



On being a physician: the Gaceta Médica de México as an unsystematized manual of knowledge, 1860-1890

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Abstract

This article discusses the role played by the *Gaceta Médica de México* in the process of institutionalizing and professionalizing scientific medicine in Mexico from 1860 to 1890. From the notion of literary technology utilized by Steven Shapin and Simon Schaffer and qualitative analysis of medical reports containing typical discourse, we examine how members of the Mexican National Academy of Medicine (the institution responsible for this journal) and the National School of Medicine collected their experiences and prescribed ways of being and acting through their publications. The aim is to demonstrate how this periodical acted as an unsystematized manual, an important instrument for normalizing and regulating medical knowledge in Mexico during this period.

Keywords: *Gaceta Médica de México*; history of medicine; scientific standardization; Mexico; nineteenth century.

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The emergence of the clinic in France at the turn of the nineteenth century gradually changed medical practices and concepts in Western Europe. In the Americas, the clinic found enthusiasts in the first part of the 1800s. As doctors on this side of the Atlantic encountered this type of medicine, through either the French who were here or trips to Europe to train or to complement their studies, they began to establish clinics in their own countries according to the specific characteristics there (Warner, 2003; Sáenz, 2018; Coradini, 2005).

With the establishment of clinics, the anatomo-clinical model emerged; it was epistemologically founded on analysis and comparison of physiological signs and symptoms to classify what are known as normal and pathological bodies (Foucault, 2015; Canguilhem, 2015). Implementation of this model in the Americas required certain changes in the procedures and attitudes of those who intended to be accepted and recognized by their peers.

In Mexico, Luz María Hernández Sáenz (2018) argues that the first movements in medicine to implement the anatomo-clinical model were already underway in the early 1800s, intensified after political independence, and were partially realized in the 1860s after the French invasion. For some doctors, the winding road as they tried to carve out an institutional and professional niche over a half-century finally led them to create and control formative, normative, and regulatory authorities of medicine in the country. During this trajectory, a limited group of people established themselves as the medical/scientific elite in Mexico, centering around the National School of Medicine and the National Academy of Medicine.¹ By mastering these centers for the production and dissemination of medical knowledge, this elite formulated, adapted, and imposed a series of norms on those who aspired to be part of the “medical/scientific community.”

As clinical medicine became institutionalized in Mexico, doctors also began to understand that in order to produce scientific knowledge according to European models, they had to write reports based on observing as many cases as possible so their data could be tabulated, accounted, and empirically analyzed. This made it possible for these doctors to gain approval from their peers (Cházaro García, 2000; Silva, 2018). But until the mid-1870s, before this mode of action had fully gained force in medical practice and understanding, knowledge was mainly collectivized through the publication of reports in which each physician related individual experiences and potential procedural solutions that could be useful to others. As a result, during this process some more prestigious doctors (especially Academy members and teachers at the School of Medicine) created constraints on how their professional colleagues should behave. This, together with the reach attained by the *Gaceta Médica de México*² among practitioners of scientific medicine in the country, eventually made this journal a kind of normative manual for medical knowledge: more simply, what we define here as an unsystematized manual.

In light of these circumstances, this article discusses the role of the *Gaceta Médica de México* in the processes of institutionalizing and professionalizing scientific medicine in Mexico between 1860 and 1890. This publication was one of the most important instruments for standardizing and establishing norms for Mexican medical knowledge. For this reason, this article investigates how members of the Academy used the *Gaceta* to define and discuss what being a physician meant, as well as the duties involved.

Before beginning the discussion, there are two caveats to observe. First, we will not analyze how medical suggestions were put into daily practice by physicians; this should be the topic of another text. As suggested by Steven Shapin and Simon Schaffer (2005) in their analysis of how experimental life emerged from the efforts of Robert Boyle and his vacuum pump in seventeenth-century England, the intention in this article is to understand and introduce how the literary technology utilized by Mexican physicians during the process of institutionalizing and professionalizing medicine in Mexico worked, through the writings published in the *Gaceta Médica*.

Steven and Shapin (2005, p.57) state that literary technology was how Boyle and his allies communicated the results of their experiments to those that did not witness them directly. Boyle wrote detailed reports that focused on the facts, avoiding obscure philosophical analyses and using a modest tone to gain allies that would promote his experimental efforts. He even reported some errors in his experiments to demonstrate his commitment to this other way of producing knowledge. Similar developments were seen centuries later among Mexican doctors, as we shall see below.

The second caveat refers to the examples employed. Although most come from obstetrics and pediatrics, this article does not tell the story of these medical specialties as authors such as Ignacio Àvila Cisneros et al. (1997), Alberto del Castillo Troncoso (2001, 2003, 2006), Oliva López Sánchez (2005, 2010, 2017), Nora Jaffary (2016), Frida Gorbach (2008), Alanís-Rufino (2009), and Laura Cházaro García (2004) have done, directly or indirectly. The examples in this present text were chosen because: (1) they were part of another study (Silva, 2018); (2) they indicate how the *Gaceta Médica* was used by physicians to present their projects and reflections; and (3) they make it possible to identify certain characteristics typical of Mexican medicine in literary as well as technical terms from the 1860s to the 1890s. For this reason, these examples contain structures and methods of discourse that are typical of clinical reports from other specialties published in this periodical during the same period.

This article is structured as follows: (1) first, we demonstrate what is meant by an unsystematized manual and how this differs from other manuals; (2) some medical reports related to technical practices and procedures are discussed; and (3) other reports related to medical ethics (descriptions and expectations of doctors and the medical profession) are examined.

An unsystematized manual of medical knowledge

The *Gaceta Médica* was first published in 1864, the same year in which a scientific, literary, and artistic commission was established that years later would give rise to the Mexican National Academy of Medicine. This was not the only journal published in the country during the second half of the nineteenth century, however. There were others edited by other medical institutions (Rodríguez Pérez, 1997), but this periodical was exceptional for three reasons: (1) it was the publication of the Academy, Mexico's main medical association that concentrated the country's medical elite; (2) it is the country's oldest scientific publication; and (3) it was the first national medical journal to circulate

in different states of the Mexican republic as well as other Latin American and European countries during the nineteenth century (Silva, 2018, p.66-67).

One difference from the first Brazilian medical journals of the nineteenth century, which were characterized by the “relatively frequent inclusion of subjects that were directly of interest to the lay reader” (Ferreira, out. 1999), is that from its early days the *Gaceta* targeted a specialized audience, namely doctors and medical students. This editorial choice can be explained by the fact that the Academy had received some degree of support from the Mexican government since it first began operating, during the Second Empire (1864-1867) and later during the Porfiriato period (1876-1910),³ already as an official advisory body (Silva, 2018, p.45).

The texts published in the *Gaceta* established it as a medical reference over the years; its contents were cited not only in the final theses of medical students graduating from the National School of Medicine, where the Academy was headquartered from 1878 and where many of its members taught, but also in other articles published in the *Gaceta* itself and in the periodicals of other national medical/scientific institutions (Díaz Robles, Oropeza Sandoval, 2007). Within this scenario, the publication more or less consciously became what we consider an unsystematized manual of medical knowledge.

The term “unsystematized manual” is used here to classify a certain set of documents that organize, regularize, and standardize specific knowledge (practices and ways of being) differently from traditional science manuals, which we denote here as “conventional.” Conventional scientific manuals are usually written with educational intentions, as are the texts published in unsystematized manuals. But conventional texts are characterized as spaces presenting more succinct written formulations that can be used to acquire certain knowledge that the “scientific community” believes it dominates.

In conventional manuals, “information on how the knowledge was acquired (discovery) and why it was accepted by the profession (confirmation) at best was excess baggage,” as Thomas Kuhn suggests (2011, p.213). In this way, their statements that guide the process of knowledge production are already mitigated or omitted, partially or impartially. The final products displayed in these manuals, the results of complex operations, are often presented as free from scientific controversy or conflict. These manuals are consequently reproductions of established, consensual knowledge in a certain “scientific community” that is equally established or in the advanced stages of establishment.

Unlike conventional manuals, evidence of knowledge production processes (along with contradictions, debates, and controversies) are fundamental characteristics of unsystematized manuals. Furthermore, the understandings they contain about certain procedures are dynamic and constantly transforming, considering competition, differences, and the latest discoveries of new concepts, techniques, and technologies. In other words, the “facts” in unsystematized manuals are still “prescribed;” in the words of Bruno Latour (1999), Pandora’s box is still presented as partially open.

The pages of unsystematized manuals are not only spaces in which the subjects involved in the process of knowledge production propose and test theories and methods that may generate conventional manuals; they are also spaces in which the subjects involved in the process of scientific production attempt to validate and expand their knowledge through

reports with empirical demonstrations to convince others involved in the process. These aspects can be found in the content published in the *Gaceta Médica*.

In Mexico, until the mid-nineteenth century there were no conventional manuals drafted by Mexican doctors. The manuals used in the country's medical schools were mostly written by French, Prussian, and English physicians, and were used as textbooks during the basic medical training process as well as what we currently would call specialization in Brazil. These foreign texts were obviously essential for training native doctors, but their circulation was restricted according to the number of copies that existed, and this knowledge also was not produced to meet the specific needs of Mexican at that time, a fact that led to some complaints even in the *Gaceta* itself.

Between 1860 and 1870, some conventional manuals on medical procedures were published by members of the Academy. The first, from 1869, was *Introducción al estudio de la medicina legal* (Introduction to the study of legal medicine), by Luis Hidalgo y Carpio. This author stated that his manual was intended to supplement the foreign legal medicine manuals used in classes as textbooks by students and native professors of medicine and law courses.

In 1877-1878, this manual was reissued by Luis Hidalgo y Carpio in partnership with another Academy member, Gustavo Ruiz y Sandoval, and published in chapters under the title *Compendio de medicina legal arreglado a la legislación del Distrito Federal* (Compendium of legal medicine with regard to the legislation of the Federal District) (Hidalgo y Carpio, Sandoval y Ruiz, 1877). This new edition included some studies that had already been published in the *Gaceta* by Hidalgo y Carpio, in addition to topics discussed among Academy members and elicited by the new Mexican Civil and Criminal Codes that came into force between the publication of the first edition and the drafting of this second manual.

The *Guía clínica del arte de los partos* (Clinical guide to the art of childbirth) by Juan María Rodríguez (1878, 1885) was another manual released during this same period. Although it was published as a book in 1878, a significant part of this material had already been published in the *Gaceta* and discussed among Academy members since 1869; it was later republished in an enlarged and slightly modified edition in 1885. As with the manuals by Hidalgo y Carpio, Rodríguez claimed that publishing his texts as a book was intended to provide accessible and practical material to physicians and students in the discipline he taught: clinical obstetrics (Silva, 2018).

Soon both publications were officially employed as textbooks at the National School of Medicine, replacing and/or supplementing the foreign editions used, and new editions were published during the second half of the nineteenth century. While these manuals are not the main focus of this article, they were also important to the process of normalizing certain medical knowledge. From the explanation above, we should remember that: (1) these books were produced from publications in the *Gaceta*; (2) there were no other manuals prepared by and scientifically accepted by Mexican physicians until they were published; (3) even after they were published, they were altered. In later editions, some discussions and experiments were incorporated and discussed by the authors in meetings of the Academy and published in the pages of the *Gaceta Médica* (Silva, 2018). Therefore, from this point of view the publications of this journal (as an unsystematized manual)

played an important role in producing, regulating, and standardizing knowledge among doctors and medical students in Mexico.

With this established, below we analyze some reports published in the *Gaceta* between 1860 and 1890. The aim is to highlight how they were presented, as well as how specific characteristics contributed to shaping certain practical and moral positions among Mexican doctors.

Defining the practice of medicine

In 1884, Juan María Rodríguez published a text describing his experience performing a cesarean section based on Porro's method for the first time in Mexico.⁴ Rodríguez reported that his efforts were not very successful, since the procedure that was supposed to save the lives of the woman and her child failed. In reflecting on the case, he stated that

When a professor faces an arduous task, such as the one I faced on March 12, when I first performed the cesarean section with the modifications proposed by the doctors Porro and Müller for the first time in Mexico, it is his duty to judge this conduct, taking into account the means that prompted him to carry out this task and to review his procedures. When situations are seen, studied, and examined in the light of reason, the resulting judgments will be intelligent. The dispassionate failure they cause will serve as a lesson in the future, whether success has crowned the king [that is, if his effort yielded positive results] or the results did not correspond to his intentions (Rodríguez, 1884, p.362).⁵

The doctor also emphasized, like Boyle in his texts on the vacuum pump (Shapin, Shaffer, 2005), that “a detailed and authentic account of events is of paramount importance, [since] favorable outcomes show what should be done, and unfavorable outcomes show what should be avoided.” This was “enough for men to become careful, skeptical, and experienced” (Rodríguez, 1884, p.362). In other words, Rodríguez stressed how important it was for his peers to share their experiences, even when unsuccessful, because this would prepare other physicians who might encounter similar situations or even allow them to pursue joint solutions to problems.

Reading clinical reports from behind the scenes of scientific production would, from a Goffmanian viewpoint, convey to other physicians certain “interruptions that have already occurred in descriptions, as well as those that are likely,” and also share “news about colleagues’ teams” and the “how the most recent description was received” (Goffman, 1985, p.44). Rodríguez’s proposal that doctors share their failures had two additional objectives: (1) to decrease stigma among members who might feel ashamed or technically inferior because they did not attain their goals; and (2) increase the number of potential publications in the *Gaceta*.

Some other reports among the publications prior to the 1890s can be highlighted for the similar normative judgments about medical practice they contain. Using various discursive tones, nearly all physicians expressed their opinion in this way, guiding readers as well as to prescribing the use of certain methods and medications. The authors of some reports were more explicit, arguing the validity of their experiences verbatim, while in

other reports implicit normative discourse prevailed. In these latter cases, the authors did not directly suggest that other physicians follow their advice, although their intention was to formulate rules on how certain procedures should be performed, as will become clear in the following examples.

In 1865, the physician Ramon Ochoa published a report of a surgery performed on a woman having problems giving birth, in his own words. Ochoa (maio 1865, p.258) reported that he had been called to attend a 29-year-old multiparous woman who was pregnant for the sixth time. Unlike her other pregnancies, which had not required medical intervention, this time complications emerged in a dystrophic delivery.

After an initial examination, Ochoa reported that he had identified the fetal position, but the patient's bleeding increased after he applied a small dose of *centene cuernecillo* (today known as ergot), and he had to reassess. This time the doctor noted in his report that he found the head of the fetus (which was being pushed by the uterine contractions) was blocked by the placenta, preventing complete dilation of the cervix. With this knowledge, he emphasized "the need to carry out pelvic version" (Ochoa, maio 1865, p.258). He then executed this procedure, which consisted of pushing "the head strongly to the right" in order to dislodge "the placenta from its lower insertion, grasping the feet of the fetus and removing it via the customary procedure." It was only in this way that he was able to remove the fetus, which was already dead (p.258).

From this point in the report, the doctor began to deduce what might have happened. From some physiological signs (the fact that the stillborn had blood clots obstructing its mouth), he determined that the fetus died shortly before it was removed. Setting the small corpse aside, Ochoa reported that he extracted remnants of the placenta that were still adhered to the inside of the uterus and others close to its entrance. In his opinion, this latter tissue may have caused the young woman's hemorrhage, since they blocked the fetus from exiting. Finally, he categorically concluded that the woman surely would have died without his intervention. With this, he told readers that if his observation was not useful to more experienced physicians, at the least he expected it would be helpful to "young professors, who sometimes have doubts about how to proceed in certain obstetrics cases in which the lack of a procedure will cause the death of more than one woman" (Ochoa, maio 1865, p.259).

In 1868, Manuel Soriano published a text relating a delivery he performed in a woman around 22 years old in good health, with a lymphatic-sanguine constitution. Soriano (set. 1868, p.268) commented that the woman had already had three births and a miscarriage, but only during her last pregnancy had suffered greatly, falling ill for 15 days of "chronic laryngitis" before she died. The doctor reported that after using touch to identify the fetal position (standard procedure among Mexican physicians at the time) he found the woman's cervix slightly dilated. After she suffered an attack of eclampsia, the doctor attempted to remove the fetus via cesarean section in an attempt to improve her condition and save her life.

Soriano's narrative about the procedure he used is thorough and exemplary in terms of what is "unsaid" about how doctors proceed or should proceed. In the report, the doctor comments that during this birth he "called a priest for spiritual aid" and his friend "Mr.

Carmona (D. Trindad), to consult on how to deliver the child and follow-up treatment” (Soriano, out. 1868, p.282). As soon as Carmona arrived, Soriano gave him a general report on the woman’s condition, and after examining her they decided to induce labor to “save the child and see if, with it removed, the mother’s crises would stop” (p.282). Moreover, according to Soriano, “the cervix was not sufficiently dilated, but could be dilated; the water had not yet broken; the fetus had already descended: in a convenient position” (p.282). Therefore, he inserted

A stylet needle into the end of the birth canal and, using my right index finger as a guide I found the bag of waters, but the stylet did not penetrate, instead slipping on its smooth surface. Then I rested my finger gently and obliquely on the head of the fetus, the bag broke and a certain amount of amniotic fluid came out, the head presented. Immediately, Mr. Carmona told me to apply an injection of hot water, because in addition to some author having recommended it, he had done so in his practice. [This practice] had two objectives: to perform the birth and to baptize the child, and so I proceeded. Immediately the head came, I introduced my left hand with the palm to the occipital [region] and on the back of the neck until I could grasp the two armpits with my hands, with fingers immediately gaining traction, and crowned with the best success ... [until] the child came out in state of asphyxia (p.282) (Soriano, out. 1868, p.282).

They then cut the umbilical cord and let it bleed, common practice among Mexican obstetricians. They massaged its chest and breathed into its mouth, and only returned their attention to the woman after the child’s breathing was established. They immediately attempted to remove the placenta from the mother; according to the report, it was already almost entirely detached except for one point that remained stuck in the uterus. In noting this, Soriano (out. 1868, p.282) reported that he tried to “detach it by gently inserting my finger between the cotyledons and the inner surface, as advised by Chailly-Honoré when adhesion is normal. The internal tissue was hard, uneven, like a type of mushroom with a bit more weight.” Before carrying out any procedure, however, he consulted his companion to confirm his findings. The doctors concluded their work by applying dressings to the woman and left, with the child breathing well (p.282).

In addition to the “manual-like” structure of his writing, Soriano’s report sheds light on other elements that are characteristic of Mexican medical practice in the mid-nineteenth century. Two are particularly relevant: first, the care provided needs to be described in detail. Thomas Laqueur (2001, p.12) states that this rich descriptive style with a dramatic tone is the heritage of a specific genre that emerged at the turn of the eighteenth century: the humanitarian narrative. This narrative did not describe individual bodies merely as objects in which pain manifested, but instead depicted a type of link or connection, a close relationship between those who suffered and those who protected them.

Another notable element is the doctor assisted by other individuals; the fact that Soriano invited a colleague and a priest to assist him may seem strange to current readers, but it was not unusual at the time. The “medical morality” taught at the National School of Medicine recommended that physicians ask a colleague to oversee their work, especially when attending patients in mortal danger. The presence of an eyewitness was fundamental to prevent potential accusations against the doctor, for example, especially at that time

when scientific medical knowledge was not well respected by the Mexican population, who viewed physicians with suspicion and disdain and often denounced medical practices in the periodicals that circulated throughout the capital (Agostoni, 2005). The presence of clergy was fundamental, not only in the medical conception of that time: religious authority was of utmost importance to ensure the salvation of the unborn and/or mother's souls, providing comfort to Catholic families when things did go wrong (Vailati, 2010).

The third example became public in 1869, when Juan María Rodríguez published a series of texts with recommendations about some labor procedures in the *Gaceta*. These texts comprised the first version of what later became the first delivery guide in book format published in Mexico in 1878.

In the first report of this series, Rodríguez (jul. 1869) listed and discussed the benefits and risks of certain products for mothers and babies during childbirth, such as ergot and *zihuatpatle*. He also defended the importance of simplifying the precepts of obstetric medicine via explanatory images. In his view, this type of layout was considered a very useful resource for medical practice by European doctors, since it was simple and objective, as often required. Another advantage of organizing birthing methods into pictures mentioned by Rodríguez (jul. 1869, p.196) was that they standardized obstetric doctrines without requiring eclectic knowledge of Mexican practices. This type of organization, in his words, only included methods based on the experience and observations of well-known professionals in the scientific world.

Rodríguez (jul. 1869) published his entire series of images in the *Gaceta* in 1869, stating that they were directed at students of clinical obstetrics at the National School of Medicine, a subject he taught. But we can say that he intended them to go even farther, since these lessons were published in the pages of the *Gaceta*, which disseminated knowledge to audiences other than students. It should be noted that his images did not go unchallenged; some specific points were criticized by his peers. Still, there were no substantial changes over the years. On the contrary, Rodríguez (even two decades later) supplemented them with more practical examples to expand his samples and consequently be able to prove his initial assumptions (Silva, 2018).

In 1870, one year after the images were published, another obstetrician, Ignácio Capetillo (who called himself Rodríguez's disciple) presented a collective republication of a clinical procedure called "Kiwish" by some physicians at the Casa de Maternidade. In a report published in two issues of the *Gaceta*, Capetillo (out. 1870, nov. 1870) described in detail how his colleagues and teachers adapted this method after attending a woman who died along with her baby. After disagreeing on how they should have proceeded and the differences compared to European doctors, the Mexicans made some adjustments to the surgical method.

To prove the efficiency of this reformulation in subsequent issues of the *Gaceta* that same year, Juan María Rodríguez himself (nov. 1870) published an extensive clinical report with step-by-step details of this procedure he performed, which this time saved a mother and her child. He proudly justified his haste in publishing his experience by the fact that cases of eclampsia during the final months of pregnancy were recurrent in Mexico, stating that from that time on he knew how to solve this problem. In his words:

Artificial premature delivery deserves first place among the various means recommended to combat it, due to its effectiveness, innocence, and degree of simplicity and perfection that the intervention method invented by Kiwish has achieved among us. I have not hesitated to present its results today, choosing for my reading, according to the regulation, this reason that I gladly submit for judgment by my enlightened professor colleagues (Rodríguez, nov. 1870, p.312-313).

Another text related to obstetric practice that also comprised a vast list of clinical reports published in the *Gaceta* was authored in 1878 by one of the first obstetricians with scientific training who worked in Mexico, José Pablo Martínez del Río (ago. 1878, p.459). Drawing on his prestige as one of the pioneers of his generation in obstetrics (and unlike the other doctors mentioned above), Martínez del Río shared a report prescribing the correct use of chloroform in medical practice.

Del Río began his text by stating that for years, he had received the first notices of surgeries performed on humans anesthetized with sulfuric ether in Europe, and that he did not delay to use this substance on his patients in Mexico. Similarly, he added that he had also received the news of how chloroform was being applied during surgical procedures in Europe, and that he quickly disseminated the use of this substance among Mexicans. But he was concerned about how chloroform was being used in the country, especially in obstetric procedures. In his words, “no one can just accuse me of opposing the beneficial procedure that allows us to perform the most arduous and terrible surgical operations without pain” but “seeing how chloroform is often used in obstetric operations, and sometimes with fatal outcomes, I believe it is appropriate to call my colleagues’ attention to the dangers of this practice” (Martínez del Río, ago. 1878, p.459).

In his opinion, the danger of chloroform was related to imprudent application of this anesthetic during labor, especially by less experienced obstetricians. Since the effects of chloroform included decreased circulation, overapplication could impede hemorrhage during labor; this could mask the true condition of the laboring mother, and after the drug’s effects passed her condition would deteriorate so dramatically that it would lead to death.

Martínez del Río consequently recommended moderate use of the substance; it should only be applied to relieve the patient’s pain during childbirth, as “half anesthesia” or “as used on the Queen” (referring to Queen Victoria). This method consisted of rapid or moderate inhalation of the substance only to remove sensation. The ideal, in his opinion, was for women to apply it themselves by inhaling from “a cloth with chloroform at the moment of uterine contraction, letting patients breathe during the intervals without pain” (Martínez del Río, ago. 1878, p.460). He continued to add that physicians must always be attentive to the laboring woman’s heartbeat and breathing.

Finally, at the end of his report Martínez del Río made his goal even clearer: he said that his appeal would certainly capture the attention of younger doctors and obstetricians, putting them on guard against the dangers of abusing this anesthetic in laboring women. He wrote that if his reflections served “to avoid some misfortune,” his “effort will have been very well employed” (Martínez del Río, ago. 1878, p.461).

The aforementioned reports are just a few examples that can be found in the *Gaceta* during the first decades it was published. As we have shown, they conveyed particular

experiences and contained subjects that were not explicitly intended to regulate or standardize medical knowledge in the practical sphere. All presented certain technical and procedural novelties developed during everyday medical practice. However, these texts were directed toward other physicians and medical students and exhibited a normative character. In this context, texts like the one by Rodríguez, an obstetrician with significant scientific prestige, carried more standardizing weight than others. As seen above, the regulatory and normative powers of these reports were expressed both explicitly (directly and through recommendations) and implicitly (through suggesting procedures or demonstrating some practice as correct). While publications from the *Gaceta* addressed medical practices and procedures, some also approached other subjects related to the duties of doctors, both directly and indirectly. Some of these texts will be examined below.

How a physician should act

As detailed above, the texts published in the *Gaceta Médica* not only contributed to developing and transforming norms and rules related to medical practice. While publications functioned as unsystematized manuals in the latter half of the nineteenth century, they also provided elements that helped establish other social rules related to a physician's duties.

The aforementioned reports by Manuel Soriano, Juan María Rodríguez, and José Pablo Martínez del Río recommended certain medical practices and implicitly expressed how a physician should act. From these reports we can extract notions of companionship, mutual help among physicians, respect for patients' beliefs (in the report by Soriano), a commitment to truth, honesty, and scientific perseverance (in the case of Rodríguez and his disciple), and demands for respect and reliability, through antiquity as well as pioneering activity (in the example of Martínez del Río).

Other texts published in the *Gaceta* addressed additional topics on how doctors should behave and their duties. Perhaps the most emblematic example from the early decades of this publication of how doctors were expected to act is the report by Domingo Arámburu, published in 1866. This anecdotal text reinforces the notion of the *Gaceta* as an unsystematized manual, but also illustrates how some writers were more emphatic about the normalization of certain "scientific" values and attitudes.

As he describes it, Arámburu (maio 1866, p.156) was urgently summoned to see a child who had choked on the shell of a pine nut. After assessing his condition and reflecting on what procedures to perform, Arámburu performed a tracheostomy, implanting a flexible cannula through a perforation in the child's trachea. This allowed the patient to breathe through the cannula while he successfully extracted the shell that had stopped the patient from breathing.

But the most interesting part of this report describes when the doctor met the recovering young patient. Arámburu confessed to his colleagues that days after the surgery, when he returned to the patient's house, he nearly wept to hear the child scream after the doctor blocked off the cannula he had placed in his trachea. He said that this was a sign that the boy was able to breathe on his own, without the cannula.

Despite his emotion, the doctor said he needed to contain his tears because he was in front of the child's parents. In his own words: "I had to squelch this commotion because his parents were present, and I understood that they felt the same as I did; and 'a doctor must suppress certain feelings of sensitivity so as not to appear ridiculous.' With this feeling, I considered myself rewarded" (Arámburu, maio 1866, p.156; emphasis added).

This section explains two interesting questions related to the duty of the medical profession as it was being shaped at that time. First, in describing the doctor's posture in relation to the patient's family (in other words, that he must "suppress certain feelings of sensitivity so as not to appear ridiculous") Arámburu not only explained but reinforced a certain normative aspect that may have gone "unsaid" in medical practice but regulated the behavior required during the dramatization of medicine in clinical care.

The excerpt also confirms the existence of a growing demarcation between the social positions of the individuals who interacted in these situations. Therefore, in providing care it was up to the physician to respond to the family and fulfill the sociologically expected role of his field, in other words to carry out scientific procedures to restore the health of the sick patient. Meanwhile, the family was to be attended by the physician, waiting for him to act as a doctor and a "man of science" who demonstrated skill and some emotional control. As Arámburu interpreted it, crying in front of the family would break the ritual protocol, thus leading to an embarrassing and "ridiculous" situation, in his words.

Again, Goffman's studies help us better understand this shared symbolic interaction in the report. We can understand that if the parents saw the doctor cry, the ritual representation of the "scientist doctor" would immediately shatter, and to avoid this outcome the physician had a duty to behave coolly to patients and their families. According to Goffman (1985, p.157), crying during medical dramatization would constitute an "exclamation that is not part of the piece," which in turn would cause the persona acted out by Domingo Arámburu to fall apart.

In 1870, Manuel Dominguez published an interesting reflection on how prescriptions should be written in Mexico; in it, he also introduced some elements of how Mexican physicians should behave. Strategically, Dominguez (jun. 1870a, p.126-127) starts the text with a careful compliment to someone he intends to be critical. He says that "in general, the children of the National School of Medicine leave it adorned with the indispensable requirements for teachers and those seeking to improve their private practices" (p.127). During their training, future physicians not only did acquire theoretical knowledge on physiology, but they also perfected their practices at the institution's hospitals and learned, "through pharmacological studies, the weapons that serve to combat illnesses." But there is a stain on this "magnificent image of biological and pathological knowledge." "A small stain," but one that bothers him enough to try to eliminate it. Dominguez refers to the poor quality of physicians' writing (p.127).

In the past, Dominguez said, prescriptions were written in Latin, since the language was inaccessible to patients and their families. Doctors thus distinguished themselves and protected themselves from any legal problems if the contents of the prescription were altered. However, Dominguez said that since that time there were two serious problems with prescribing this way: (1) Latin was no longer so strange to patients; and (2) with

the emergence of new medicines and treatments, many doctors “Latinized” their names or invented new symbols to incorporate these innovations and make their prescriptions incomprehensible to laypersons.

On the first point, the doctor (Dominguez, jun. 1870a, p.128) commented that many sick people already knew some Latin terms and were often shocked to read certain random words that they mistakenly took to represent other substances. For example, “there was no shortage of [doctors] who had been politely dismissed from homes after prescribing mercury to treat phlegmasia.” This resulted from misunderstandings of this substance, which was also prescribed to people with syphilis (a disease with major stigma at the time, especially among wealthier families, since it was linked to unclean, illegal, or illegitimate sexuality).

On the second point, he was even more careful. Dominguez said that he did not deny that there were Mexican doctors who dominated the difficult language of Cicero and Virgil, but many others invented words, used roundabout paraphrases, and created symbols that made no sense in an attempt to make their prescriptions less understandable. In doing so, they created “Quijote prayers”⁶ and “exposed doctors to rightful criticism of the disciples of Iriarte and Nebrija [Spanish writers] who could evaluate their knowledge by what they revealed from their command of Latin” (Dominguez, jun. 1870a, p.127).

To avoid this, Dominguez recommended that Mexican doctors avoid Latin. He also recommended against replacing it with French, a language that was slowly propagating among doctors at that time. Dominguez understood that some Mexicans chose to write in the language of Racine because of its beauty, and also since it was used by some of the great names in scientific medicine of that period. Still, “French is not the national language” (Dominguez, jun. 1870b, p.132; emphasis in the original); he argued that only Spanish should be used. Even if physicians claimed they were only attempting to defend themselves against abuse and falsification by using other symbols and languages, he argued, this would not be effective since clients who want to carry out such acts would commit fraud in any language.

In addition to their language, the handwriting of physicians was also sharply criticized. Dominguez (jun. 1870b, p.131-132) stated that he would not remain silent on this other major problem affecting Mexican doctors. As if it were not enough that doctors used unintelligible language and created their own symbols, they used a script so unintelligible that no paleographer could decipher it, he said. Poor handwriting had other disadvantages, since pharmacists could misunderstand the prescriptions while preparing them, and doctors who were consulted later could have trouble reading the patient’s medical record. This was noted as a defect that could reveal low standards during the physician’s primary education, which could risk his credibility with the population. In the words of Dominguez (jun. 1870b, p. 132), poor writing “should be something mortifying,” since “many doctors make a show of their terrible writing like the sovereigns of the Middle Ages who glorified in writing ... in fat, shaky, and unintelligible letters.”

In conclusion, the doctor drafted a model prescription for use by his peers and students. He noted that the document should be written in Spanish, without abbreviations or any symbols, in the physician’s best handwriting, and that the decimal system should be used to designate the quantity of products used to produce the prescribed medications. Finally,

he argued that the science of that time did not need cabalistic obfuscations. By writing clearly, they would ensure not only the credibility of learned men, but also give patients freedom if they wanted to “appeal to the knowledge of another option” (Dominguez, jun. 1870b, p.133).

In addition to the examples cited, there is also an 1892 report by Demetrio Mejía that discusses the priestly aspect of medicine and collection of fees. Mejía (dez. 1892, p.418) was trying to counter an opinion outside the Academy that by collecting fees for their services, doctors had transformed the medicine of those times into a profitable profession like any other, ignoring its sacred and priestly dimension.

Medicine as a priesthood was an ancient concept in the imagination of laypersons as well as doctors and was reinforced daily during medical education and everyday medical practice. As an element of distinction, the priesthood symbolically valued the practice of medicine to the detriment of other fields such as law, which had set price tables. But it also generated some interpretations that became problematic for physicians as medicine became more professional. On the one hand, by being a priesthood, and something sacred, the growing monetary dimension was seen by some critics as demeaning and even heretical, since it was a financial return that was almost related to greed. On the other hand, the payment of fees was defended by Mejía as a fair recognition of doctors’ scientific efforts to restore their patients’ health. He even considered this recognition insufficient in many cases, since while in Europe physicians’ knowledge was valued and they were paid relatively well, they were customarily paid very little or even nothing in Mexico, where the cost of living was higher. In Mejía’s assessment (dez. 1892, p.417), this also occurred because the unlearned population did not value the knowledge of scientific medicine.

Mejía defended the medical profession. To him, collecting fees did not nullify its sacred character, since that was related to other aspects of a physician’s duty: charity and sacrifice. Both, according to Mejía (dez. 1892, p.418-419) manifested when doctors cared for contagious patients, for example, or gave up time with their families to serve the needy, even after a tiring day full of work. Charity and sacrifice were even present when doctors skipped meals to attend their patients. They earned little while doing all this, exposing themselves to the risk of infection. So even if they were paid fairly, they were not neglecting the priestly side of their profession.

The text did not deny that the priestly dimension of the profession could be deprecated, however; Mejía (dez. 1892, p.420) remarked on specific situations, such as when some physicians offered free consultations in apothecaries with only financial interests at heart. “With rare exceptions,” he wrote, “this service yielded the doctor little benefit and no honor,” since many of these places draped themselves in the garments of charity to “cover the nakedness of simple exploitation” as they often offered free consultations and issued coded prescriptions that forced patients to buy their medicines at that establishment (p.420).

Demetrio Mejía (dez. 1892, p.417) praised the diligence of younger doctors disposed to offer their services for free, especially to acquire clientele and clinical experience, the “treasure of teaching that can only be achieved over time.” But he recommended caution: not all paths were noble, some more worthy than others. To demonstrate which path led to riches, Mejía used his own trajectory as a model; he described opening a private office

in the early years of his career, where he offered free services and allowed other young doctors who also became renowned in Mexico to use it in the same manner. In this way he built up his clientele and experience, and then opened another office where he began to charge for the services. He nevertheless maintained that he did not stop serving patients who might not be able to pay for the consultation (Mejía, dez. 1892, p.421).

In this way Mejía countered external criticism of the medical profession, ensuring it was distinct from other professions while also warning his younger peers about socially expected behaviors. This example, together with the others already presented here, is part of a set of reports that shed light on the normative aspect of the *Gaceta Médica* between 1860 and 1890, especially on the topic of what doctors and the profession should be. The Arámburu's report highlights how the doctor, as a scientist, should behave toward his clients; the text by Dominguez specifies how doctors should write when prescribing medications, adopting a somewhat nationalist dimension by emphasizing the language of Mexico; finally, Mejía's report, published years after the Academy was institutionalized by the government of Porfirio Díaz (Rodríguez Pérez, 2013), defends fee collection and contains a call to order that indicates how physicians of that era thought about their own profession.

Added to these, of course, are the normative aspects of the physician's duties contained in the other examples presented in the previous section. Together, they all show how the *Gaceta* was an unsystematized manual and important normative venue for medical knowledge in Mexico.

Final considerations

The reports discussed here are part of a vast universe of medical texts published not only in the pages of the *Gaceta Médica* during the latter half of the nineteenth century. In drafting this article, we chose not to address the conflicts that occurred during these years among the members of the National Academy of Medicine, since we believe this matter should be more carefully described in a separate work. Instead, here we analyzed an arbitrary selection of some reports published in the *Gaceta* between 1860 and 1890; the main criterion for selection was the fact that these texts have typical aspects that represent the dynamics of the Mexican medical/scientific universe within a context of institutionalization and professionalization of medicine.

From this, we demonstrated how certain experiences were shared through this journal, and how doctors who were mainly linked to the National Academy of Medicine and the National School of Medicine (the main Mexican institutions for medical research and education at that time) established a certain model of how physicians should behave and practice medicine for those who wished to join and be recognized in this profession. This occurred, at least in the discursive sphere, because those physicians who were at the top of the scientific hierarchy in the country transformed the pages of the *Gaceta Médica* by sharing their experiences into another arena for normalization beyond those that already existed, constituting what we define as an unsystematized manual of medical knowledge.

Thinking of the *Gaceta Médica* as such a heuristic instrument helps us better understand certain aspects of the organization and production of medical knowledge in Mexico that

were not properly systematized in the textbooks for the courses offered in the Academy and in the School's statutes. It also allows us to monitor the dynamics of producing implicit and explicit rules and norms for the medical profession, without the need for actual manuals or statutes.

The notion of an unsystematized manual can also serve to analyze the dynamics of other institutionalized groupings and agents or those that are in the process of institutionalization and professionalization. Even if they have systematized and formally explained rules, reading their everyday productions as we have interpreted the *Gaceta* can shed light on interesting aspects of these interactions that might not be clear from other readings.

NOTES

¹ The National Academy of Medicine in Mexico has undergone some changes to its name and organizational structure. Founded in 1864 as the Sección de Medicina da Comisión Científica, Literaria y Artística de México (Medical Section of the Mexican Scientific, Literary, and Artistic Commission), it became the Mexican Society of Medicine in 1865, the Academy of Medicine in 1873, and National Academy of Medicine in 1887 (Rodríguez Pérez, 2013). For practical reasons, here we have opted to refer to this organization as the National Academy of Medicine or just the Academy.

² Copies of the *Gaceta Médica de México* are available for study at the Nicolás León Library.

³ The Porfiriato is the period of approximately three decades during which Mexico was ruled by General Porfirio Díaz, who came to power in 1876 and left office in 1910. About this period, see Garciadiego (2010).

⁴ Eduardo Porro was an obstetrician who adapted and performed a specific type of cesarean surgery for the first time in Milan in 1876.

⁵ [Translator's note] In this and other citations of texts from non-English languages, a free translation has been provided.

⁶ A reference to the character Pomposita, from the book *La Quijota y su prima: historia muy cierta con apariencias de novela*, by José Joaquín Fernández de Lizardi, published at the end of the eighteenth century. Pomposita is a female character inspired by Cervantes who lacks learned instruction and lives through pomp and frivolity. But she uses her main weapon, her beauty, to achieve her goals, with her parents, maids, and suitors (Arrom, 1988).

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