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“Feminine Invasion” Women and Philippine Pharmacy in the Early Twentieth Century

Originally a male-exclusive profession in the nineteenth century, Philippine pharmacy became the domain of women in the early twentieth century. This sea change occurred as educational institutions began to cater to women’s career aspiration in pharmacy and especially after the US colonial school system introduced domestic science as a mandatory subject for girls, many of whom pursued pharmacy education in college. Women pharmacists set up retail drugstores in or near their residences, indicating pharmacy’s compatibility with women’s home-based roles. A contribution to gender history, this article shows that women actively challenged extant gender boundaries, which helped dismantle male exclusivity in other fields.

KEYWORDS: FEMINIZATION · PHARMACY · PUBLIC HEALTH · WOMEN · GENDER STUDIES

In an article in *The American Chamber of Commerce Journal*, Botica Boie pharmacist and prominent Philippine Pharmaceutical Association member Juan Barbera (1929, 25) drew attention to the increasing number of women in the pharmaceutical profession, a trend that according to him started in 1925 and would continue throughout the foreseeable future. Given the need for professional pharmacists in the colony, this development should have been welcome news, but male pharmacists feared that the “feminine invasion” (ibid.) of pharmacy would trigger male flight, decrease salaries, and foster unfair competition, as women pharmacists could offer their services and products at lower prices because they did not expect to become breadwinners. Women pharmacists could survive on small salaries “until they marry—as they always do—and the burden of their maintenance falls upon their husbands” (ibid., 26). Although Barbera supported the increased participation of women in pharmacy, male pharmacists resisted the increasing feminization of the profession and even demanded that “colleges close their doors against women who would matriculate in the pharmacy courses” (ibid., 25).

During the Spanish colonial period only men could enter the pharmaceutical profession because of the male-exclusive nature of medical education, with the exception of midwifery and nursing, the latter practiced mainly by members of women religious orders. However, by as early as 1920, women pharmacists had become a dominant majority. Male pharmacists interpreted this trend as a threat to the prestige and profitability of the profession, although their fears were mainly a subterfuge for masculinist bias and concern for the loss of male privilege. Thus, the removal of male exclusivity in a Philippine profession first took place in pharmacy, a transformation that led to the entry of women in other male-dominated professions. Given the significance of the feminization of pharmacy for Philippine gender history, the lack of scholarly inquiry into this phenomenon is surprising.

Although the literature on Filipino women has grown over time, most of these studies focus on the marginalization of women due to colonial rule, such as Zeus Salazar’s (1996) work on the Spanish colonization of Filipino women, Carolyn Sobritchea’s (1989, 1990) critique of American colonial education and female domesticity, and Elizabeth Eviota’s (1992) study on the sexual division of labor. Although these studies tackle the relationship between colonialism, patriarchy, and the marginalization of women in the social, political, and economic spheres, their focus on the victim status of

colonial women disregards the inroads made in professions to which women had access as well as the attempts to engage and subvert colonial-patriarchal roles ascribed to women. Studies such as Ma. Luisa Camagay’s (1995) work on the economic roles of Filipino women are invaluable as they depart from the victim narrative, but such studies remain few in number. The study of women’s roles in public health may advance women’s history, but the studies done in this area tend to either offer broad narratives (Tadiar 1989, 121–27) or concentrate on nursing (Choy 2003; Giron-Tupas 1961), which was professionalized during the American colonial period and feminized from the outset.

In this article I hope to address the various gaps in gender and public health history by presenting factors that eventuated in the feminization of pharmacy. I also analyze the impact of this change on colonial women. Although I utilize the standard definition of feminization, which focuses on gender shifts in the population, I also adopt Tracey Adams’s (2005, 88–89) view of feminization as the reorientation of men’s work into women’s work. I use this approach to present the feminization of pharmacy not just as a shift in the gender populating the profession, but also as a feminine turn in the profession’s practice and perception. In doing so, I hope to present the narrative of women pharmacists as well as provide an alternative view of colonial women, not simply as spectators or victims but also as active participants in shaping gender roles in society and history.

The Masculine World of Public Health

The feminization of pharmacy occurred not only in the Philippines but in other countries as well, such as the United States (Phipps 1990), Sweden (Stanfors 2007), the United Kingdom (Crompton and Sanderson 1990; Bottero 1992), New Zealand (Norris 1997), and Canada (Marshall 1990). Although the factors that contributed to the feminization of pharmacy in these countries varied, the common denominators included male flight, decreased wage gaps, and economic and institutional shifts in retail pharmacy that benefitted women. The trajectory of feminization in Senegal (Patterson 2012) nearly mirrored that of the Philippines, not just because both countries were former colonies, but also because access to scientific education paved the way to the entry of women to the profession. The Philippines was among the first colonial territories where pharmacy was feminized.

Prior to the late sixteenth century, indigenous communities had a multitude of herbalists and shamans (Plasencia 1903, 192–94) who utilized indigenous pharmacopeia and religio-magical rituals to achieve certain effects, medicinal or otherwise. The most prolific of these practitioners, the predominantly women religious leaders called *catalonan* in Luzon and *bailan* or *babaylan* in the Visayas, acquired medical expertise based on experiential knowledge and communal folklore. Precolonial communities considered the practice of healing as exclusive to women or to those who exhibited feminine qualities (Geremias-Lachica 1996, 57–58).

The highly feminized orientation of indigenous medicine contradicted the European perspective of medicine as the domain of men. In Europe the witch hunts and trials caused by the impact of *Malleus Maleficarum* on Catholic doctrine during the fifteenth and sixteenth centuries contributed directly to the exclusion of European women healers from medicine, and Spanish colonialism imposed the same male-exclusive view of medicine on the Philippines. The colonial government persecuted native healers and practitioners, while friars and the religious orders branded them as sorcerers and witches; the religious establishment also deemed indigenous healing as devil worship (Brewer 2004, 90–96; Green 1989). The lack of empirical basis and the feminine orientation of indigenous medicine fitted perfectly with the assertions of *Malleus Maleficarum*, and the emergent colonial gender dynamics reoriented Philippine medicine as the domain of European men. Hence women became invisible in the Spanish colonial public health system as they were intentionally alienated from both medical training and practice. Spanish conquest contributed as well to the increased presence of men in the previously feminine shaman practice. Although the ability to give birth made the woman shaman superior to her male counterpart, her unique role as life giver also made her the most vulnerable member of the community (Geremias-Lachica 1996, 58). Male shamans took over the more prominent roles, initially as spiritual leaders of the resistance to Spanish rule, then later on as medical practitioners during the early colonial period (ibid., 57; Aguilar 1998, 50).

From the seventeenth to the eighteenth century, the colonial government restricted medical practice to European doctors and pharmacists, most of whom came from Spain. The first Spanish military hospitals employed military doctors and pharmacists, while the religious orders managed the hospitals outside of the colonial centers (Rodriguez 1954a, 480–81).

Although the colonial public health system existed as early as the sixteenth century, geography and the shortage in personnel and supplies severely hampered its impact. Manila nearly monopolized medical supplies and personnel, as majority of hospitals and health institutions, which served exclusively Spanish military personnel and immigrants, were located in the colonial center. These hospitals also competed with each other for the limited supply of drugs and medicines from the galleon trade. The colonial government funneled medical resources to the Royal Hospital and the military hospitals as soon as they arrived (Sales Colin 2005, 169–74), leaving medical institutions outside Manila to fend for themselves. The absence of a medical education program further heightened the scarcity of supplies and personnel, which rendered the colony dependent on migrant doctors and imported supplies.

Due to the concentration of medical resources in Manila, the religious orders became a critical component of the colonial health system in the provinces, especially in areas not yet fully under colonial rule. Out of necessity, the religious orders functioned not just as ministers of the soul but also as doctors of the body, although the scarcity in personnel and supplies meant that they had to adapt to local environs and available materials (Rodriguez 1954a, 484; Joven 2012, 172). The administering of medical services inevitably became a crucial component of the religious mission in the Philippines.

Religious orders conducted preliminary research on available medical resources and healing practices, often collaborating with local healers such as the *curandero* (quack doctor), in an effort to utilize indigenous methods and provide empirical basis for their efficacy. Francisco Ignacio Alcina, despite framing indigenous healing as linked to devil worship, conducted studies on the medicinal qualities of herbs and plants used by the *herbolario* (herbalist) and *curandero* and published the results of these studies in his treatise on indigenous medicinal plants and remedies (Joven 2012, 175–76). These researches led to more than thirty works and around six treatises on various local remedies and herbs in the Philippines. Some of these researches gained renown in Europe and the United States, such as Jorge Camel's botanical studies in Luzon, which John Ray (1704) published as an appendix to the third volume of his *Historia Plantarum*. The excellent quality of the work done by some members of the religious orders is unsurprising given that some of them like Camel, a pharmacist

prior to his deployment to the Philippines, had medical training (Joven 2012, 177–78).

To supplement the services that the religious orders provided, the colonial government issued licenses to certain individuals with limited medical training—the *mediquillo* (petty doctor), *herbolario*, and the *vacunadorcillo* (petty vaccinator)—but the government restricted their practice to the native population. These medical professionals were allowed to prescribe and dispense remedies and set up small-scale drugstores called *botiquines*, but they could only sell first-aid remedies. Prescription medicine could be compounded, but only under the supervision of a licensed pharmacist. Those who opened a botiquín usually served in hospital dispensaries and had licenses as registered pharmacists or *farmacéuticos habilitados*. Botiquines in provinces without pharmacies could obtain licenses, but with the proviso that the botiquín would be closed or sold once a registered pharmacist came to reside in the area (Rodríguez 1954a, 480–93).

A Masculinized Professional Pharmacy

The nineteenth century served as a watershed for Philippine pharmaceutical history as it witnessed the professionalization of pharmacy. The shortage in personnel had forced medical professionals to function as both doctors and pharmacists, blurring the distinction between the two professions (Joven 2012, 171). However, the opening of the Philippines to foreign trade during the nineteenth century paved the way for the entry and proliferation of European medical professionals, particularly pharmacists from Germany who dominated the profession from 1870 up until the end of Spanish rule.

German pharmacy in the Philippines can be traced to the early nineteenth century, when Hapsburg pharmacists Johann Anton Karuth and Johann Andreas Zobel migrated to Manila. Karuth, who trained in Breslau, set up his *botica* (drugstore) in Intramuros in 1819 after obtaining his license, while Zobel, who arrived later in Manila in 1832, opened his own botica in 1834. These two pharmacists were apparently related, with Zobel having worked for Karuth before he set up his own shop, among other possible links (Salazar 2000, 96–97).

The Germans further strengthened their hold on the profession when Heinrich Rodbertus, a former employee of Botica Zobel, purchased the dispensary of Spanish pharmacist Lorenzo Negrao in 1844. Originally founded in 1830, Negrao's shop became Botica Boie, which eventually

grew into the largest and most prolific drugstore in the Philippines from the nineteenth century up to the early years of American colonial rule. From the original Botica Boie in Escolta, it expanded to several branches in Manila (Botica de Santa Cruz and Botica de Santo Cristo), Cebu (Botica de Cebu), and Vigan (Botica Boie). Unlike their local counterparts, German pharmacists extended their operations well beyond the colonial centers, as they set up boticas in Cagayan, Iloilo, and Albay from 1880 to 1890 (*ibid.*, 134).

The desire to retain German control of their boticas brought about an influx of migrant German pharmacists, as German proprietors personally recruited pharmacists from their homeland (Rothdauscher 2010, 100).¹ Heinrich Rothdauscher recounted how Pablo Sartorius recruited him in Hamburg after he passed his state examinations. A substantial initial salary of US\$500, with an annual increase of US\$100, and *wanderungslust*, or the desire to explore a new environment, sparked Rothdauscher's wish to move to the Philippines (*ibid.*, 79–80; Guillermo and Agabin 2013, 523–25).

Botica Boie's proprietors firmly believed in maintaining German influence and ownership over their boticas, ensuring the company's expansion and survival during periods of financial crises. Reinhold Boie's acquisition of German-owned boticas, such as Botica Santo Cristo, consolidated various independent German-owned boticas under the Boie franchise; when the shop encountered financial issues during the 1890s, Boie gained the assistance of another German pharmacist, Alexander Schadenberg, thus keeping the drugstore in German hands (Philippine–American Drug Co. 1930, 14–15).

By the end of the nineteenth century, the Philippines had approximately thirty-four pharmacists of German origin who practiced in at least thirteen dispensaries. Even Spanish boticas depended on the Germans, as they sourced their medical supplies from German boticas that imported pharmaceuticals in bulk from Europe. However, Wigan Salazar (2000, 134–35) qualifies that, although German drugstores dominated the trade in pharmaceuticals, they had minimal impact on public health as they catered mainly to the middle class and elites while the majority of Filipinos still went to indigenous or Chinese healers for remedies.

Aside from male German pharmacists occupying a dominant position in colonial pharmacy, the male-exclusive orientation of pharmaceutical training and education further alienated women from pharmacy. Although

the formation of separate pharmacy courses during the late nineteenth century professionalized pharmacy and separated it from medicine, the restriction of enrollment to male students further institutionalized male dominance in the profession.

In an effort to address the limitations of the public health system, the colonial government created the Faculty of Medicine and Surgery and the Faculty of Pharmacy at the University of Santo Tomas (UST) in 1871. In his report to the governor-general, university rector Fr. Domingo Collantes (cited in Villaroel 2008, 138) highlighted the dismal state of medicine and pharmacy in the Philippines, with the limited medical personnel and resources in the colony leading to the prevalence of indigenous healers:

In the city, in extramuros and in the provinces there are plenty of *curanderos*. There are “boticas” or pharmacy stores in the Royal Hospital, in Santo Domingo Convent, in San Agustin Convent [the two latter ones about to be closed] and in San Juan de Dios Hospital. Some medical doctors come from Madrid, and provisions of medicines arrive occasionally aboard boats from Mexico, Canton and Cadiz.

The UST Faculty of Pharmacy initially offered a six-year program leading to a bachelor’s degree in pharmacy, with the first year serving as a preparatory course and the subsequent five years comprising course work focused on pharmaceutical chemistry and management, the determination and classification of *materia medica*, and botanical pharmacy. After the fourth year, the student had the option to apply for a bachelor’s degree. In 1875 the UST Faculty of Pharmacy added to the requirements a two-year apprenticeship (Rodriguez 1954b, 32, 41–44, 62–63). Later it also modified the bachelor’s degree into a licentiate degree, which allowed pharmacy graduates, after passing their examinations, to practice their profession. Besides having a monopoly on pharmaceutical education, UST also had the sole authority to test and issue licenses for pharmacists. However, as a school policy, UST made the pharmacy courses exclusive to men.

The licentiate in pharmacy course generated interest among middle-class men as it offered professional and entrepreneurial opportunities. Apart from employment in drugstores, licensed pharmacists could work in private or government institutions, while affluent graduates could set up their own drugstores. From 1871 up to the end of the Spanish colonial period,

UST trained 290 *licenciados* (licensed pharmacists) and 91 *practicantes* (pharmaceutical practitioners) of pharmacy (UST Alumni Association 1972; Rodriguez 1954b, 50). Toward the end of the Spanish period, pharmacists in the colony—all of them men—had either graduated from UST or migrated from Europe. The initial success of the medicine and pharmacy courses led to the formation of other medical courses in UST, but only the *Escuela de Matronas o Parteras* (School for Midwives) allowed matriculation for women—a concession to the preference of Filipino women for female midwives. Medicine and pharmacy remained solely in the hands of men up to the initial years of American colonial rule.

Dismantling Restrictions on Colonial Education

Although pharmacy in the Philippines already had professional foundations in place (which the First Philippine Republic attempted to build on by including a pharmacy course in the proposed *Universidad Literaria de Filipinas*), the US perceived the Philippines as living in the “dark ages,” especially at the beginning of the twentieth century when it was consolidating state control (Ileto 1988, 140). The discourse of war and colonization intermingled with the battle against cholera and diseases, the alleged unhygienic conditions of Filipinos, and the backward and superstitious state of medicine in the country. US conquest utilized medicine and its auxiliary professions such as pharmacy to justify the pacification of Filipinos; the medical sciences, which delivered Filipinos from the “dark ages,” became symbols of the modernity of colonial society under American rule (Ileto 1995, 52–53).

In line with the project of modernizing medical and pharmaceutical practices in the Philippines, the American colonial regime invested in government institutions, such as public dispensaries and the Bureau of Science, to advance both the practice of and scientific research on pharmacy. The colonial state also crafted legislation aimed at reforming pharmacy and criminalizing unlicensed medical and pharmaceutical practices. These measures proved to be necessary due to the outbreak of beriberi, which led to high infant mortality rates, during the first decade of American rule (De Bevoise 1995, 139–40). This public health problem required the efficient manufacture and distribution of products from the extract of rice bran or tikitiki, a supplement that prevented thiamine deficiency caused by the consumption of polished rice. The burden of producing sufficient remedies,

especially for beriberi, served as an impetus to train pharmacists and found independent drugstores throughout the colony. However, the male-exclusive orientation of pharmaceutical training and the limited access to basic and secondary education hampered the desire of the colonial regime to increase the number of pharmacies and pharmacists.

The restrictive nature of both basic and professional education in the colony led to a limited supply of medical professionals. Only middle-class men had unhampered access to education, with women expected to focus their energies on service to the church, childcare, and other domestic tasks such as housekeeping and cooking (Mendoza-Guazon 1951, 24). While women of the middle and elite classes had the option to pursue degrees, they had access only to education and midwifery courses. The marginalization of women from knowledge acquisition and the restriction of professions such as medicine, pharmacy, and law to men resulted not just in a highly masculinized set of professions but also in a limited population of professionals and skilled workers.

Education reforms became necessary, and the American colonial state formulated basic and secondary curricula geared toward providing literacy, arithmetic, and livelihood training for Filipino children of both sexes. To facilitate and organize the educational affairs of the colony, the US formed the Department of Public Instruction in 1901 and institutionalized free basic education. Although public school enrollment at the primary levels had its peaks and declines, matriculation in intermediate and secondary courses increased from 1907 to 1920, especially from school year 1914–1915 to 1919–1920 when more schools for higher education opened more courses to both women and men (Bureau of Commerce and Industry 1921, 9).

Data on public and private schools in the mid-1920s show that, while both sexes had access to education, males substantially outnumbered females at all levels (Bureau of Commerce and Industry 1923, 6; 1924a, 1924b). The preexisting division of labor between men and women and the career paths that both sexes would take caused this disparity in enrollment rates. Masculinist bias that regarded men as the breadwinners led to a strong demand for literacy and arithmetic skills, livelihood training, and higher education for men, with household tasks relegated to women. This division of labor confined women to the home, with all their tasks conforming to their domestic role. This role assignment contributed to the perceived irrelevance of education for women beyond domestic training because, once

married, a woman was regarded as linking her social status to her husband's. Paul Monroe, who led the survey of Philippine education in 1924, made the same observation in his report:

Man participates in the more active occupation; woman keeps the house. The social and economic position of the man determines the status of the family. In such a society it is only natural that parents should be willing to make great sacrifices for the education of a son, but should be reluctant to make similar sacrifices to send a daughter to school. To them, since her condition in life will merely reflect the position of the man she weds, the higher education of the girl is a waste of time and money. (Board of Educational Survey 1925, 329)

On the surface, enrollment data reflected male dominance in colonial society due to the gender disparity in access to education. Nonetheless, the colonial education system also produced a substantial number of women who would later on be eligible for higher education courses. The barriers to basic and higher education for women during the Spanish colonial period gradually broke down, and education became more accessible to women during the twentieth century.

Enrollment figures show that more men than women completed secondary education, but raw figures indicate that the number of women who finished secondary education increased annually. In school year 1907–1908, only 240 girls enrolled at the secondary level, and, as shown in the table on p. 148, they also suffered from very high attrition rates of 90 percent or higher (Bureau of Commerce and Industry 1921, 9). However, within five years, the number of women enrolled at the secondary level ballooned to 740, and by school year 1917–1918 over 2,600 girls had enrolled in high school (*ibid.*). Toward the 1920s attrition rates among female students also declined significantly, even though the absolute number of female students increased. For example, the table on p. 148 indicates that the dropout rate at the secondary level by school year 1922–1923 was nearly 80 percent, which though high was a significant drop from the 91 percent during the initial school year 1907–1908 (Bureau of Commerce and Industry 1923, 6; 1924a).

Despite the initially small number of females who completed secondary education, those who did so pursued college degrees, especially in pharmacy.

Attrition rates for higher stages of education in public schools, 1907–1923

SCHOOL YEAR	DECREASE FROM PRIMARY TO INTERMEDIATE	%	DECREASE FROM INTERMEDIATE TO SECONDARY	%	DECREASE OF WOMEN STUDENTS FROM PRIMARY TO INTERMEDIATE	%	DECREASE OF WOMEN STUDENTS FROM INTERMEDIATE TO SECONDARY	%
1907–1908	346518	96.28	12055	90.10	135076	97.90	2658	91.72
1908–1909	407565	96.64	12340	87.09	160792	98.10	2799	89.97
1909–1910	541749	96.22	18221	85.53	215712	97.91	4082	88.86
1910–1911	438326	95.28	18737	86.35	176195	97.28	4472	90.86
1911–1912	374843	93.65	21735	85.49	150821	96.24	5337	90.52
1912–1913	287425	90.94	23885	83.40	114753	94.41	6050	89.00
1913–1914	382386	92.56	25383	82.60	155534	95.51	6399	87.47
1914–1915	457849	92.26	31545	82.13	184262	95.15	8289	88.25
1915–1916	456458	90.85	37613	81.81	186631	93.92	10734	88.81
1916–1917	487631	90.10	42878	80.03	199012	93.20	12641	87.13
1917–1918	477727	88.74	47014	77.56	196743	91.72	15124	85.15
1918–1919	531168	86.72	65859	80.97	229039	89.29	23597	85.87
1919–1920	656226	86.71	83245	82.75	287725	89.17	30206	86.46
1920–1921	735212	85.36	102622	81.41	321789	87.65	38531	84.95
1921–1922	723097	83.60	110346	77.81	317350	86.03	41836	81.16
1922–1923	769648	83.71	116502	77.80	336464	86.13	44028	81.27

Sources of data: Bureau of Commerce and Industry 1921, 9; 1923, 6; 1924a, 7

Data from schools that offered coeducational pharmacy courses starting in 1904 (see below) reflected significant spikes in the number of pharmacy graduates for the years 1916 and 1918 (fig. 1), and subsequent years showed a positive trend toward female pharmacy graduates, whose numbers rose to 208 in 1929.² Given that the initial spikes in the number of female pharmacy graduates occurred toward the end of the 1910s, it can be surmised that these graduates belonged to the first batches of female high school students who had domestic science training, which was introduced in 1910, as discussed in the section that follows.

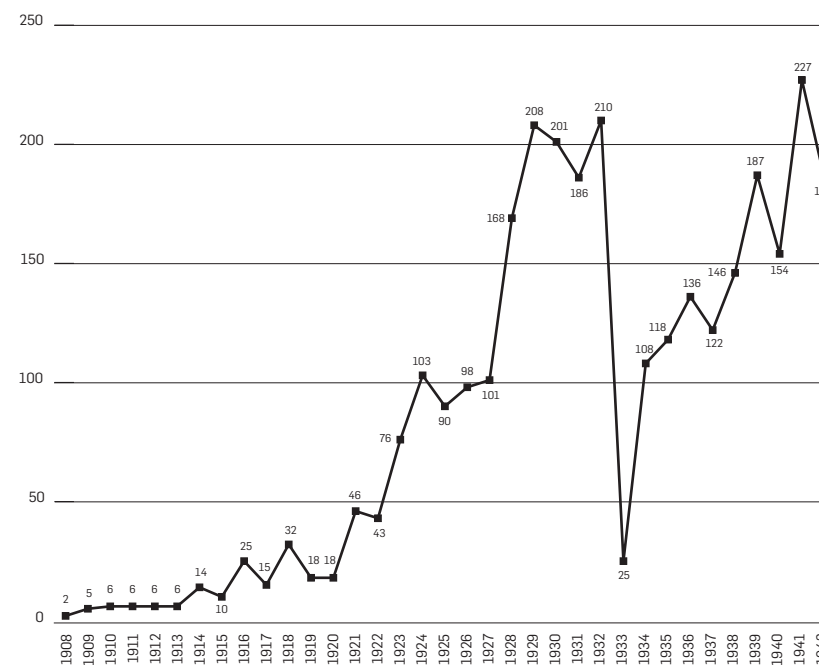


Fig. 1. Number of women pharmacy graduates, 1908–1941 from MCP, UST, UP, and CES

Sources of data: Gonzales 1954; UST Faculty of Pharmacy 1953; UP 1917, 1919, 1920, 1921, 1922, 1923, 1924, 1925, 1926, 1927, 1928, 1929, 1930; UP Class of 1917; UP Class of 1920; UP Class of 1929; UP Class of 1930; UP Class of 1931; UP Class of 1932; UP Class of 1933; UP Class of 1934; UP Class of 1935; UP Class of 1936; UP Class of 1938; UP Class of 1939; UP Class of 1940

Domestic Science as Scientific Training for Women

The curricular revision of 1910, which introduced the mandatory domestic science course for women from the fourth up to the seventh grade (Bureau of Education 1910, 19), spawned a gendered view not just of pharmacy but also of the sciences. The domestic science course trained “the girls of our schools to become intelligent home makers and capable mothers and to meet the common needs of everyday life” (Fuller 1911, 11). As early as the fourth grade, female students engaged in activities such as “housekeeping,” which included the production of home remedies and needs and instruction in moral and cultural values, hygiene, and caring for the sick—tasks considered as the responsibilities of women.

The domestic science course also influenced views on what constituted women’s work, although it might not have been the intention at the time. Director for Education Frank White summed up the basic aspects of the domestic science course in contrast to other courses, such as weaving and cooking, that were oriented toward livelihood: “Pure air; sunshine; industry; cleanliness of body; clothing, house and premises; sterilized drinking water; active sympathy for the sick and distressed; proper manners and refined conduct in every relation in life—these are some of the things that need quite as much attention as sewing and cooking” (ibid., 3).

The 1924 Monroe report further emphasized the home-making thrust of domestic science. Although the course integrated livelihood training in embroidery, lace making, and sewing, the focus did not have to be on the commercial but rather on the domestic application of the training (Board of Educational Survey 1925, 283). The report stressed the importance of domestic science, especially within the framework of domesticity and colonial women:

It is assumed that they will all become mothers of families and housekeepers in the rural community. As the farm, whether that of the school or that of a father, is the laboratory for the boy, so the school or community dormitories and kitchens should be the laboratory for the training of the girl in the skills and knowledge required in housekeeping. . . .

More particularly these courses in household arts should be organized with definite reference to the work and problems of the woman as a home maker, mother, and member of a community,

responsible in a large measure for the quality of the food and clothing of the family; the sanitation of the home; the physical care of the family in health and in sickness; the education of the children; the social life of the home and the community. (ibid., 358)

Young girls were trained in thread production and sewing, not just to earn a living but also to ensure that their families had clothes to wear. They learned how to clean and sanitize their houses and take care of the sick so that their homes maintained a healthy environment. They manufactured soaps and perfumes to make the people they cared for presentable and fragrant, like modern citizens. Ethics and manners became necessary in order for them to raise civilized children. In other words, colonial education transformed the connection of women to the home. During the Spanish colonial period, her responsibility to God, her husband, and her family defined the Filipina. During the American period, all these undertakings formed part of a woman’s responsibility to her country.

Although the domestic science course groomed women for domestic management, certain skills that were tangential to what became popular professions among women became feminized. Aside from the inculcation of ethics or morals and norms expected within and outside the home, female students acquired industrial and scientific skills through training geared toward household needs. Dressmaking involved the processing of raw materials into thread, with which they could make clothing. The hygiene course provided not only basic medical training but also instruction in food preparation, the detection of symptoms, and the compounding of remedies for first aid. Household-based activities subtly taught chemistry and health science as students learned to handle and process chemicals such as petroleum for the removal of stains and cleaning of household items. Girls also learned to manufacture herbal remedies and hygienic products.

By the time they reached secondary school, female students already possessed technical skills honed by the academic curriculum, which prepared them for higher education. Secondary school science classes in botany, zoology, and physics provided the scientific bases for the applied knowledge obtained in elementary-level domestic science, eventually preparing them for professional careers that correlated with the ideals of and training in domestic science.

The Entry of Women in Pharmacy

The increase in the number of women eligible for higher education also led to more schools accepting or catering exclusively to women and opening up male-exclusive courses. Pharmacy became a popular course for women, possibly due to the alignment of the basic and intermediate scientific skills acquired in the domestic science course with the disciplines essential to the pharmacy course. Bacteriology, for example, shared the objective of eliminating harmful germs and bacteria through chemicals with the hygiene and sanitation aspect of housekeeping. Filipino girls could also utilize their basic training in remedies for pharmacology, botany, and pharmacognosy. The compounding of chemicals according to a particular pharmacopeia, for all intents and purposes, mirrored the preparation of dishes and remedies according to a particular recipe. In other words, colonial education presented the pharmaceutical profession as a logical trajectory of the domestic training of women.



Fig. 2. Filomena Francisco-Guerrero

Source: Gonzales 1954, 145

Although UST's monopoly of pharmaceutical training in the nineteenth century perpetuated male exclusivity in pharmacy, the establishment of two higher-education institutions that offered coeducational pharmacy courses broke this monopoly during the first decade of the twentieth century. One of these schools, the Manila College of Pharmacy (MCP), overtook UST in terms of student population due to the volume of female pharmacy students.

The MCP traces its origins to the private review class organized by Dr. Alejandro Albert in 1903 at the Liceo de Manila, which prepared pharmacy graduates for the licensure exams stipulated in Act 597 or the Philippine Pharmacy Act of 1903, which the Board of Pharmaceutical Examiners (BPE) supervised. While the BPE recognized the licentiate degrees and licenses issued prior to the Treaty of Paris, it required subsequent applicants for pharmacy licenses to pass its battery of exams in areas such as chemistry,



Fig. 3. Matilde Arquiza. Source: *Lipang-Kalabaw* 1908, 1

toxicology, use of microscopes, and pharmaceutical preparations and prescriptions (US Philippine Commission 1904, 338–40). The high demand for subsequent classes led to the organization of the College of Pharmacy of the Liceo de Manila, which became formally known as the Escuela Farmacia de Liceo de Manila in 1904. The steady increase in enrollment led to the relocation of the college to the corner of Oroquieta and Zurbaran and its reorganization in 1915 as the Manila College of Pharmacy (now Manila Central University) (Gonzales 1954, 143–44).

In 1904, the Escuela Farmacia de Liceo de Manila offered women the opportunity to enter a field previously closed to them, pharmacy, which at the time was a profession equal in prestige to medicine (a profession still closed to women at that time). The first women to obtain their degrees, and subsequently their licenses, were Filomena Francisco (fig. 2) and Matilde Arquiza (fig. 3), who placed first and third, respectively, in the licensure exams held in 1908 (*Manila Times* 1908, 4).

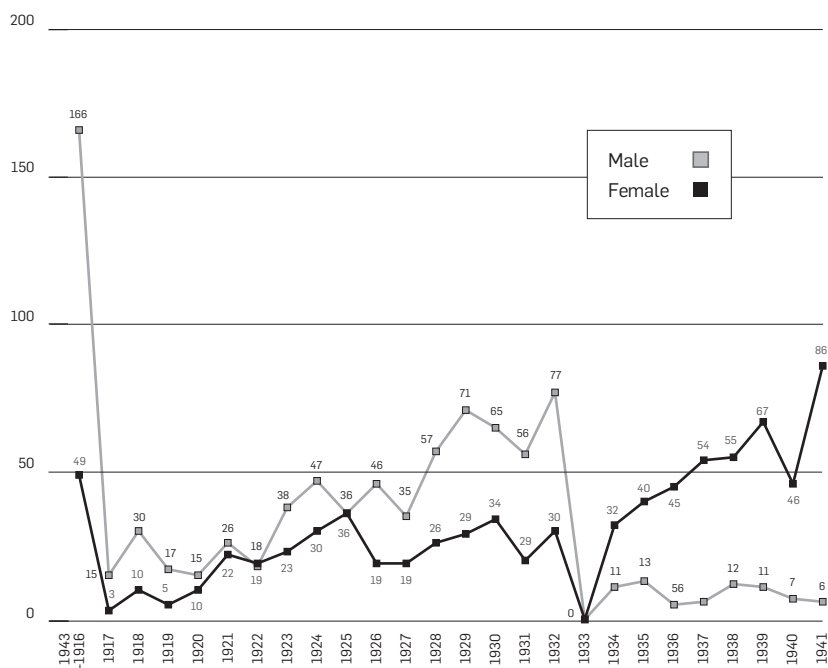


Fig. 4. Number of graduates of pharmacy, Manila College of Pharmacy, 1904–1941, by gender

Source of data: Gonzales 1954, 501–50



Fig. 5. Manila College of Pharmacy students in a laboratory conducting assaying

Source: Gonzales 1954, 159

Not much is known about Arquiza, although *Lipang Kalabaw* featured her on its September 1908 cover to mark the emergence of educated Filipinas (*Cultas Filipinas*). As for Francisco, she started teaching at Centro Escolar de Señoritas (now Centro Escolar University) in 1907 (anon. 1907, 6) before obtaining her license; she then set up her pharmacy, Del Carmen, in 1910, with *The Filipino Teacher* calling readers to support her by asking, “how do you like . . . to have your prescriptions prepared by Miss Menang’s delicate fingers” (anon. 1910, 21). Francisco, however, ended her career as a pharmacist after she married Alfredo Guerrero and settled into the role of “submissive and dutiful wife and mother,” as her in-laws considered it “unethical for a physician’s wife to own a drug store” (Nakpil 2006, 17–18).

While Francisco and Arquiza seemed to have ended their careers early, their success in 1908 was well publicized. The *Manila Times* (1908, 4) congratulated the two women pharmacists, proclaiming their entry to pharmacy as “another victory for the Filipino woman” and validating the opinion that it was to the Filipina that the colonial government had to turn “for this country’s real regeneration and redemption” as “she is the hope of the future and that in her we shall find the chief instrument in achieving success in our work of advancing and prospering the Filipino people.”

After 1908, the graduation data showed an increasing number of women pharmacy graduates (fig. 4). By 1923 MCP had more female than male

graduates. Recognizing the popularity of pharmacy among women, MCP came out with advertisements around 1929 aimed at enticing women to enroll in its pharmacy program. Besides highlighting its success in the licensure exams, MCP also offered a “dormitory with all the conveniences for girls . . . under the competent direction of one of the lady instructors” (Manila College of Pharmacy 1930, 666). Archived photographs of the pharmacy classes in the college further show the predominantly female composition of pharmacy classes as well as the prominence of women in course activities (fig.5).

The state-run University of the Philippines (UP) in Manila also offered a coeducational pharmacy program in 1911 under the College of Liberal Arts. The Board of Regents in 1914 reorganized the program into the School of Pharmacy under the College of Medicine and Surgery to facilitate practical training in the Philippine General Hospital Dispensary (University of the Philippines 1914, 32; 191–94). It offered a three-year Graduate in Pharmacy course (renamed Degree of Pharmaceutical Chemist in 1921), with the option of obtaining the Bachelor of Science degree after the completion of an additional year. The three-year undergraduate course was designed for students who wanted to take up a career in retail pharmacy, while the four-year course was intended for those who wanted to pursue advanced studies in bacteriology, botany, chemistry, or pharmacy for work as a pharmaceutical chemist, public analyst, or food and drug expert.

Similar to MCP, women gradually, then consistently, outnumbered men in the pharmacy courses at UP. Female graduates outnumbered their male counterparts in the three-year course from 1914 to 1920, while those who finished the fourth year for the BS Pharmacy degree were mostly men, reflecting a perspective that women preferred a career in retail pharmacy over an academic career. However, by 1921 women comprised the majority of the graduating classes of both the three-year pharmacy course (fig. 6) and the four-year bachelor’s degree in pharmacy. Although the increase in the number of female students was the primary cause of the gender shift in the student population, the number of men who took up pharmacy also substantially decreased, as some graduating classes had only one or no male graduate at all.

Toward the 1920s more educational institutions offered pharmacy courses due to the strong interest among women. The Colegio Filipino offered a coeducational pharmacy course in 1922, while the Centro Escolar de Señoritas (CES) and the Philippine Women’s College (PWC),

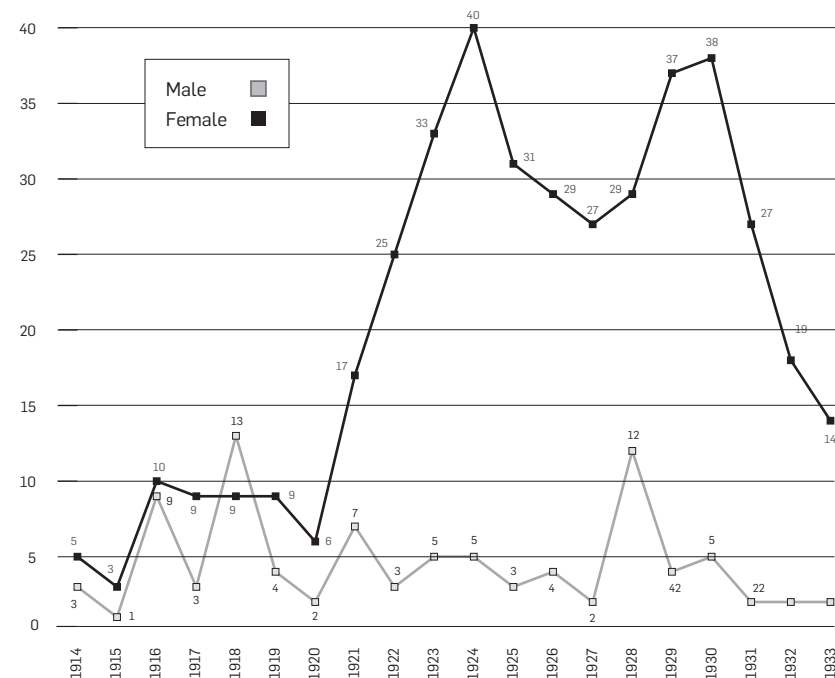


Fig. 6. Number of University of the Philippines graduates of the three-year course, Pharmacy (1914–1920), later renamed to Pharmaceutical Chemistry (1921–1933), by gender

Sources of data: UP 1917, 1919, 1920, 1921, 1922, 1923, 1924, 1925, 1926, 1927, 1928, 1929, 1930

both exclusive schools for women, contributed to the increasing number of women pharmacists. Data from CES, for example, show that it trained over 400 women pharmacists during the American colonial period (Centro Escolar University 1981).

Increased competition and the school policy on male exclusivity led to a severe decline in enrollment in pharmacy at UST. Hampered by UST’s policy of restricting matriculation to male students, the Faculty of Pharmacy failed to capitalize on the increasing interest in pharmacy among women, resulting in the dwindling of the number of graduates of its licentiate course compared with that of graduates of other schools of pharmacy. From 1917 to 1926, except for 1921, UST had the lowest number of graduates among the three biggest schools of pharmacy (fig. 7).³

The decline in the number of students forced UST to reconsider its male-only policy, and the university eventually opened its doors to women,

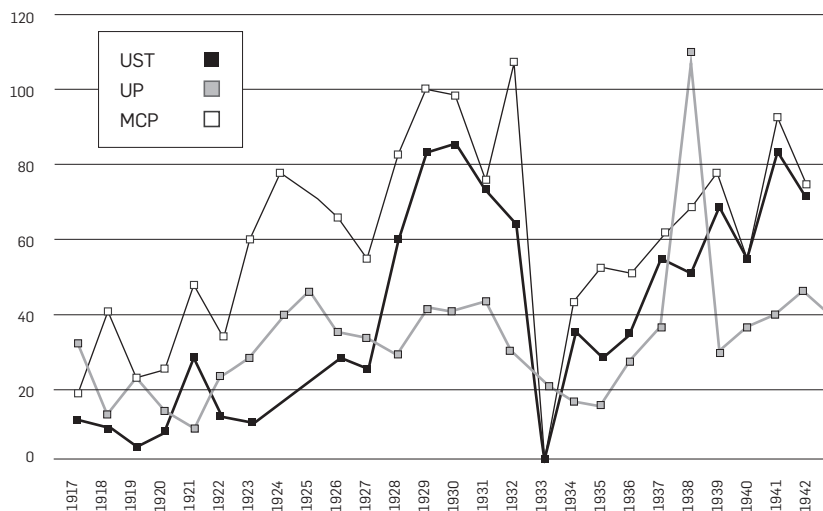


Fig. 7. Number of pharmacy graduates from MCP, UP, and UST, 1917–1942

Sources of data: Gonzales 1954; UST Faculty of Pharmacy 1953; UP 1917, 1919, 1920, 1921, 1922, 1923, 1924, 1925, 1926, 1927, 1928, 1929, 1930; UP Class of 1917; UP Class of 1920; UP Class of 1929; UP Class of 1930; UP Class of 1931; UP Class of 1932; UP Class of 1933; UP Class of 1934; UP Class of 1935; UP Class of 1936; UP Class of 1938; UP Class of 1939; UP Class of 1940

with pharmacy as the first course to be made available to both men and women. A petition sent to UST Rector Asiselo Alfageme on 10 December 1920 also contributed to the decision to offer pharmacy to female students. The petition, which contained nearly 1,000 signatures mostly of women, led UST to endorse the petition to the Vatican, which approved it in 1923. The UST's licentiate course opened its doors to twenty-one female students in 1924. However, unlike its counterparts, UST segregated the students, with women taking morning classes and men taking afternoon classes (Lim Pe 1973, 41–42). Opening pharmacy to women also led to the highest number of graduates in the course's history since 1875 and, akin to the MCP and UP, the UST population substantially leaned toward female students.

The passage of Act 3536 in 1929 made completion of a four-year course a requirement for the examination and certification as a pharmacist starting July 1934. In effect, the law phased out the three-year course and replaced it with the four-year course Bachelor of Science in Pharmacy, although those enrolled prior to 1930 were allowed to finish their degrees under the old

programs (University of the Philippines 1929, 358). It led to a significant drop in the number of graduates in academic year 1932–1933, with the last students of the three-year course graduating in 1933 (figs. 4, 6, and 7).

The following school year saw the first graduates of the four-year pharmacy course instituted by Act 3536. The number of graduates from MCP, UST, and UP steadily increased in the succeeding years (fig. 7). While graduation figures for all three schools already reflected a highly feminized population of pharmacy graduates prior to 1933, the disparity between male and female pharmacy graduates increased during the years 1935–1942, with male graduates per year numbering less than fifteen per school. In the case of UST, the number of male pharmacy graduates peaked at four, while UP produced all-female graduating classes for the years 1939, 1941, and 1942.

Tippling the Scales: Emergence of a Dominant Female Majority in Pharmacy

In less than a few decades, the influx of women in pharmacy courses transformed pharmacy from a male-exclusive profession to one dominated by women. After the success of Francisco and Arquiza in 1908, a steady number of women obtained their pharmacy degrees. The substantial increase in female pharmacy graduates, which started in 1916 and continued throughout the American colonial period, as well as the sharp decline in male graduates led to a highly feminized population of pharmacists as early as the 1920s.

By 1939 women comprised more than 60 percent or 1,493 of the surveyed 2,430 pharmacists in the Philippines (Philippine Islands 1940). This figure, however, did not fully reflect the disparity between male and female pharmacy graduates as it might have covered practicing pharmacists only. Pharmacy graduates had a variety of options for employment, including work as chemists, researchers, and educators. Pharmacists or graduates of pharmacy possibly comprised a certain percentage of the surveyed “chemists and analysts” in the 1939 census. Of the fifty areas surveyed, thirty-eight had a higher proportion of women pharmacists compared to men. Women pharmacists also outnumbered men in ten out of the thirteen areas with sixty or more pharmacists, with Manila having the highest total number of pharmacists at 595, 351 (59 percent) of them women.

The census data, when squared with graduation data, show the impact of the increase in female pharmacy graduates during the 1920s, especially in

the age range, location of practice, and gender composition of pharmacists in 1939. In terms of age, male pharmacists dominated the age brackets 45–54 (92 percent) and 55–64 (82.9 percent), but among pharmacists between the ages of 35 and 44, the genders were almost equal (53 percent men compared to 47 percent women). Presumably, the pharmacy graduates from 1910 to 1925 comprised those in the 35–44 age bracket, and it was during this period when the number of female graduates started to increase. Women comprised the majority in the age brackets 25–34 (75.5 percent) and 20–24 (85.3 percent), indicating that most of the surveyed women pharmacists graduated in 1926 and later years (ibid.).⁴

Majority of surveyed pharmacists practiced in Manila and its peripheries. Pharmacists in Manila (595) and Rizal (230) comprised one-third of the total number of pharmacists, while Laguna (119), Tayabas (119), Bulacan (117), and Pampanga (113) had the next highest population of pharmacists. Among these provinces, only Tayabas (58.8 percent) and Pampanga (51.3 percent) had a higher percentage of men. Women pharmacists comprised the majority in Manila (59 percent) and Rizal (65.7 percent), indicating that around one-third of all women pharmacists practiced in these areas (ibid.). The concentration of pharmacy schools and the availability of the best opportunities for pharmacists and pharmacy graduates in Manila and its peripheries possibly caused the geographic concentration of women pharmacists in the said areas.

Pharmacy as a profession appealed to middle-class Filipinas for various reasons. Pharmaceutical education and, by extension, domestic science played a critical role in dismantling the monopoly of men not just in pharmacy but also in governance and in scientific education and research. Occupations such as science instructors in academic institutions, researchers in the Bureau of Science or private organizations, as well as government positions in the Board of Pharmaceutical Examiners became available to women, along with other employment and entrepreneurial opportunities.⁵

More importantly pharmacy represented the best possible compromise for the desire of women to have a career without abandoning their domestic responsibilities and expectations. Other feminized professions such as teaching and nursing required flexibility and the ability to work shifts, but pharmacy enabled women to work in home-based pharmacies while fulfilling her domestic expectations. Marriage, in essence, did not hinder a career in pharmacy (Blanco 1962, 26).

Pharmacy also offered the flexibility to shift careers based on the needs and wants of women. Women pharmacists had the option of employment or proprietorship prior to marriage. If they chose to get married, they could set up pharmacies within the confines of the home. As Barbera (1929, 26) noted, a woman pharmacist could “have her children with her in her office, attend her domestic duties too, and the public of the Philippines will think it all quite correct—even view it with genuine approval.”

Teaching in science-related courses became an option for female pharmacy graduates. Salud Campos, after her graduation from UP in 1922, became an instructor for the UP School of Pharmacy and later on obtained her *Grado de Doctorado* (doctorate) from UST in 1925 (UST Faculty of Pharmacy 1953). Like Campos, Pilar Perez Herrera joined the UP faculty as an instructor in chemistry in the College of Arts and Letters. In 1941 the National University listed eight women instructors in its College of Pharmacy. Even the traditionally male-exclusive UST adjusted to the increased presence of women in pharmacy. In 1931 the UST Faculty of Pharmacy had seven women instructors, which rose to ten in 1936 and nineteen by 1941 (Rosenstock 1931, 1936, 1941). Like UP, UST often hired graduates of their school, with its roster including Josefa Medina and Dr. Consuelo Rodriguez Belmonte, who eventually became the dean of pharmacy.

Women also gained employment in the Bureau of Science as researchers. Rita Villaamil, a UP graduate of the BS Pharmacy program in 1922, worked as a junior bacteriologist of the Division of Biological Products (Rosenstock 1936). Lourdes Ocampo, who obtained her *Grado de Doctorado* in Pharmacy in 1925, worked as an assistant chemist in 1936 and eventually became assistant scientist of the Division of Tests and Standards in 1941 (Rosenstock 1941). The appointment of Angela Agrava-Villa as head of the Board of Pharmaceutical Examiners in 1941 (ibid.), after several years of being a board member and a retail pharmacist, made her the first woman chair of the board, which served to recognize the advancement of women in the profession.

Women pharmacists also succeeded in multiple fronts, often simultaneously. Luz Oliveros-Belardo, an accomplished pharmacist, educator, and researcher, obtained recognition for her research in indigenous medicinal plants and the extraction of essential oils for medicinal, cosmetic, and other uses. Her research led to the discovery of a rare organic compound (2,4,5-trimethoxy styrene) and to alternative sources of energy from extracts of apitong and pili (*Canarium luzonicum*).

She engaged in postdoctoral research assignments, published in scientific journals, and had speaking engagements in Japan and the US. The Professional Regulatory Commission gave her the Outstanding Pharmacist of the Year award in 1983 (Tecson-Mendoza and Barroga-Jamias 2004, 22–23), and the government conferred on her the title of National Scientist of the Philippines in 1987.

Although pharmaceutical education and practice offered a variety of options for women, some eventually chose different careers. Pura Santillan-Castrencia focused on a career in literature, journalism, and diplomacy; she even taught French in the UP College of Arts and Letters, even though she had degrees in Pharmacy and Chemistry (Varias-De Guzman et al. 1967, 130–33).

The number of women who took up postgraduate studies not just in pharmacy but in related fields such as chemistry also increased. Men dominated the doctorate program in pharmacy at UST from 1911 to 1924, but from 1924 to 1941 women represented the majority, with men accounting for only nine of the twenty-five recipients of the doctoral degree. The MS in Pharmacy programs of UST and UP reflected the same trend: nineteen out of the twenty MS graduates from 1935 to 1941 were women.

Women pharmacists also became prolific in retail pharmacy. Women either owned, co-owned, or managed a substantial portion of drugstores in the Philippines. After the Second World War, 368 of the 690 drugstores (53 percent) were owned or co-owned by women, while 286 (41 percent) of these drugstores were owned solely by women (Menez 1948). Out of 702 employed pharmacists, 523 (74.5 percent) of them were women.⁶ The 1948 census reflected the same gender disparity, as women represented 76 percent of the 1,675 registered pharmacists (Sobritchea 1989, 84).

The Domestication of the *Botica*: Pharmacy as a Feminine Profession

Aside from the shift in population, the feminine turn of pharmacy both as a discipline and profession also involved a shift in practice and societal perception. Women pharmacists made the practice of the profession compatible with their domestic responsibilities, which when combined with the influence of the domestic science course strengthened the ties between pharmacy and the home—in a sense, domesticating the previously masculine profession.

The nineteenth-century botica required substantial capitalization. The pioneering boticas, owned either by European migrants or their local upper-class counterparts, required sizable premises due to the various products and services it provided. Aside from pharmaceutical products, these boticas also sold imported goods, ranging from medical texts and surgical instruments to paint, bicycles, and other nonmedical items, making inventory space necessary. They also functioned as venues for socialization, as patrons consumed soda water, lemonade, and other popular products as they conducted “community round-table conferences” on politics, science, or other matters of “manly consequence” (Marañon 1947, 482). Clients conducted business and socialized in the main area called the *oficina*, while a second room called the *rebotica* served as an internal office and storage room for products and imported equipment for distillation, compounding, and aeration (Rothdauscher 2010, 100).

In the twentieth century, pharmacy as a profession (and venture) became more accessible, as the increase in the number of women pharmacists as well as the surge in demand for domestic-related pharmaceuticals led to the proliferation of the small-scale, usually home-based, botica. Drugstores no longer required substantial capital for machinery and real estate, as home-based pharmacists focused on retail, with compounding done only for certain products. Customers simply purchased what they needed and left the store, making it a place “where one [was] free to come and go at any time” (Marañon 1947, 482). Women pharmacists usually set up boticas in their homes or within their vicinity, which made the neighborhood drugstore a fixture in virtually every street corner of Manila and its environs by the 1930s.

Aside from retail pharmacy becoming less capital intensive, the proliferation of neighborhood drugstores made pharmaceutical products more accessible to women. Travel to the intimidating, large-scale pharmacies in Intramuros or its peripheries was no longer required; women simply walked to the nearest neighborhood botica. More importantly, the resident pharmacist or proprietor could provide not just the necessary products, but also make recommendations and offer advice, given that the pharmacist was not just a medical expert but possibly a wife and mother as well.

The expectations set by the domestic science course also contributed significantly to the shift in how pharmacy was perceived. As early as childhood, the domestic science course introduced to Filipinas the relationship between homemaking and the utilization of chemical products,

Good Appearance First of All!

—pupils look for this in their teachers

Teacher's poise and gentle attractiveness are her surest reliances in her trying work!



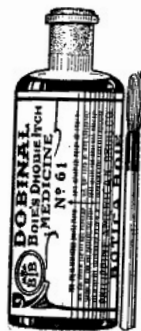
Buoyant good spirits and vitality in the teacher impart her radiant charm to the classroom!

GORDOL BOIE is a preparation composed of rational pharmaceutical products approved by the highest medical authorities everywhere. It is recommended and prescribed because of its INVIGORATIVE and NUTRITIVE qualities, and for its active and definite results in General Debility, Weakness, Anemia, and during the period of convalescence. GORDOL BOIE does not act instantly; improvement is certain, but gradual, and its bene-



Price P0.80

cial effects only observed after a lapse of time, during which the ordinary rules of clean and proper living, regularity in eating and exercising, dismissing from mind all disturbing thoughts, should be followed. Correct hygiene and the observance of the foregoing advice will do much to assist in restoring the body to normal. DOSE: One to three tablets during the three principal meals.



Two Sizes P0.50 and P0.80

Skin infections often afflict teachers—infections which are annoying and may be banished by use of BOIE'S DOBINAL—efficient in treating itch of every sort—relieves dthobie itch after three applications.

Do not tolerate headaches, whatever their cause. They unfit you for work, and will go away when BOIE'S Migramint tablets

How easy it is, in bathing daily, and in making one's toilet in the morning, to add just a dash of BOIE'S



Lilac Eau de Cologne BOIE'S DIARROL to moderate perspiration and impart a mild perfume.

Two Sizes: P0.60 and P1.20



Price P0.50

are taken. These little "medicos" combine the refreshing and stimulating properties of mint with those of a headache reliever.



Two Sizes P0.70 and P1.20

Dysentery is one of the dangers to which teachers are always exposed. Precaution advises that

be kept on hand and used to arrest incipient attacks. It is dependable, but if unrelieved one should consult a doctor.

Supply yourself with these remedies at your drug store or directly from

BOTICA BOIE

ESCOLTA, MANILA
LEADING PHARMACISTS FOR A CENTURY

which made the pharmacy an essential institution for the colonial home. This domestic discourse established women pharmacists not simply as dispensers of remedies, but also as consultants in the formation and maintenance of the functional colonial Filipino home and lifestyle. As homemakers themselves, women pharmacists were preferred over their male counterparts on the assumption that they would not provide products that they themselves would not use in their homes.

The discourse of health and medicine became domesticized as well, leading to a division of labor within the context of the home. The husband-wife dynamic was superimposed on the doctor-pharmacist relationship. If the home was regarded as the point of origin of good health, the union between a female pharmacist and a male medical doctor became the optimal arrangement, a division of labor where "one prescribes, the other fills the prescription. It is all in the family way" (Sunico 1933, 295).

To survive increased competition as well as take advantage of the growth in demand, the pioneer boticas of the nineteenth century shifted their operations toward wholesale and large-scale manufacturing; they then utilized the growing number of small-scale drugstores as retail outlets. Recognizing the feminine shift in their market base, owners of large-scale boticas supplied and marketed products geared toward Filipinas, a move that contributed further to the feminine perception of pharmacy. Farmacia Manuel Zamora focused on the manufacture of childcare products such as tikitiki. Botica Boie sold health tonics, cosmetics, food additives, and even remedies for menstrual pain and "skin eruptions." Botica Boie (1934, 47) partnered as well with Max Factor in organizing sessions for make-up and cosmetics tutorials. In another advertisement, Botica Boie marketed its cosmetic product to women teachers, emphasizing "good appearance" because "first of all . . . pupils look for this in their teachers" (fig. 8). It is therefore unsurprising that, among the various products sold in boticas, products that catered to women were among the most marketed in print ads in magazines (Lacson 2008, 76).

Conclusion

The compatibility of pharmacy, especially of the retail kind, with domestic work reoriented the profession as a career for women. Colonial education played a critical role in this shift, as an increasing number of girls entered the school system starting in the 1910s and were introduced to domestic science,

Fig. 8. Botica Boie advertisement
Source: Botica Boie 1929, 165

which linked basic scientific concepts to colonial domestic expectations. From 1904 onward tertiary educational institutions also removed male exclusivity in pharmaceutical training, which had been the norm in the nineteenth century. Although there had been female pharmacy graduates beginning in 1908, it would not be until the 1920s that pharmacy education and practice were substantially feminized as seen not just in the emergence of a dominant woman majority but also in the transformation of the botica into the home-based retail pharmacy and the reorientation of societal perceptions of pharmacy as a profession for women.

Colonial society perceived pharmacy as the perfect profession for women, who were seen as “traditionally and by nature home lovers and the practice of pharmacy offers a good opportunity to glorify this venture” (Taningco 1949, 577). By treating pharmacy as compatible with the domestic responsibilities of women, colonial society shifted the originally masculine perception of pharmacy to that of a feminine profession. In fact, pharmacy was seen not only as a profession for women, but also as originally feminine (Sunico 1933, 295). However, while the feminization of pharmacy contributed to dismantling male exclusivity in science, creating inroads to other professions for women, it did not necessarily liberate them from the home. Rather, pharmacy provided a compromise for women’s professional ambitions and societal assumptions regarding domestic tasks. Pharmacy was for women precisely because it was an extension of their work at home.

Nonetheless, the feminization of pharmacy presents an interesting case where women took advantage of unexpected opportunities presented by colonial policies and used these openings in challenging established social norms, especially in the division of labor and professions according to gender. As an initial stage in the struggle for economic and political participation, the feminization of pharmacy was a critical phenomenon in gender history, for it proved that women did not simply remain spectators or victims; on the contrary, they challenged the restrictions in colonial society and actively expanded their roles in accordance with their demands and aspirations.

Notes

This article is a revised version of a paper that was submitted to the 2017 Graduate Research Colloquium of the School of Social Sciences, Ateneo de Manila University; in that event it received the 2017 Outstanding Graduate Research Award. The author thanks the reviewers whose comments and suggestions contributed significantly to the paper’s improvement.

- 1 Graduates of the UST pharmacy course were relegated to the role of *despachadores* or auxiliary workers in German pharmacies.
- 2 Only the graduation data from MCP, UST, UP, and CES were available at the time of research. Graduation data from other schools of pharmacy such as Colegio Filipino (now National University) and Philippine Women’s College (now Philippine Women’s University) were unavailable because these institutions were unable to retain their prewar graduation records. Only the names and total number of pharmacy graduates of MCP for the years 1909–1913 are known, so the average number of graduates per annum for the years 1909–1913 is used for comparison.
- 3 The year 1917 was chosen as the start for comparison because only the names and total number of MCP graduates for the years 1904–1916 are known. No data for the UP graduating class of 1937 were available.
- 4 This estimate in the year of graduation is based on the assumption that these women pharmacists started their pharmacy courses at around the age of 18.
- 5 Due to the lack of published memoirs, the *Manila City Directory* as well as school catalogs and yearbooks were utilized to chart the professional careers of these women pharmacists.
- 6 Although the directory has listings for 690 pharmacies, its tally for drugstores and pharmacies in the Philippines was at 1,690.

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