

DOCUMENTARY SOURCES WITHIN THE PATRIMONY OF THE MUSEUM COLLECTION OF THE FACULTY OF PHARMACY FROM BUCHAREST REGARDING *MATERIA MEDICA*

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Abstract

Materia Medica represents the totality of the curatives that were used in the last century's pharmacology. It can be reconstructed by studying the direct sources: Codex, Dispensatories, and Pharmacopoeias but also by the assessment of the indirect sources that are resulted from the organizational-administrative activities: inventories, sale-purchase documents, pharmaceutical taxes [3], vessels and labeled furniture pieces.

The most significant aspects of pharmaceutical education and practice in Romania can be illustrated by means of patrimony of the Collection of Pharmacy History “Lecturer PhD. Pharm. Zisi Fârșirotu” within the Faculty of Pharmacy from Bucharest. The present paper examines the pharmaceutical vessels from the point of view of the information provided regarding *Materia Medica*. In the Collection there are 122 pharmaceutical vessels dating from the XIXth and XXth centuries. They are made from various materials: wood, porcelain, glass and enameled ceramics being accomplished in autochthonous and abroad studios. All of them bear “signatures” that, as labels, mention the content of these recipients. That is why the pharmaceutical vessels are constituted as a documentary important source for the identification of the curatives that were used, along the time, in pharmacology.

Rezumat

Materia Medica reprezintă totalitatea remediilor folosite în farmacologia secolelor trecute. Aceasta poate fi reconstituită prin studierea surselor directe (de exemplu Farmacopei) și indirecte, rezultate din activitățile administrative ale vremii (inventare, vase și mobilier farmaceutic). Aspectele cele mai semnificative ale învățământului și practicii farmaceutice din România pot fi ilustrate cu ajutorul patrimoniului Colecției de Istoria Farmaciei „Conf. Dr. Farm. Zisi Fârșirotu” din cadrul Facultății de Farmacie din București. Prezentul studiu analizează vasele farmaceutice sub aspectul informației pe care o furnizează despre *Materia Medica*. În Colecție se află 122 de vase de farmacie care datează din secolele al XIX-lea și al XX-lea. Ele sunt confecționate din diverse materiale: lemn, porțelan, sticlă, ceramică smălțuită fiind lucrate în ateliere din țară sau străinătate. Toate poartă „signaturi” care, întocmai unor etichete, menționează conținutul acestor recipiente. De aceea, vasele farmaceutice se constituie ca o sursă documentară importantă pentru identificarea remediilor utilizate de-a lungul timpului în farmacologie.

Keywords: museum collection; pharmaceutical vessels; *Materia Medica*

Introduction

Materia Medica represents the totality of the curatives that were used in the last century's pharmacology. It can be reconstructed by studying the direct sources: Codex, Dispensatories, and Pharmacopoeias but also by the assessment of the indirect sources that are resulted from the organizational-administrative activities: inventories, sale-purchase documents, pharmaceutical taxes [3], vessels and labeled furniture pieces.

Materials and methods

There were studied, as an indirect source of information, the vessels from the Collection of Pharmacy History "Lecturer PhD. Pharm. Zisi Fârșirotu" within the Faculty of Pharmacy of Bucharest. Starting from the information thereby obtained, it was launched a documentary research upon some of the curatives used in pharmacology, along the time.

Results and discussion

The Periodical "Revista Farmaciei" published in 1924 the following announcement: "*In the purpose of construction of the Pharmaceutical Museum, we insistently ask the colleagues who detain old objects that interest the past of the pharmacy from our country, to communicate us under what condition they can donate them to the Associations (General Association of the Pharmacists from Romania).....*" [12]. This initiative that denotes the consciousness of the importance for keeping over time the testimonies related by the profession's past, had been concretized on February 16th, 1936. At that time the Professors' Council of the Faculty of Pharmacy from Bucharest had decided the development of an "Art Museum and Pharmaceutical Culture", name that later on was changed into "National Museum of Pharmacy". Aurel Scurtu, publicist pharmacist and librarian of the Faculty of Pharmacy was incharge with the Museum. The gathering of the patrimony was performed throughout the territory of the entire country, the objects being exposed in a chamber close to the library. In April 1944, the University building, where the Faculty of Pharmacy was located too, was bombarded. The whole patrimony was destroyed. In a short time occurred the death of pharmacist Scurtu and as a consequence, the project of setting up the Museum was stopped. Only after almost two decades, in 1962, the project was retaken by the pharmacist Zisi Fârșirotu, professor at the Faculty of Pharmacy from Bucharest. With the support of the County Pharmaceutical Offices, he had succeeded to collect pharmaceutical practice objects: vessels, machines, furniture, specialty

literature, etc., founding therefore the museum collection, that, as homage, it holds his name: "Collection of Pharmacy History <<Lecturer PhD. Pharm. Zisi Fârșirotu>>" [1, 4].

Within the patrimony of this Collection, the pharmaceutical vessels are represented by 122 pieces, 39 pieces of them being from wood, 37 being from porcelain, 43 from glass and 3 from enameled ceramics. Their study was focused on the information that they can provide regarding the therapeutic curatives that constitute *Materia Medica* from the centuries XIXth and XXth.

There were received testimonies upon the existence, from the XVIIth century, of some trade companies that were founded in Brasov and Sibiu by the naturalized Greek ethnics [5.9]. The flavours and the exotic vegetal curatives constituted an important part among the products that were commercialized by these merchants.

Gumi Ladan represents a secretive resin obtained from the glandular pillars of the young leaves and branches of the *Cistus ladaniferus* species, *Cistaceae* family, or from some related species, shrubs or tumble weeds, spread in the Mediterranean area. We possess information about this product dating from the early historical periods. In the paper "Thalia", the third part of Herodotus books about the wars of Greeks against the Persian Empire, it is described an ancient method to collect this resin. The grazing of the goats in the places with *Cistus* shrubs, allowed the integration of the resin within the animals fur that were, after that, shaved for collecting of the gum. In the Latin writings of the Middle Age, the product was named "*ladanum*" or "*labdanum*" [6.11], words that had their origin in the Semite name of those plants with resin. Later on, the botanist Joseph Tournefort (1656-1708), at the order of Ludovic the XIVth of France, had started a journey to Crete, Cyclade, Armenia, Turkey, to describe the flora of these territories and to make *herbariums*. He is the one who described the use of the "*ladanisterion*", a rake like tool, but in the place of the metallic teeth, had some strait leathery bands, that were covered with resin after their passing on the leaves of the *Cistus* shrub. This method is applied nowadays, in a restrained area in the north of Crete, and the sub-products obtained after processing the *ladanum* gum have unanimous appreciation in the perfume industry. The studies on the oleoresin that has dark brown color, strong smell, being alike with the amber, had shown a complex composition [2]. The presence of the *labanum* bicyclic diterpen with antimicrobial, anti-fungal and anti-inflammatory action, justifies the product use in a series of external pharmaceutical forms for treating the cutaneous affections. The fumigations with *gumi ladanum* were often used due to their pleasant scent

that they developed and for their disinfectant effect. Also, this product is frequently found in the expectorant potions formulas.



“Hirudo medicinalis”, represents a parasite annelid from the *Hirudidae* family, named leech in the common language, and it was frequently used in therapy from ancient time for “blood dropping”. In this regard, there can be mentioned the Sanskrit medicine book, *Sushruta Samhita*, and also a representation from the 18th dynasty period of the ancient Egypt (3500- 1500 b.Ch). The phlebotomy method using leeches had continued to be practiced up to the XIXth century, the doctor Francois Joseph Broussais (1772-1832), professor at the Faculty of Medicine from Paris and member of the French Academy, imposing a real trend by institutionalizing this treatment. Thus, in the period 1825-1830 the doctors from Paris used for this medicinal practice about 3.000.000 leeches per year, the military hospital Val-de Grace where Broussais worked, being one of the main applicants. Distributed by pharmacies, the leeches were purchased from the collectors of the mire areas and there were registered important fluctuations of the price depending on the quantity that could be gathered. Regarding this, a doctor from Savannah (USA) was unsatisfied about the saling price, that in 1838, had reached the value of 50 cents per leech. This is the reason why in France and Germany there were created “farms” with *Hirudo medicinalis*, Germany succeeding to export to USA 30.000.000 leeches per year. From the third decade of the XIXth century, the leeches’ use had decreased. Thus, the fail that was registered when this method was used on patients with cholera, in 1832, determined a drastical decrease of the leeches’ request. In England, after only a half of the century, the consumption of *Hirudo medicinalis* was reduced at only 2000 per year. Nowadays, we assist on a new “rediscovery” of leeches’ therapy virtues in the micro-vascular surgery for the treatment of venous congestion and also in the reconstructive plastic surgery. In the pharmaceutical industry there are initiated studies for the isolation and assay of the compounds with anti-coagulant, anti-inflammatory, analgesic and antimicrobial action, compounds that exist in the

leeches' saliva. It was discovered that the *hirudin* and *hemetin* are polypeptides with anti-coagulant action stronger than the heparin, urokinase and streptokinase. The *orgelose* is an enzyme that actions upon the hialuronic acid, the main binder of the tissue cells, and it can be used as a potency agent for the injectable drug solutions. The psychological rejection that most patients manifest on this method, which is perceived as being anachronic, and the risk for infections, determined the researchers from the Wisconsin University (USA) to develop a mechanic device that acts similarly to the leeches [8].

"The carbolic acid" [10] and its synonyms: "carbolic acid", "phenol", represent a colorless substance with acicular crystals that, by non-purification and in the presence of light, takes a pink-red color. It is soluble in water, alcohol, ether, chloroform, etc. and under humidity conditions it forms a hydrate due to its property to be slightly hygroscopic. The carbolic acid has a corrosive action and a specific smell, lightly sweet, being often associated to the idea of hospital. It was used in surgery in the form of solutions with various concentrations for disinfecting the instruments and as cutaneous antiseptic. By error, the concentrated solutions could produce severe chemical burnings on the teguments. The phenol can be found in the composition of the suctorial pills due to the antiseptic action upon the oral cavity and for treating the larynx affections.

As a pharmaceutical form we choosed to present *Syrupus Lactucarii* [11]. The inner compound responsible for the analgesic and lightly narcotic action is the "*lacturium*". This is the milky juice collected from the indigenous plant named *Lactuca sativa*, from the *Compositae* family. In contract with the air it turns into polymorph pieces, colored with brown-yellow, opaque, fragile and with vireos smell and bitter taste [7, 11]. The action that determined the use of the product *Syrupus Lactucarii* is similar to the one of opium. This is the reason why the writing on the recipient label was made with red characters, a convention used by the pharmacists to distinguish the products that are maintained at *Separanda*. The technique for obtaining this syrup was described in 1862 Pharmacopoeia: the *lactucari* was "mixed by rubbing" with distilled water, moderately boiled and then it was filtered and the obtained filtrate was "dissolved by assimilation" in alcohol and then sugar was added.

Conclusions

The information supplied by the "signatures" of the pharmaceutical vessels represents an important documentary source for the study of *Materia Medica*.

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