1881) and that of his wife, Empress Maria Alexandrovna (1824–1880), in the last decade of their lives. The long-term history of disease described by physician-in-ordinary Botkin is one of the most detailed written records professionally detailing the day-to-day service of the court physician.

Overall analysis of the material shows that at the beginning of his work at the palace, Botkin simultaneously maintained two notebooks, having probably had the intention to present his accumulated medical information on the “main patient” (as he called the ailing empress) in a structured fashion. It should be noted that medical histories in the form of an official document did not exist. It is clear that Diary (1872–1874) was used as a notebook. The daily records provide information on the state of health of the empress and her daughter, Grand Duchess Maria Alexandrovna, who received climate therapy (“acclimatization”) in Italy in the spring and summer of 1873. Over this same period, Diary (1872–1877) contains draft reports sent to his majesty and the minister of the court, Count A.V. Adlerberg, as well as recollections of forgotten events.

In caring for the royal family, Botkin visited their quarters twice a day (morning and evening). Daily records reveal when visits took place and the meteorological conditions (Fig. 3). Botkin

---

5 ML MMA. S.P. Botkin Foundation. F. VIII. D. 12 / 1 (Diary Notebook [1872-1874]. P. 120.
systematically measured the air temperature with a Reaumur scale thermometer on the territory of the residence and in the living quarters, observed the wind direction, humidity by a hygrometer, aneroid-barometer readings, and precipitation patterns. “... morning of May 6, 11... In the north 19, 19.5 in room 17, hygrometer 6.8 – clouds uniformly covering the whole sky, southerly wind and at times from the west; more pleasant than yesterday, the sun is obscured, barometer 754 ...” – a phrase that is typical at the start of the daily narrative. Attention to the weather conditions was no coincidence. The aim was to identify the individual meteo-sensitivity of the patient. For example, the influence of the southern Mediterranean sirocco wind and humidity on breathing, of southwestern winds on headaches, the spread of “feverish miasma” and, conversely, the favorable northern and northeastern winds, and so on. These external influences on the course of chronic diseases was empirically observed prior to Botkin and his contemporaries (I.E. Dyadkovsky, P. Charukovsky, N.F. Zdekauer and G.A. Zakharyin). However, Botkin, with his rationalism and scientific way of thinking, tried to explain the mechanism of these phenomena and their pathogenesis. We present one original conclusion on atmospheric conditions that provoke an increase in sputum volume in the long-coughing sovereign: “...Clearly, the falling of the barometer brings lots of different schizymycetes, causing ... decomposition in the cavity contents, these decomposition products are absorbed and produce a feeling of weakness, drowsiness on days when the barometer is showing a low reading...”

---

*ML MMA. S.P. Botkin Foundation. F. VIII. D. 12 / 1 (Diary notebook [1872–1874]).

1°R = 1.25°C.


established at a time when the nature of the main bacterial infectious diseases (tuberculosis, syphilis, typhoid and typhus, malaria), had not yet been proven.

Since the first entry was usually recorded between 9 am and 10 am, it becomes clear that the physician-in-ordinary conducted a morning examination of the royal patient when she was still in bed. Inquiries were conducted concerning complaints, sleep efficiency, the presence of night sweats, details of their bowel and bladder habits. Heart rate was assessed, as well as its force, and the skin temperature level. Daily measurement of body temperature with a Celsius thermometer was a must. (If you take into account the content of Haartman’s reports, it can be concluded that when Botkin examined his Winter Palace patients he first took their temperature – “[it] was done out of urgent necessity” [1, p. 231]). From a number of the diary’s comments, it should be noted that the medical examinations that are typical for the present day were perceived as something unusual and foreign by the royal patients. The procedure was tiring; it was accompanied at times by undisguised irritation.

The physician-in-ordinary usually recorded the second entry at around midnight. He also recorded weather reports for the day, noted appetites (sometimes referred to dishes), estimated daytime sleep, body temperature, pulse, cough intensity, the state of “physics” (physical strength).

A full physical examination was not included in the “daily minimal” examination of the VIP patient. Diagnosis using methods that involved contact with the body had not yet become everyday practice at the time. Days on which medical manual manipulation techniques were carried out, requiring the patient to reveal private parts of the body, were agreed in advance (“...auscultation is prescribed for tomorrow at 8 ...”13 “a request for auscultation needs to be made for tomorrow ...”14 “... today auscultation was prescribed ...”15 and so on).

Judging by the diaries, Botkin was scrupulous, even by modern standards, in conducting medical examinations: hepercussed, conducted detailed auscultation of the lungs, listened to heart sounds, felt the belly (recorded the size, density and tenderness of the liver and spleen, the position of the kidneys, the degree of bowel movement), assessed the nature of the pulse, skin (color, warmth, clamminess, precipitation), the thickness of subcutaneous fat, hearing condition, swelling of the legs, abdomen, and examined the tongue. The examinations conducted by the physician-in-ordinary included the study of night-time urine and the contents of the spittoon (the volume of sputum were recorded, its structure, admixture of blood). In connection with this, the imperial house’s family doctor acquired a microscope [1, p. 231]. At a time when laboratory diagnostics as a specialty was just beginning to emerge, the examination of the patient’s biomaterial was the responsibility of the attending physician. In the 1870s, these tasks were likely assigned to the doctor’s assistants – Kononov and Yakovlev. Together with this, the diary mentions details of examinations revealing that the physician-in-ordinary monitored the results using laboratory methods that were innovative for the time. The morning visit ended with the calculation of the urine’s specific gravity, the volume of urinary sediment, the carrying out of chemical reactions for protein identification (reaction to boiling and acetic acid). Microscopic (“micrographic”) examination revealed hyaline cylinders, “cellular elements of a pus-like nature,” “red blood cells,” crystals of urea, uric acid. The mass of urinary salts was weighed. The sputum was searched for elastic fibers, which were already known as a marker of lung tissue destruction, “Myelin forms” (fat-like formation in the sputum, which are cells of degenerating epithelium), and “schizomycetes” – bacterial cells that had only just started to be considered as the cause of infectious processes. Laboratory techniques were used that have long been shelved. For example, in suspected cases of colic associated with “gallstones,” the order was given to wash out and grind the patient’s excreta. Using this method, they searched for excreted concretions, which confirmed the correct diagnosis (clinical case of Grand Duke Nicholas, Sr., 1877)[16][14, 15].

Often among the daily records are “notes” or “conclusions” – a prototype of the modern epicerisis. Their defining feature was a comprehensive

analysis of the causes of disease: taking into account the sanitary-hygienic conditions of the palaces (ventilation of rooms, air flow, humidity, etc.), landscape, weather factors, the psychological condition of the patient and the medical tactics of the previous doctor. Botkin’s interest was piqued by such seemingly irrelevant information as the epidemic situation in previous years (the smallpox epidemic in the Yalta district in 1869–1870, malaria outbreaks in the vicinity of Rome in the early 1870s, the cholera epidemic of 1837, seasonal “infectious forms” in the Bulgarian steppes).

The diaries record the details of the medication regimes that were prescribed for the empress over an eight-year period. Botkin’s pharmaceutical prescriptions often took the form of pills and tinctures, and less frequently infusions, ointments and plasters. The tzars’ doctor was an opponent of the old doctrine of dyscrasias, which was emphasized by the fact that at no point did his recommendations mention the use of vein bloodletting, leeches, debilitating methods of water treatments and other such treatments. In the records priority is given to simple prescriptions for single-component mixtures, often containing sal ammoniacum (purified ammonia — a favorite tool of Botkin’s teacher, Moscow Professor F.I. Inozemtsev), quinine, codeine, digitalis, chloral hydrate, potassium bromate and other substances. Prescriptions from pharmacopoeia were also used: Dover’s powder, Blanchard’s pills, Fowler’s solution, Hoffmann’s drops, Darel’s wine tincture, etc. The clinical features of the disease (“conditions that alter the proper course of the disease”17 “admixture of some other infections,”18 complications, “the exacerbation of processes”) was determined by the appearance of individual, often polysyllabic, medicinal formulations. We present a recipe for a pill that the empress took during periods of hemoptysis:

“Rp: Ext. Hyoscyami gr Vijj
Pul. Secale cornutum ʒ[3]
Chinini muriatis ʒ[3]
Pul. Herbae Digitalis gr XV
Ext. Liquiriti q.s. 60.
D.S. 2 [pills] – 3 times a day”
(July 1879)19.

The prescription of this recipe, which included well-known vegetable substances with antitussive, hemostatic, anti-inflammatory effects, slowed down the increased heart rate, was well understood and was the prototype for the modern principle of combination therapy.

In addition to the known and proven official substances, the latest drugs and therapeutic methods, which were still not listed in the Russian Pharmacopoeia, were used. These included treatment with “condensed air,” inhaled nitrous oxide and faradization. The royal patients were among the first in Russia to receive pilocarpine, preparations from Lily of the Valley and Adonis, among others. Among the European innovations in private therapy were massage (“passive gymnastics”), the application of which the empress evaded in every possible way, most likely for moral reasons.20

His overall outlook, confidence in his beliefs and independent nature allowed Botkin to demand radical changes in the living conditions of his royal patients in order to maintain their health. (It should be noted that the implementation of high-tech and extremely expensive projects provides evidence of their confidence in the royal physician). In November of 1876 “an oxygen bell” was installed and put into operation in the Winter Palace.21 An emergency decree on its creation followed a September 19, 1876, telegram from Livadia, and, we believe, was a result of Botkin’s advice. This recommendation may have been a result of the emperor developing in the summer (!) chronic bronchitis with “asthmatic seizures,” which lasted almost three months.22 A sophisticated hermetic design in the form of a metal cylinder about three meters in diameter was the forefather of the modern apparatus for hyperbaric therapy. It was situated in the private quarters of Alexander II.23 An entire vertical space in a western part of the Winter Palace, including a basement, was required for engineering support. According to our calculations, putting the

23 RSHA. Foundation of the Court of His Imperial Majesty Office Ministry of Internal Affairs. F. 469. Op. 11. D. 225 (Case on the “bell” device in the Winter Palace (pneumatic apparatus) for the treatment with condensed air […] September 19, 1876 to September 3, 1881). P. 1.
“bell” into operation cost 73,200 rubles.24 (For comparison, the annual salary of a full professor at the Medical Surgical Academy clinic in 1876 was about 3,150 rubles, and 4,290 rubles for a physician-in-ordinary [16, p. 584]. A room in a boarding house in the Vyborg district, popular among medical students in the early 1870s, was rented out for 8 rubles per month, and regular family care for boarding students was about 25 rubles [17, p. 834]). In her last years, the empress did not suffer from a single tuberculous flare up, and as such “hyperbaric therapy” was intentionally not prescribed: “…purulent exudates [in the ‘bell’] are almost all bad, apparently the “bell” produces an opening through the bronchi…” 25 This recording, made in 1873, is fully consistent with the modern understanding of the issue.

In turn, at the request of the physician-in-ordinary, completely enclosed wooden corridors were built for the ailing empress in winter time; they were insulated with thick cloth and furnace heated. The temperature in them was maintained at no lower than 19°C.26 The purpose of these “specially constructed devices” was to ensure the most tolerable transfer from a train to the state carriage, and from there to the entrance of the palace. During the cold season, the empress could continue her physical activity in the fresh but at the same time somewhat heated air, in palace galleries that had specially installed fountains and reconstructed windows to provide the required temperature (“palace halls adapted for strolling”).27

When speaking of large-scale projects for the restoration of the royal family’s health, we cannot ignore Ereklelike. Soon after Botkin’s first visit to Livadia in March 1872, an order was issued for the urgent construction of this satellite residence. (Note that it was in this spring that Alexander II became a father in his second family.) With an understanding of this family’s medical history (“…there could be no secrets kept from Botkin in the palace …” [18, p. 152]), the physician-in-ordinary found that for pulmonary conditions and upset nerves the royal patient would benefit from many hours away from the palace. To this end, the seemingly irrational construction of the Ereklelik residential complex was quickly started at a remote site in the mountains, 4.5 kilometers away from the official residence.28

The medical prescriptions frequently include balneotherapy, which was characteristic of the times. In Botkin’s materia medica are European resorts such as the Ems, Karlsbad, Franzensbad, Nauheim, Salzbrunn, and others. However, his favorite destination was the waters of Karlovy Vary’s hot mineral springs in Bohemia. Depending on the situation, he also recommended artificial mineral water made from evaporated Karlsbad salt or its pharmacopoeia analogue. Botkin’s individuality appears in his recommendations to start treatment with a small volume of water and then later gradually increase it (“…one should be very careful in drinking …”, “…begin drinking water from one glass …”, “…we decided to offer a small amount to drink …”29 “…I advised to drink water very sparingly …”30). Botkin confidently adhered to this rule, while at that time the view of many practitioners was still dominated by the “humoral” treatment doctrine, with its debilitating methods of treatment (baths lasting many hours, consuming mineral water in large quantities, abundant bloodletting, and so on).

The physician-in-ordinary’s differentiated perception of natural healing factors should be noted. Although Karlsbad was considered a popular resort in the highest circles, Botkin never suggested it to the emperor and empress. This place, from the point of view of the physician-in-ordinary, was curative for different a type of patient – those who often overrate, led a sedentary lifestyle and were prone to sluggish bowel movements. Indications for it included “gallstones,” atonic constipation, and obesity, among others. Advice for taking spa water treatments was given to Grand Duke

29 ML MMA. S.P. Botkin Foundation. F. VIII. V. 12 / I. P. 61, 72 ob., 84.
Nikolai Nikolayevich Sr., Court Minister A.V. Adlerberg, Prince B.D. Golitsyn, and first lady in waiting E.P. Makushina. Botkin himself went to Karlsbad.

The physician-in-ordinary regularly recommended Ems for the emperor, with *Krahnchen* water, curative in cases of “catarrh and asthma.” Mineral waters were not prescribed for the empress. Emaciated by eight pregnancies and childbirth and constantly coughing, the melancholy woman was prescribed the mildest of revitalizing interventions – a long climatic treatment in locations with a warm, moderately humid climate and hilly terrain, providing for walks, exercising the lungs (Fig. 4). Among the locations for “acclimatization” for the empress was Sorrento (1873), Albano (1873), San Remo (1874–1875), Cannes (1879), the southern coast of Crimea (1872, 1876, 1878, 1879), and Jugenheim (1873, 1874, 1879).

The physician-in-ordinary’s duties included dietary recommendations: variations of treatments with milk (in cases of cardiac edema, tuberculosis of the lungs, typhoid fever and loss of appetite), ampelotherapy (for metabolic disorders and obesity), meat-based and “sugary” diets and others. The Winter Palace’s patients were administered whole, skim, and ice-chilled milk, mare’s milk, *libihovsky* broth, meat bouillon, meat “pellets” roasted on the fire, asparagus soup, sweet grapes, Rhine wine, and more.

Thus, a review of the diary materials consistently refutes the criticism of Professor Botkin found in a certain literature of the 1890s for a weak therapeutic arsenal and so-called “therapeutic skepticism... bordering almost nihilism...” [19, p. 12].

Today these “real-life” personalized accounts of private treatment from the second half of the 19th century are fertile material for separate research. A comparison of the physician-in-ordinary’s “elite” prescriptions and “public” prescriptions, offered in the clinic that Botkin simultaneously ran, would be interesting [20].

Two discoveries merit a separate discussion, one of which dates from June 1880 and is associated with the death of the empress, and the other, the regicide incident of March 1, 1881. The first was presented in memoir style, uncharacteristic for the document on the whole – and was an attempt to create a psychological portrait of the empress. (Note that this passage does not even include the results of the autopsy, which is uncharacteristic for the author, who had always defended the need sectional analysis of a clinical case.) This detailed, 20-page description is of exceptional value because it contains a number of unique characterizing observations, expanding on accounts about the woman’s personality, which have been undeservedly forgotten by Russian historical science.

A different approach can be found in a fragment associated with the death of Alexander II. The description of the emperor’s agony, which was witnessed by Botkin, ends with a detailed results of the autopsy. This document’s content is a classic posthumous epicrisis and is a professional postmortem report on the case. Such a clear difference in the “concept” for drawing up the last diary entries for the empress and emperor seems to reflect Botkin’s different personal attitudes towards his foremost patients. Seeing the suffering of the empress — physically (due to terminal illness) and mentally (as a result of family needs) — the physician-in-ordinary’s “elite” prescriptions and “public” prescriptions, offered in the clinic that Botkin simultaneously ran, would be interesting [20].

Two discoveries merit a separate discussion, one of which dates from June 1880 and is associated with the death of the empress, and the other, the regicide incident of March 1, 1881. The first was presented in memoir style, uncharacteristic for the document on the whole — and was an attempt to create a psychological portrait of the empress. (Note that this passage does not even include the results of the autopsy, which is uncharacteristic for the author, who had always defended the need sectional analysis of a clinical case.) This detailed, 20-page description is of exceptional value because it contains a number of unique characterizing observations, expanding on accounts about the woman’s personality, which have been undeservedly forgotten by Russian historical science.

A different approach can be found in a fragment associated with the death of Alexander II. The description of the emperor’s agony, which was witnessed by Botkin, ends with a detailed results of the autopsy. This document’s content is a classic posthumous epicrisis and is a professional postmortem report on the case. Such a clear difference in the “concept” for drawing up the last diary entries for the empress and emperor seems to reflect Botkin’s different personal attitudes towards his foremost patients. Seeing the suffering of the empress — physically (due to terminal illness) and mentally (as a result of family needs) — the physician-in-ordinary’s “elite” prescriptions and “public” prescriptions, offered in the clinic that Botkin simultaneously ran, would be interesting [20].

Fig. 4. Empress Maria Alexandrovna (about 1870).31

31 From S. Balan and T. Shakirov’s book [23].
32 The diary description of the last minutes of the emperor’s life was discovered and first published with scientific commentary by Professor B.F. Egorov [12].
drama) – evoked, contrary to Botkin’s professional pragmatism, in addition to human sympathy, a kind of metaphysical perception of her personality. “...Only now do I understand the connection between us, the severing of which I feel very deeply...” wrote Botkin, several weeks after the funeral of the empress.33 In contrast, the psychological makeup of Alexander II – both as a patient and as a person, despite his status, should have been well understood by Botkin, who possessed the instincts of a psychologist. The formation of the physician-in-ordinary’s special loyalty to his patient was aided, it would seem, by a unifying similarity in personal circumstances censured by public morality – the existence of secret families and illegitimate children with both men. We shall leave this as a topic for later discussion.

The content of the diary significantly changes after the March 1881 tragedy. From that point it ceases to be a patient-specific document and contains many short recordings made after the one-time consultations with the dynasty’s members (Grand Duchesses Alexandra Iosifovna, Alexandra Petrovna, Maria Pavlovna, Duchess Theresia Petrovna, Grand Duke Konstantin Nikolaevich and others), as well as representatives of the Russian elite (Minister of Justice D.N. Nabokov, Prince N.M. Golitsyn, General P.A. Cherevin, and others).

In describing the diaries’ contents, we cannot ignore numerous significant topics of a psychological nature. Analysis of royal patients’ illnesses foreshadows the appearance of the main areas of clinical psychology – mental manifestations of internal pathologies, occurrences of neurosis, psychosomatic diseases and, finally, the psychological method of medical treatment (psychotherapy). The diary’s narrative provides an idea of the empirical phase of the existence of areas of medicine that would not be transformed into an independent scientific field for some time. Designated issues of clinical psychology are not so clearly expressed even in the “Courses of Clinic Internal Medicine” [21], probably for the reason that during the preparation of the editions (1867, 1868, 1875), these ideas were not yet clear for Botkin.

Diary entries indicate that Botkin was well aware of the value of “internal” (psychological) reasons for disease. “...Her Majesty’s psychological side is reflected very strongly in her physics (and I as a doctor do not have the right to intervene), and daily chest examinations reinforce this opinion, now and as before. Her Majesty’s more depressed state of mind is immediately evident with a decrease in respiratory muscle strength and her breathing becomes less free...”34 The clause in parentheses, deleted by the author, clearly indicates that the physician-in-ordinary understood the nature of his patients’ family relationship. Of course, openly mentioning the situations that had a negative impact on the course of the Empress’ thoracic disease was not allowed. Along with the dark moments, the diary constantly features extensive references to certain “moral reasons” and “ethical reasons” aggravating the disease. It is thanks to the diaries’ recording of the empress’s worsening pulmonary tuberculosis (instances of acute pleurisy in 1872, 1873, 1874, 1878) that we can trace their connection with the events that took place in the second family of Alexander II (the birth of Princess E.M. Dolgorukova’s children, the appearance of a secret decree of their adoption, relocation to the palace). Botkin’s observations, made in October 1873, when Dolgorukova’s second child was born, can be considered an example: “...The current ... life with all its situation is, of course, such that one cannot take sound measures for the health [of the empress], which requires particular calm, both physical and moral... The task is so difficult that ... it is almost impossible under the conditions in which Her Majesty lives...”35 In contrast, the exacerbation of the head of state’s chronic diseases (asthma, chronic malaria), Botkin associates exclusively with the events of a public nature – military and political. “...Each unpleasant dispatch affects the emperor...” – a note, concerning the circumstances of the tense political situation on the question of declaring war with Turkey, preceded the summer exacerbation of chronic bronchitis in 1876.36 This topic was discussed earlier [22].

The impact of mental factors was noted in the clinical findings concerning the diseases of

the younger grand dukes and duchesses (Maria, Sergei, Pavel Alexandrovich and Konstantin Konstantinovich). Each member of the family, by virtue of their individual “moral reasons,” received recommendations for a course or individual dose of chloral hydrate, potassium bromate, Hoffmann’s Drops or valerian drops, and so on.

Understanding that there were “moral causes” for disease, during the natural-science breakthrough in medicine, demonstrates Botkin’s flexibility in clinical thinking. Materialist views did not prevent him from recognizing the physical condition’s dependence on insignificant, at first glance, psychological factors: “...Man is not a plant that needs only a predetermined amount of heat and humidity to maintain human health, his moral side must be satisfying as well...” (November 1874).

Botkin’s innovativeness as a clinical psychologist-empiricist is demonstrated by the fact that his ideas emerged several years before 1876, when the first Russian work demonstrating the link between mental and internal diseases appeared [23]. (Note the special significance that was given in this publication to the importance of emotional turmoil and stress for the emergence of tuberculosis.) It is reasonable to ask the question: did Botkin pass to its author, V.A. Manassein, his former faculty assistant, the torch of scientific research for this eternally relevant clinical topic – the significance of which he had had the opportunity to confirm by observing his royal patients?

The diary entries pay special attention to the psychological mood of the ailing man, his attitude to the treatment (there is a special term for this in modern medicine – compliance). The physician-in-ordinary’s comments concerning the implementation of his recommendations allow us to understand that the empress, in modern parlance, was a patient with low compliance (“...the empress feels better, even though she did not admit it...”, “...my advice to stay here and then go to warmer districts remains ignored...” “...I cannot tell you what a great amount of effort it took to solve this, I admit Her Majesty’s vacillations exhausted me...”).

There is reason to believe that Maria Alexandrovna was not allowed to openly discuss her family situation (“...she was not open with anyone, always restrained, almost always official...”). Mental suffering, lack of outside involvement, apparently, created a state of reactive depression (“...always sad, grieving, crying...”). For such a patient, Botkin had the ability to beneficially affect the psyche of the ill person, probably, due to his nature and his years of practice. (This is what E.A. Golovin meant when he spoke of Botkin’s special character: “...His tone of voice, a smile, a gesture betrayed a congenital good nature and good will, a charm to which everyone who engaged with him in private dealings involuntarily succumbed” [1, p. 233]). Being a witness to many years of Botkin’s court practice, Golovin noted that “he considered not only diagnosis and treatment, but a healing moral influence...” to be among his duties [1, p. 234]. Even in the conclusions of the biased courtier, his “presence was reassuring... and desirable for the empress” [18, p. 151]. Characteristically, Botkin never commented on this ability in the diaries about (leaving it “between the lines”).

Let us emphasize another important psychological topic in the source material – the deontological aspect of the physician-in-ordinary’s court service. The extraordinariness of the clinical cases is explained by the status of the VIP patient (the head of state), with absolute power in an empire of 80 million people. Details in the records give one reason to assume that the establishment of contact with the patient and receiving his or her consent for accurately providing medical recommendations – whilst impeccably complying with court etiquette – made the work of the doctor a hard task. Obviously, these conditions required the highest professional rhetorical skills and at the same strenuous exertion of mental powers. Botkin was forced to constantly prove to his “main patient” the accuracy of his diagnoses, and to persuade him of the validity of his prescriptions, since following

them (and it was evident to all of the surrounding family) aggravated the contradiction between the dynasty’s official interests and Alexander II’s private considerations.41

In conclusion, we highlight the significance of the source material and its prospects for multilateral study. We have identified a topic that is not directly addressed in the present report: the diaries’ value, of course, is determined by their author. The diaries’ narrative provides historians of medicine with a better understanding of Botkin’s identity and provides examples that demonstrate the particular outlook and clinical thinking of this famous Russian physician.

The physician-in-ordinary’s diaries disclose the details of the practical organization of the court’s medical care. The material’s specificity and vastness allow us to consider the source as a kind of “encyclopedia of everyday” court medicine. Devoid of officialdom, while providing objective (professional) information, they create an effect of being present, humanize the “patients on the throne,” as well as, indeed, the doctor himself, making them closer to us and more human and understandable. Holding promise for research, the diaries’ materials present the position that an individual’s health, when it comes to the powerful, may be regarded as an independent factor in the historical process.

It should be noted that the prevalence of medical topics does not make the diaries an insulated, “closed-off” system. The rather well-researched, rich epistolary and memoir heritage of Botkin’s contemporaries, as well as official historical documents of the era, have been preserved. A concurrent review of Botkin’s diaries with these source materials will significantly complement the national history of the last third of the 19th century.

Acknowledgements
The author would like to thank V. Chikulin for his collegial discussion of the material and advice in writing the article.

REFERENCES


16. Spisok grazhdanskim chinam chetvertogo klassa (The list of civil ranks of the fourth class). Saint Petersburg, 1876. [in Russian]


20. Bogomolov V.I. “Rp” – найболее upotrebitel’nye lekarstvennye formy v klinike prof. S.P. Botkina i lekarstvennye formy, vpervye predlozhennye im (“Rp” – the most commonly used drug forms in the clinics of S.P. Botkin and drug forms which were suggested by him for the first time). Mezhdunarodnaya klinika. 1882; 5: 1–5. [in Russian]


23. Manassein V.A. Materialy dlya voprosa ob ehtiologicheskom i terapevticheskom znachenii psihicheskikh vliyanij (The Materials Related to the Issue of Etiological and Therapeutic Effects of Psychological Factors). Saint Petersburg, 1876. [in Russian]


About the author
Sergei Grigorievich Zhuravskii – Doctor of Medical Sciences, Leading Researcher at the Laboratory for hearing and speech of the First Pavlov State Medical University of Saint Petersburg, the Ministry of Health of the Russian Federation (Saint Petersburg).