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LAURA E. RODRIGUEZ DULANTO: EL PRIMER EXPERIMENTO CLÍNICO REALIZADO POR UNA MÉDICA GRADUADA EN EL PERÚ.

LAURA E. RODRÍGUEZ DULANTO: THE FIRST CLINICAL TRIAL PERFORMED BY A FEMALE PHYSICIAN IN PERU.

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SPECIAL SECTION

ABSTRACT

Laura Rodriguez Dulanto has been highlighted for her status as the first woman to graduate in Medicine in Peru. Her high intellectual qualities have been noted from various perspectives, as well as her effort and tenacity to overcome the difficulties of pursuing university studies, particularly in scientific disciplines, then reserved exclusively for men. It has been pointed out, however, that due to the limitations imposed on women at the time, she had a diminished professional activity and little scientific production, which has not been reviewed by existing historiography. This article analyzes his scientific production, especially a clinical study developed in a women's hospital in Lima, Peru, showing his ideas about science and medicine and identifying a clear, modern and innovative thought, not exempt from social sensitivity, in addition. to show herself as a keen and thorough observer of clinical-surgical problems.

Keywords: Laura Rodríguez Dulanto; Peru; History of Medicine; Historiography; Gender; Physician woman. (Source: MeSH NLM).

RESUMEN

Laura Rodriguez Dulanto ha sido destacada por su calidad de primera mujer graduada en Medicina en el Perú, se ha señalado desde diversas perspectivas sus elevadas cualidades intelectuales, así como el esfuerzo y tesón para vencer las dificultades para seguir estudios universitarios, en particular en disciplinas científicas, entonces reservadas exclusivamente a varones. Se ha señalado sin embargo que por las limitaciones impuestas a las mujeres en la época tuvo una disminuida actividad profesional, y una escasa producción científica, lo cual no ha sido revisado por la historiografía existente. En el presente artículo se analiza, su producción científica especialmente el estudio "empleo de ictiol en la inflamación pélvica" mostrando sus ideas sobre la ciencia y la medicina e identificando un pensamiento claro, moderno e innovador, no exento de sensibilidad social, además de mostrarse como una aguda y minuciosa observadora de problemas clínico-quirúrgicos.

Palabras Clave: Laura Rodríguez Dulanto; Perú; Historia de la Medicina; Historiografía; Género; Médicos Mujeres. (Fuente: DeCS- BIREME)

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THE FIGURE

Laura Ester Rodríguez Dulanto was born in Supe, Chancay province, on October 18, 1872. Discrepancies about her birthdate were resolved with the publication of her baptismal record[1]. She spent her early years in her hometown but later moved to Lima with her family, where she began her primary education, the only available for women. She studied at Colegio Badani, directed by Magdalena Badani de Chávez [2], which focused on preparing "young ladies" for child-rearing and teaching roles. Laura obtained the title of third-grade preceptor from this institution[3].

There were no high schools for women[4], but in order to enter the Faculty of Sciences at the Universidad Nacional Mayor de San Marcos, it was a requirement to have completed six years of secondary education. Laura Gutiérrez took advantage of the fact that her brother Abraham Moisés began secondary studies at Colegio Guadalupe and replicated the education at home.

"My brother, upon returning from Colegio Guadalupe where he attended high school, would borrow his classmates' notebooks and bring them to me. For two hours, he would repeat the lessons to me." After completing the subjects included in the curriculum, she took an exam before the Special Jury of the Superior Council of Public Instruction. Elvira García y García mentioned that "very few of her classmates who took the exam were able to pass it." [2].

In May 1892, she entered the Faculty of Sciences at Universidad de San Marcos, although she was not the first woman to enroll in this faculty (Margarita Praxedes Muñoz from Santiago del Estero had done so in 18885). A year later, Laura Rodríguez Dulanto graduated as a Bachelor of Science in 1893 with a thesis titled "The Biological Chemical Phenomenon of Fermentations"[3]. The following year, meeting the requirement of having higher education in Sciences, she enrolled in the Faculty of Medicine, but continued her studies in Sciences with the declared objective of becoming the first female doctor of Sciences in Peru. A woman studying Medicine disrupted the established order. Laura Rodríguez Dulanto received support from her brother, who also started medical studies. Classes were held in the old premises of the Faculty, adjacent to the Hospital de San Andrés, in Plaza Santa Ana in Lima. There is no autobiographical account of her time at the Faculty, but the prevailing order forced her to make certain concessions. She had to wear suit and tie, imitating what the male students wore, and was required to receive anatomy lessons behind a screen in the Amphitheater until she was granted permission to conduct her practices in a separate room accompanied by her brother [6]. Mannarelli interprets that her participation in the Faculty of Medicine, a field until then exclusive to males, could only be tolerated by symbolically assigning her to a protective order in which her brother controlled her.

"This family company reveals the discomfort that a female presence could provoke. It was a relief for everyone that women were protected by family company, as they continued to be pieces of the tutored order... In this way, men took the accompanying patriarch as a reference; they were not facing a woman with her own ideas, but rather the sister of a man"[6].

Her clinical training was conducted at Hospital de Santa Ana, exclusive to women. There, as an intern in the San Pedro Ward, she published her first scientific work on August 15, 1898: "Enormous ovarian cyst accompanied by another small one. Laparotomy. Healing"[7]. It is noteworthy that her work was surgical, considering that medicine was a field prohibited to women, and surgery even more so. Chronologically, her second academic work was her doctoral thesis to obtain a Doctorate in Sciences, titled "Geological Studies of the Chancay Province" [8], presented on October 18, 1898. In it, she demonstrates the early onset of her scientific vocation and her efforts: "Twelve years have passed since the day when, under the irresistible call of a vocation, I committed myself to science; twelve years of work and effort, but also of ideals and hopes." She also expresses her conviction of deserving the degree: "I was flattered by the illusion that perhaps I could be the first Peruvian woman to achieve the honor of bearing the doctoral insignia"[1].

Even after earning her doctorate in sciences, she continued as an intern at the San Pedro Ward of Hospital de Santa Ana, supervised by Dr. Néstor Corpancho, who introduced her to a new method of treating pelvic infections: "He put into my hands the pamphlet titled 'Pelvic Inflammations of Women' by Dr. Celestino M. de Argenta." The pamphlet referred to is a 45-page communication published in 18949, in which the author recounted his experiences with ichthyol in

Spain. She replicates the treatment and as a result of her research, presents on December 4, 1899, an experimental thesis for her Bachelor of Medicine: "Use of ichthyol in pelvic inflammations"[10]. On December 13, a jury composed of Drs. Benavides, Carvallo, and Fernández is appointed, and she defends her thesis on the 23rd of the same month [1]. According to a publication in the newspaper "El Comercio," she was sworn in as a medical doctor and surgeon on September 26, 190011. Before taking the oath, she publishes a new academic work "Uterine Fibroid - Abdominal Hysterectomy with Formation of Extraperitoneal Pedicle – Healing", also published in "La Crónica Médica"[12].

After these publications, there is a long period without publications until 1913, when the 5th Latin American and 6th Pan American Congress of Medicine is held in Lima, before which Laura Rodríguez Dulanto presents the paper "Contribution to the Treatment of Tuberculosis[13]. " A few years later, on July 6, 1919, she passed away in Lima.

Laura Rodríguez's Medical Practice

The historiography of Laura Rodríguez Dulanto unanimously indicates that her professional practice was minimal, as Pamo reaffirms, summarizing what Villavicencio14 expressed: "Social censure and veiled harassment of the time confined her to practicing the profession in a girls' school or convents but never in a hospital or medical office"[15].

Balbuena reaffirms this:

"Rodríguez did not succeed in developing her surgical profession in hospitals or medical offices due to the discrimination she faced and had to dedicate herself to directing the Normal School for Women, the Liceo Fanning, and the Convents of La Concepción, Jesús María, and Nazarenas."[16].

Her contemporary and biographer Elvira García y García also shares this opinion:

"With the exception of the 'Fanning School,' where she was the obligated doctor from the day she took her professional oath until her health prevented her from continuing to work, her professional services were not utilized in any other girls' school, not even the one where she was educated."[2].

Exhaustive research allows us to refute this information: Laura Rodríguez Dulanto did practice medicine privately, in her medical office located at calle Boza N° 349, currently cuadra 8 del Jirón de la Unión, in the center of Lima. She advertised in the Almanac of "El Comercio," edition of 190217, indicating that she specialized "in diseases of ladies and children," attending daily from 9 am to 12 m (figure 1). She even had a telephone number. However, her private practice was not limited to diseases of women and children, as she recounts in her 1913 paper, where she attended numerous tuberculosis cases.


Doctora Laura L. Rodríguez Dulanto
MÉDICA CIRUJANA
SE DEDICA A LAS ENFERMEDADES DE
SEÑORAS Y NIÑOS
CALLE DE BOZA Núm. 349—TELÉFONO Núm. 933.
CONSULTAS DE 9 Á 12 A. M.

Figure 1. Advertisement for the medical office of Dr. Laura Rodríguez Dulanto.

Scientific and Medical Thought: The First Clinical Experiment

Laura Rodríguez Dulanto's scientific ideas are delineated in her doctoral thesis, "Geological Studies of the Chancay Province." In this work, she recounts conducting extensive observations during two prolonged stays. Her proposition in this thesis reflects a conservative view, interpreting the geological

formations of Chancay in line with James Hutton's plutonic theory. Hutton, a Scottish geologist of Deist ideology, believed that through immutable natural laws, the Earth had adapted to accommodate human life[18]. Adopting Hutton's stance allowed Laura Rodríguez to reconcile her profound religious faith with her scientific education. The detailed descriptions of the landscapes of Chancay in her thesis showcase her acute observational capacity.

Her medical thought is evident in her Medicine Bachelor's thesis, a 59-page manuscript titled "c,"[19] currently preserved in the Special Collections section of the Central Library of the Universidad de San Marcos (figure 2). This thesis is dedicated to Dr. Néstor J. Corpancho, the head of the ward where she served as an intern:

"to the eminent gynecologist, Dr. Néstor J. Corpancho / this work is dedicated by his disciple and niece / [signature]."

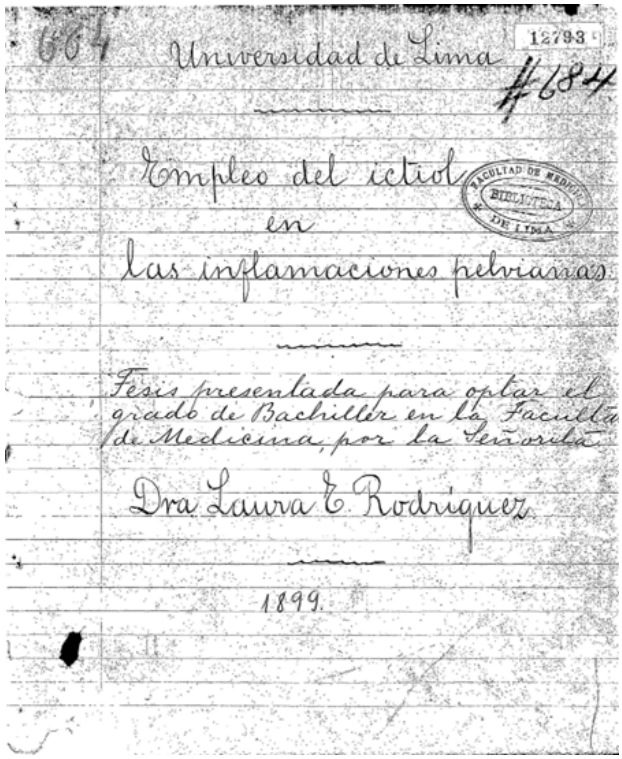

Figure 2. Cover of Laura Rodríguez Dulanto's Bachelor's thesis.

This dedication is significant because it reveals a previously undisclosed relationship by her earlier biographers, which may explain the facilities she had for her surgical practice. In the Introduction, she points out the intrinsic unity between the male and female body as "organized beings" subject to environmental influences: "woman, like every organized being, is subject in her vital evolution to the varied influences of the surrounding environment." This assertion harks back to the long influence of Hipólito Unanue on Peruvian medical thought. However, she does not fail to point out the differences between man and woman, with the latter having diseases "that concern her alone and have repercussions throughout her being." From there stems her interest in operative gynecology, which she calls a "completely new science" that fights "age-old worries, correcting old errors, and boldly going as far as to eradicate evil at its very source." Regarding the treatments that are the subject of her thesis, she indicates that, although operative surgery is the field of greatest achievements, there are other procedures within her field such as healings that prevent complications, and these triumphs "are not less positive simply because they are more modest."

Following the introduction are two sections.

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The first describes the causes of pelvic infections. Although she acknowledges their microbial nature, she maintains a traditional view of their predisposing causes: "we frequently find as a predisposing cause falls onto the pelvis, long horseback rides, prolonged vertical position, excessive exercise whether on a sewing machine or in household chores, sudden chillings."[19].

The second section is fundamental and has an innovative character that has not been recognized by historiography. In fact, Laura Gutiérrez Dulanto, based on a new medication proposed in Germany for the treatment of pelvic infections by Dr. Freund, decides to apply it in 10 cases that initially should have required surgical resolution, achieving remarkable success in all cases. It is surprising that her declared objective is similar to what would guide the discovery of antibiotics decades later:

"the therapeutic ideal must be constituted by the use of a substance that, having sufficient microbicidal power to destroy the viability today of pathogenic germs or reduce their resistance, is capable of increasing natural organic defense mechanisms and is susceptible to immediate and prolonged application, without its penetration into the circulatory system causing disturbances in the economy"[19].

Pelvic infections during this pre-antibiotic period caused high mortality. They were fought with various antiseptic substances such as copper sulfate, iodoform, iodine tincture, and especially carbolic acid. However, in 1890, the German gynecologist Freund proposed the use of ichthyol[20,21]. His proposal quickly spread in Europe and the United States[22], also used for the treatment of gonorrhea[23]. Chemically, ichthyol is a sulfonic derivative of ammonium from crude oil obtained by dry distillation of a fossiliferous rock. Ichthyol was patented and first introduced into the drug trade by a company in Hamburg, Germany, which obtained its base oil from marine deposits in Seefeld, Tyrol[24,25]. The final product did not have an exact composition as it depended on the manufacturing process.

The experiment followed a protocol typical of the time, applying the same procedure in all cases:
"2 grams of ichthyol per day in 12 pills, 2 pills every 2 hours, continuing this dosage until the inflammation largely subsides, then replaced by 3 pills per day of 20 centigrams each. If the pain is severe, 6 centigrams of codeine are added to the ichthyol, which can generally be discontinued after six to eight days due to complete cessation of pain symptoms. Licorice extract or powder is used as the vehicle for pill formation in sufficient quantity"[19].

The results of Laura Gutiérrez Dulanto's experiment were excellent; all patients recovered without the need for surgical intervention. This marked the first medical experimental investigation conducted by a woman in Peru, heralding a bright future. However, limitations on hospital professional practice for women thwarted this goal. Thus, in addition to being the first woman to graduate in Medicine in Peru and the first female Doctor of Science, she must be acknowledged as the first woman to conduct a clinical experimental intervention in a context characterized by limited scientific production. One can only speculate about her potential as a researcher and pioneer of modern clinical practices had she been able to continue working in a hospital setting rather than being confined to private practice.

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