

The opportunity pill: discourses about the birth control pill in *A Gazeta da Farmácia*, 1960-1981

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Abstract

The pharmacy world was a mandatory crossing point and active player in the establishment of hormonal contraception in Brazil. Through an analysis of articles published in *A Gazeta da Farmácia* from 1960 to 1981, the study explores little-known aspects of the birth control pill's biography and the construction of its Brazilian market. For pharmacy professionals, oral contraceptives were “opportunity pills” in two senses: they provided profits and they restored the prestige of these professionals within the scientific, clinical-therapeutic, and political realms. The pathways of the pill and the pharmacy world intersected as both wove their biographies under the patronage of industry. Pharmacists and the pill were co-constructed, and each was an important crossing point for the other.

Keywords: birth control pill; pharmaceutical market; history; hormonal contraception; pharmaceutical.



The first birth control pill went to market in the United States in 1960 and within a few years had swept the world (Watkins, 1998), Brazil included (Pedro, 2002). This new contraceptive method reached Brazil at the same time that neo-Malthusian debates were being waged over the “demographic crisis”; the pace of modernization was accelerating, expressed through industrialization, urbanization, increased numbers of women on the labor market, and more education for women (Fonseca Sobrinho, 1993); and the multinational pharmaceutical industry was experiencing a boom (Temporão, 1986). Brazil’s hormonal contraceptive market developed rapidly, despite the restrictions put in place by the 1941 Criminal Offense Code (*Lei de Contravenções Penais*), which banned any announcement of “a process, substance, or object intended to cause abortion or prevent pregnancy.” The market also grew regardless of social and religious norms that reinforced pro-natalist tendencies and conservative standards of sexual morality and, further, despite the heated controversies over the “family planning” issue that were a constant in the 1960s and 1970s (Dias, 2015).

The spread of this innovative technology for controlling fertility had a major social impact, spawning networks of interactions between heterogeneous actors, including physicians, scientists, government authorities, political groups, religious representatives, private family planning groups, pharmaceutical professionals, the pharmaceutical industry, the media, and, lastly, female consumers (Dias, 2015). It was within these networks and amid controversies, negotiations, and accommodations that Brazil’s market for oral hormonal contraceptives developed and gain ground. By the late 1970s, the pill had been stabilized and a large number of Brazilian women were using this form of birth control (Dias, 2015).

Much research has been done on the political processes involved in the introduction of this new birth control method in Brazil and its social effects, especially the controversies surrounding the project to establish a national population control policy (Fonseca Sobrinho, 1993; Bonan, 2002; Costa, 2009; Bhering, 2014). Yet few social studies have explored these biomedical objects from a biographical perspective. According to Van der Geest, Whyte, and Hardon (1996), there are various facets to the life cycle of drugs, like production, marketing, prescription, consumption, and efficacy. Within each of these spheres of a drug’s social life, the medication is part of a specific context that is composed of different actors, institutions, knowledge, power, values, and ideas, all of which have specific social and cultural effects on the links forged during the process. As objects move along this path, they change, acquire new meanings and significances, and transform the world around them.

Studies have examined the path of the birth control pill from certain angles in Brazil: the experiences of users of the pill in its early decades, the development of new reproductive norms and fertility management practices, and the impacts of technology on gender dynamics (Silva, 2017; Pedro, 2003); the role of pharmacy clerks as “moral eyes” looking at users (Silva, 2017; Brandão et al., 2016, 2017); physicians’ rapid assimilation of the pill into their daily practice and how this tied in with the formation of a style of modernizing medical thought, characterized by enthusiasm over scientific and technological novelties, a belief in the progress of medicine, and a desire to keep step with the world’s most dynamic medical centers (Bonan, Teixeira, Nakano, 2017); the role of women’s magazines

in disseminating scientific knowledge about the pill and promoting the ideals of smaller families and of fertility planning (Silva, 2017; Pereira, 2016); and controversies over the pill, family planning, and the “demographic crisis” (Dias, 2015; Souza Júnior, 2006; Pedro, 2002).

The role of the pharmacy world as a relevant player in the construction of the birth control pill market has, however, not been examined. We are using the term “market” here not in a strict economic sense but in a sociological one, to refer to a network of interactions and exchange where goods that aggregate economic, symbolic, and normative values circulate (Mauss, 2003).

The term “pharmacy world” also requires some explaining. As employed here, it encompasses pharmaceutical professionals, pharmacy owners and staff, advertisers, and commercial representatives. Brazil’s pharmacy world was undergoing tremendous transformation during the period in question, growing more complex in terms of its internal structure (division of duties, roles, and powers) (Edler, 2006), more central in its circuits of economic globalization, and more relevant in its role in expanding medical jurisdiction over society via “pharmacologization” (*farmacologização*) (Clarke, 2010; Camargo Jr., 2013).

The premise behind the present study is that the pharmacy world in Brazil was a mandatory crossing point and active player in formulating the complex circuit of interactions that brought the hormonal contraception culture into being. Through its large community of people, the pharmacy world helped quickly spread the pill among us. This article takes an exploratory journey to this world, focusing on the first decades of the birth control pill in order to examine what are still little-known aspects of the biography of these drugs and the construction of their market. We investigate pharmacy staff’s technical and commercial knowledge in the field of hormonal contraceptive products; the discourses on these products that emerged; the participation of these agents in the era’s debates over oral contraceptives; the roles these agents played in the pill’s dissemination and circulation; and, lastly, their contribution to the process of establishing a hormonal contraceptive culture in Brazil. Our strategy for addressing these questions was to trace the birth control pill as it was featured in articles published in *A Gazeta da Farmácia*, a major Brazilian periodical serving the pharmacy world.

This is a qualitative study that approaches from a social and historical perspective (Mota, Schraiber, 2014), using methods drawn from social studies of science and technology, specifically from a biographical perspective in the study of drugs (Van der Geest, Whyte, Hardon, 1996). Publications aimed at an expert public or professional group constitute prime sources in this type of research, since they are mediators of interests and opinions, disseminators of information and innovations, and spaces for the exchange of ideas and knowledge – in short, they are elements along a riverbank where styles of thought form the riverbed (Fleck, 2010).

We chose *A Gazeta da Farmácia* as our source. Based in the city of Rio de Janeiro, this was Brazil’s first nationally circulated, specialized newspaper aimed at professionals from the pharmacy world. It sought primarily to reach trained pharmacists and pharmacy owners – often times one and the same – but also anyone who served the customers of these commercial establishments. Published monthly from 1932 to 1981, for a total of 585 issues, *A Gazeta*

“recorded the evolution of the profession and of teaching and research in the pharmaceutical environment, as well as of transformations in Brazil’s political and social contexts” (Revista Riopharma, 2015). This material thus constituted a fertile source for a contextualized study of how the pill was received and assimilated in Brazil’s pharmacy world.

All issues of *A Gazeta* are available online through the Brazilian National Library’s Digital Periodical Collection (Hemeroteca Digital da Biblioteca Nacional).¹ Our study took into consideration potentially relevant articles published from 1960 to 1981, based on the following keywords: birth control; birth control pill(s); anovulatory agent(s); sex hormone(s); population explosion; Enovid and Anfertil (trademarks of pills marketed in Brazil in the 1960s); contraception; contraceptive methods; Administrative Ruling 40 (which regulated the sale of birth control pills, through medical prescription); and Bemfam (the acronym for the Family Welfare Society [Sociedade Bem-Estar Familiar], Brazil’s first family planning organization, founded in 1966).

After reading titles and abstracts and excluding repeated occurrences, we compiled a corpus of 191 articles of interest and analyzed them for thematic content (Minayo, 2013). In surveying this corpus, we tracked: technical, scientific, and regulatory discussions of the birth control pill (efficacy, safety, user guidance, prescription requirements, the definition of pharmaceutical specialty etc.); discussions of these new contraceptive drugs; the activities of healthcare professionals and, more specifically, of pharmacists in providing assistance with birth control matters; and discussions of political, ethical, and marketing issues.

A Gazeta da Farmácia

A Gazeta was founded in 1932 as the official organ of the Association of Pharmacy and Laboratory Owners (Sindicato dos Proprietários de Farmácias e Laboratórios). Impelled by the growing industrialization of the pharmaceutical sector, Brazil’s pharmacy world was then undergoing profound changes, while pharmacists themselves were witnessing transformations to their work places and professional paths; their technical and social role was diminishing (researching and preparing magistral formulas, direct contact with users) and their work was growing more bureaucratized and commercial (the sale of industrialized specialty drugs) (Pereira, Nascimento, 2011; Saturnino et al., 2012).

Analysts of the history of the pharmacy in Brazil have said that pharmaceutical professionals experienced a “crisis” and “loss of identity” starting in the 1930s (Pereira, Nascimento, 2011; Saturnino et al., 2012). The articles in *A Gazeta* provide us with clues about how they fought to re-invent their profession, endeavoring to forge a technical and political body in response to the dual process of industrialization and internationalization then underway in the pharmaceutical world, while also searching for new paths, meanings, positions, and roles for the pharmaceutical professional.

In an editor’s note entitled “Our Program,” which appeared in its first issue, the newspaper laid out its motivations and purposes:

Fostering only what is ours – here is one of the central points of the program, in pursuit of a sentiment of patriotism. Nothing more natural. Nothing fairer. The Brazilian

Pharmacy, given the culture and specialization of its mental values, can be ranked among the finest in the world, in some aspects surpassing its foreign counterparts, given the treasures offered by our flora (Nosso programa, 1 maio 1932, p.1).

In 1934, soon after the newspaper's second anniversary, the association responsible for its foundation closed. The owners of laboratories, which were increasingly more integrated into the circuits of the global pharmaceutical industrial complex, and the owners of pharmacies, who persisted in their steadfast defense of Brazilian pharmaceutical production, went their separate ways. The pharmacist Antônio Lago bought *A Gazeta da Farmácia* and continued its publication. Starting with the December 1934 issue, the cover displayed the tagline "independent, informative organ that defends the interests of pharmacies."² From the 1930s to 1980s, the newspaper represented a space for political discussion and for advancing proposals in various areas of interest to the profession, such as academic training and the professional regulation of pharmacists, the definition of "pharmaceutical specialty," the defense of Brazilian laboratories, and regulation of the drug market. The paper also strove to keep pharmacists informed of scientific innovations in the medical and pharmaceutical fields, promote clinical discussions, cover Brazil's key public health debates, provide information on courses and conferences, pay tribute to outstanding pharmacists for their technical merits and defense of the profession, and report on the social activities of local and regional associations of pharmacists. In short, *A Gazeta da Farmácia* played a relevant role in shaping the thought, practices, knowledge, political role, and identity of this professional group.

The editor's note for issue 585, released in January 1981, announced the closing of *A Gazeta da Farmácia*:

This newspaper has held its own for forty-nine consecutive years, through dedication, sacrifice, and great idealism. However, today it has reached the most critical point in its life. Skyrocketing inflationary costs and the lack of understanding displayed by some have been steadily reducing our ability to continue providing the pharmaceutical community with this traditional service. The newspaper is useful to all and especially to those isolated in the country's most remote corners (Encruzilhada, jan. 1981, p.1).

Although no further information was found on the closing of *A Gazeta*, it can be supposed that a set of factors contributed to its end. Brazil's pharmacy world was experiencing a series of transformations in the final decades of the twentieth century, including the emergence of huge networks of drugstores and the growing commercial role of pharmacy establishments, whose product lines diversified. Major multinational laboratories were pushing hard to disseminate their innovations and provide professionals from the pharmacy world with scientific information in the field of medications (Edler, 2006). Lastly, the country was facing an economic crisis, something complained about in the editor's notes since the late 1970s:

Newspaper: an endangered activity.

If the rise in the costs of putting out a newspaper was exaggeratedly high last year, now it's staggeringly high, at the very least, although press workers do not agree with this, since their own wages have not kept pace with the skyrocketing inflation that has been

making some suppliers rich – especially multinationals – and their independence has been steadily shrinking in light of the desperate struggle to survive that is now being waged by companies, especially small and medium-sized ones (Jornal..., out. 1980, p.5).

Sex hormones and the birth control pill in *A Gazeta da Farmácia*

From the 1920s to 1930s, European research centers identified, synthesized, and marketed sex hormones as drugs for treating a variety of conditions (menstrual disorders, infertility, menopause, impotence), which drove pharmaceutical industry research and investments in hormone-based drugs (Oudshoorn, 1994). As early as 1933, advertisements appeared in *A Gazeta* for hormone products made by Brazilian laboratories, evincing the periodical's interest in these scientific advances:

Dear Pharmacists:

Get to know the real, surprising results obtained with 'Ovariuteran' – lozenges and liquid – Ovarian hormones and sedative extracts. For all disorders of the female sex function. Product of the Hormone Therapy Section of Raul Leite Laboratories – Rio (Snrs. Farmacêuticos, jul. 1933, p.10; emphasis in the original).

In 1936, delivering the commencement speech at the Juiz de Fora School of Pharmacy (Faculdade de Farmácia de Juiz de Fora), this same Raul Leite made it clear that local laboratories were quite familiar with sex hormones, products that he cited as examples of the autonomous and dynamic nature of the Brazilian industry.

Brazil's chemical-pharmaceutical industry has been accused by some detractors and poor patriots of being a fictitious industry, which lives off customs protectionism. These accusers are unaware of, or make an effort not to be aware of, the Brazilian industry's activities in this sector. This is blatantly false, for example, in the case of our laboratories: we import nothing, absolutely nothing, to produce our serums, vaccines, bacteriophages, toxoids, hormones, all realms where Brazil has made astonishing progress, in some instances being ahead of many other countries (Discurso..., dez. 1936, p.5).

This defense of the high quality of Brazilian laboratories and their active role in the manufacture of hormone products continued in subsequent issues. In 1937, in a letter entitled "Às classes médica e farmacêutica do Brasil" (To the medical and pharmaceutical professions of Brazil), Raul Leite Laboratories said:

Shortly after we set up our Microbiology and Hormone Therapy Sections, we were widely accused of lacking technical and scientific skill. ... This campaign was clearly driven by foreign elements angry over our progress, elements who went so far as to forward samples of our hormones and biological products to their Laboratories abroad for analysis, perhaps seeking results contrary to the declared composition (Às classes..., abr. 1937, p.17).

Sex hormones constituted an important arena in the pursuit of science-based pharmaceutical practices in step with innovations. In 1939, in an advertisement addressed to "Às farmácias do Brasil" (The pharmacies of Brazil), Marcio Rangel's laboratory advertised its hormones as "rigorously standardized pursuant to international

conventions” (Às farmácias..., fev. 1939, p.7). That same year, Carlos da Silva Araújo, addressing the third Brazilian Pharmacy Congress, stated that “our age is witnessing the worthwhile blossoming of the rich scientific evolution of the nineteenth century” and cited hormones as an example of new resources that enhanced treatment options (Ainda..., set. 1939, p.6). Speaking before the Brazilian Association of Pharmacists (Associação Brasileira de Farmacêuticos), Nestor Moura Brasil advocated “science and ethics” and defended greater control over the processes used to manufacture new products, like hormones, in order to guarantee their therapeutic value (Pela ciência..., jul. 1941, p.11).

Contraceptive products were first mentioned in *A Gazeta* in December 1933. The article in question presented a notice published by the National Department of Public Health (Departamento Nacional de Saúde Pública), concerning the licensing of products with contraceptive properties. It stated that the agency:

Shall not license or renew licenses for gynecological products that come in the form of pills, tablets, pessaries, or pastes, by virtue of the ease with which they can be used as contraceptive agents ... The owners and technicians responsible for these products are prohibited from making direct or indirect reference to their use or their contraceptive properties in advertisements or by any other means (Um edital..., dez. 1933, p.7).

In the age of Getúlio Vargas, the State was expanding its regulatory role, and a series of decrees and laws were published to regulate medical and pharmaceutical activities. Contraceptive products became subject to further legal restrictions under the 1941 Criminal Offense Code, which banned the advertising of processes, substances, or objects intended to cause abortion or prevent pregnancy (article 20). A look through *A Gazeta* from its earliest issues shows how pharmacists missed no opportunity to remind their peers of this ban, until the arrival of the 1960s.

In February 1942, imbued with the era’s regulatory spirit, *A Gazeta* published the full text of Decree-Law No. 4.113/1942, which “regulate[d] the advertising of physicians, surgeons, dentists, midwives, masseurs, nurses, healthcare clinics, and similar establishments, and that of pharmaceutical preparations.” The periodical heralded this as a measure that could “only be received with general applause by all those who never had any intention of doing precisely what the enacted Decree-Law [aimed] to suppress” (Regulamentada..., fev. 1942, p.17). Among other things, the decree-law was meant to suppress “treatment to prevent pregnancy” and advertisements of products with “contraceptive or abortive properties.” While the birth control pill did not yet exist, news was already circulating about the contraceptive properties of sex hormones, and *A Gazeta* seconded the legal determination that “products denominated as ‘regulators,’ as well as preparations intended to treat disorders of or used in the hygiene of genital organs, could not make reference to contraceptive or abortive properties” (p.17).

The birth control pill in *A Gazeta da Farmácia*

A Gazeta first mentions “American contraceptives” (“Anticoncepcionais americanos”) (Anticoncepcionais..., mar. 1961, p.20) in 1961, one year after the product went to market in

the United States. With all due caution and once again calling attention to legal restrictions, an article published in November of that year introduced the new product:

Since the importation, manufacture, and sale of contraceptive substances or means are banned in our country, it is solely out of scientific interest that we will talk about the synthetic oral hormone now being broadly experimented with in the United States: Noretynodrel (Novo derivado..., nov. 1961, p.4).

The article presented the product's chemical formula and form of usage and highlighted its positive aspects, that is, the absence of "androgenic side effects," the preservation of the "sex drive" and "normal menstruation," and the facts that pregnancy occurred normally following suspension of use and that the gastrointestinal reactions of the first weeks would "vanish spontaneously." However, it cautioned that long-term risks, such as malignancy or problems with future conception, were as yet unknown.

Articles released in the years that followed reiterated this enthusiasm over the new class of products, "useful, practical, and very promising antioviulatory agents," (Hormônios..., fev. 1963, p.16). The periodical covered scientific, technical, clinical, social, and political discussions, while it also shaped opinions and offered Brazilian pharmacists detailed information on the birth control pill. A central idea running through these discussions was the notion of modernity. The pill was presented to pharmacists as a "modern medication," a product that marked the transition to a new era, "the era of voluntary suppression of fertility," as *A Gazeta* announced, borrowing the words of Professor Robert Greenblatt, of the University of Georgia (p.16). In Brazil, in the spirit of the 1960s, the idea of modernity carried a positive connotation; it lent credibility, ensured acceptability, and encouraged the incorporation of these new hormone technologies into the practice of pharmacy professionals, much as was the case among gynecologists and obstetricians (Bonan, Teixeira, Nakano, 2017).

In the pages of *A Gazeta*, the legal ban on advertising or publicizing the contraceptive properties of certain pharmaceutical products was no longer presented as a warning or a call to order. To the contrary, legal restrictions were now presented as obstructing progress and the modernization of medical and social practices; they were a problem to be confronted, with a view to positioning Brazil "shoulder to shoulder" with "civilized" nations.

Brazilian law prohibits any mention of its contraceptive property and, for this reason, product package inserts do not cite it. ... Many Brazilian physicians are confidently expecting that the near future will bring changes to Brazil's laws on birth control, in line with what is the case in so many civilized countries (O bloqueio..., out. 1964, p.12).

Restrictive laws on products intended to "prevent pregnancy" were thus questioned, while the State was called on to legalize these new forms of birth control and regulate their prescription and medical supervision. *A Gazeta* was also the source that these professionals used to stay abreast of institutional and political processes that transpired outside the pharmacy world yet affected it.

The draft law by Mr. Janduil Carneiro, which has already passed through the Health Committee, permits 'the use of birth control throughout the national territory, with a

doctor's prescription,' stipulated that it be a voluntary act, under the responsibility of the couple or the woman, of legal age (Liberação..., maio 1968, p.22; emphasis in the original).

In order to legitimize dissemination of the pill, pharmacists advocated that the medical community oversee matters related to fertility control, which was a way of skirting legal and moral prohibitions on the use of these products. As part of this idea that medical control was necessary to ensure safe consumption of the pill, through prescriptions and follow-up care, doctors should be the only ones to prescribe them: "physicians are the best indicated and the most qualified to decide which drugs will be best for their patients" (Os remédios..., fev. 1967, p.18). Along the same lines, gynecologists and obstetricians discussed this topic in their specialized periodicals (Bonan, Teixeira, Nakano, 2017).

These are, however, powerful hormones, or combinations of hormones, which cannot be administered blindly, requiring that they be prescribed in accordance with each specific patient's case, and under ongoing medical supervision (Hormones..., fev. 1963, p.16).

Efficacy, safety, and opportunity: the social construction of the birth control pill in *A Gazeta da Farmácia*

The pill's effectiveness, safety, and potential medical and social benefits were the centerpieces of a heated, controversial social debate that involved countless actors from the 1960s through the 1970s. These discussions culminated in the derogation of the Criminal Offense Code under Law No. 6.734, of December 4, 1979, which was a legal and symbolic landmark in the stabilization of these new birth control methods in Brazil (Dias, 2015). Pharmacists followed these debates actively, and the pages of *A Gazeta* bear witness to the social construction of the birth control pill. From the outset, the periodical presented the pill as a highly efficacious contraceptive method. Throughout its issues, the periodical covered the pharmaceutical industry's race to perfect these drugs, the scientific advances recorded in the field of sex hormones, and the debates on the endocrinal and metabolic effects of these synthetic products and their risks and safety:

In addition to Enovid, another new pill was recently released on the market: Ortho-Novum ... None of the women who did the experiment correctly became pregnant (Nova droga..., jun. 1975, p.22).

The American laboratory Ortho (Johnson & Johnson) has just released another sequential birth control pill in the United States, Ortho-Novum SQ, which is said to be 100% effective and which was tested on and observed in 5,134 women for one year (Novo anticoncepcional..., nov. 1966, p.6).

Following rapid acceptance of the pill (surpassing its creators' expectations), doubts arose about its safety and women's health. The pill differed from most drugs in one regard: it would be used by healthy women for long periods of time. Experts voiced a variety of opinions about the risks and benefits of synthetic hormones but failed to reach a consensus. Side effects like nausea, headache, weight gain, water retention, and spotting were seen

as temporary, minor events, and they were not expected to present any serious harm to health. Opinions were divided and uncertainties arose about possible side effects like breast cancer, blood clots, and cardiovascular problems (Dias, 2015).

Unfortunately, oral contraceptives are not free from side effects. A statistically significant correlation has been found between the use of oral contraceptives and the following adverse reactions: thrombophlebitis, pulmonary embolism, and cerebral thrombosis. Furthermore, oral contraceptives cause nausea, vomiting, gastrointestinal symptoms, bleeding, spots, changes to menstrual flow, amenorrhea during or after treatment, edema, melasma (chloasma), cholestatic jaundice, migraine, skin rash, weight loss or gain, breast changes, cervical ectropion and changes to cervical secretions, suppression of lactation when given post-partum, and increased blood pressure in susceptible women (Risco elevado..., dez. 1977, p.3).

While the safety of the pill was a matter of controversy, *A Gazeta* tended to defend the product, because it offered a possible answer to certain medical and social problems. The pill was viewed as a necessary evil; in other words, any biological risk it might carry did not outweigh the benefits of preventing an “unwanted” or “irresponsible” pregnancy. Even if the need to introduce birth control tools fueled debate between those for and against, *A Gazeta* and its opinion-shaping pharmacists – perhaps reflecting their economic, political, or ideological interests – embraced the neo-Malthusian birth control project, echoing the international calls for countries of lesser social and economic development to adopt population control policies. They were also helping publicize the pill, recruit advocates, and boost the method’s dissemination and consumption.

Our century is characterized by the ‘population explosion,’ which has already left dark clouds looming on the horizon for some nations and, consequently, for mankind, unless some solution appears in time to solve the problem ... Before advocating unlimited procreation, ‘responsible parenthood’ must be advocated: that is, producing, raising, and educating children properly (As pílulas..., fev. 1965, p.5; emphasis in the original).

Dr. Eleanor Mears, Medical Secretary of the British Family Planning Association, who is in Brazil ... told *A Gazeta* that she is happy to have helped explain family planning issues to Brazilian physicians, given the importance of the matter in various regards ... According to [Mears], the task of family planning has recently been made easier with the appearance of the contraceptive ‘pill’ (Planificação..., maio 1965, p.8; emphasis in the original).

In an article entitled “Os doentes e os defeituosos, problemas sanitários, econômicos e sociais” (The ill and the defective – public health, economic, and social problems), published in 1965, Dr. Evaldo de Oliveira,³ a major spokesman in the Brazilian pharmacy world, posed arguments showing how pharmaceutical professionals aligned from the outset with the discourse of “moral and civic responsibility to have no more children than one can raise” (Dias, 2015). Stressing the birth rate-population-development equation, Oliveira contended that family planning assistance should become part of health policy, for reasons related to health (mother and infant mortality), social justice (access by all), and reproductive choice (the right of families to decide), an argument that won him sympathizers in the pharmacy world.

Society bears the onus of an unproductive community that places a burden on public coffers but that must be taken care of using all human and economic resources. The physically and mentally ill who are irredeemably marked constitute a legion of defective, disabled beings. ... The market already offers anovulatory and progestational agents, drugs with contraceptive properties made of synthetic compounds, mainly those derived from 19-norsteroids, with which people are already quite familiar, making birth control possible. These are, therefore, measures that can be put into official practice without any harm to human dignity (Oliveira, jul. 1965, p.18).

The fact that the pill could be used to treat menstrual disorders and other female problems was another topic featured in articles and discussions in *A Gazeta*, always with an emphasis on the positive qualities of the various brands.

Anovulatory progestogens, popularly known as 'birth control pills,' are not only drugs that prevent conception. Their use has proven highly effective in the case of a number of gynecological, functional disorders, as well as with endometriosis. ... In cases of endometriosis, they are the only resource known to medicine that can induce lasting amenorrhea. They are also an excellent resource in the treatment of certain cases of essential *menorrhagia*, with marked secondary anemia. They can be used to advantage for the ongoing treatment of young women who have been made sterile either surgically or owing to an inflammatory process, as they are of benefit to the psyche and to a genital tract deprived of natural hormones. They are also a good treatment option for girls who present mammary hypoplasia in puberty (Pílulas..., set. 1966, p.16; emphasis in the original).

Articles like this, along with the ads for the pill that became plentiful in the mid-1960s, educated pharmacists about the product's clinical indications in the treatment for female health problems.

The periodical's pro-active role in the debates on oral hormonal contraceptives helped lend this technology credibility, guarantee its acceptance, and encourage pharmacy professionals to incorporate it into their practice. Through its stances, *A Gazeta* also empowered pharmacists to circulate in the political and social arenas, in addition to the public health and clinical domains. In other words, the pill afforded the pharmacy world an opportunity to keep from being excluded from the power struggle in the scientific, clinical, political, and economic arenas. *A Gazeta* fulfilled its educational role of informing and instructing pharmacy professionals and therefore enabling them to acquire new agency.

The birth control pill and pharmacists: the renewal and consolidation of a field of professional action

Pharmacies, especially in rural areas, are damned if they do and damned if they don't, that is, they are criticized when the pharmacist does not keep up with the evolution of treatment options, when he is not familiar with new drugs, when he knows nothing about major recent discoveries and new releases, and criticized when he is familiar with them and advocates them, because then they say he is 'illegally practicing medicine' ... People ask questions and seek out pharmacies when it comes to a broad range of health matters ... This isn't about offering consultations, or about

the illegal practice of Medicine ... This is the most effective form of cooperation that could take place ... If a pharmacist is not at least superficially familiar with the latest treatment options, it will be hard for him to answer questions, and this will seriously jeopardize his prestige (Atualização..., nov. 1969; emphasis in the original).

On the heels of major transformations triggered by the advancing industrialization of the pharmaceutical sector, pharmacists in Brazil as in other countries were fighting to re-invent their profession in terms of their specific characteristics, clinical, social, and scientific role, participation in the public health world, and prestige among other health professionals, and it was within this context that they were acquiring the knowledge and skills needed to work with birth control pills (Edler, 2006). In the mid-twentieth century, life expectancy was rising, the epidemiological profile was shifting, drugs now had a two-fold value (as treatments and as consumer goods), and the biotechnological health industry was constantly innovating. The market was consequently flooded with new drugs, and their use rose substantially, triggering concerns with issues such as the “improper consumption” of these products. This in turn opened new windows of opportunity for pharmacists and prompted efforts like the “clinical pharmacy” movement, which began in the United States in the 1960s; one of its goals was to re-establish the pharmacist’s clinical role by allowing these professionals to apply their knowledge and work to ensuring the safe and rational use of medications (Pereira, Nascimento, 2011; Saturnino et al., 2012).

In a number of issues published by *A Gazeta* in the 1960s and 1970s, the idea was voiced that a pharmacist is a “public health agent at the service of the ill.” In its coverage of debates over the proper use of medications, the periodical defended the technical and scientific capital possessed by pharmacy professionals and called for them to have a specific role in the clinical and therapeutic realm: providing their customers with guidance, indications, and explanations about the proper use of medicine, rather than merely selling these products.

And therefore in the act of ‘dispensing [medication], the pharmacist is doing something quite distinct from selling merchandise,’ as he is taking on a serious commitment to the patient, given that, acting in full professional conscientiousness, he must deliver the correct product, as prescribed by the physician, something that allows no room for error, which could have serious consequences for the patient, considering the powerful pharmacological action of modern medicine. ... The pharmacist’s sacred duty, which is to ‘protect the public from fraud, error, and the danger posed by improper use of medications that can be of great benefit to humanity, can become a veritable disaster depending upon whether or not due precautions and knowledge are employed.’ Beyond this important informational mission, the pharmacist plays an educational role (Celsi, mar. 1969, p.17; first emphasis added, the second in the original).

It is worth noting that contraceptives were listed among the drugs most often used improperly. In one of its earliest articles on the birth control pill, *A Gazeta* concluded that “there is much phantasy surrounding these miraculous pills;” it warned that these drugs “cannot be administered blindly” or “carelessly.” Further on, the article stated that the benefits and safety of these “modern medications” depended on their being taken “on the right days and in the right dose” (Hormones..., fev. 1963, p.16). In order to fulfill their role as “public health agents” in the realm of hormonal contraception, pharmacists needed to acquire solid

knowledge of the pill: its chemical composition, how it worked in the female body, and its indications, counter-indications, effectiveness, safety, and side effects. Throughout this period, in a series of articles of an educational nature, *A Gazeta* published up-to-date technical and scientific information, equipping pharmacists to answer customer questions, settle their doubts, and even indicate the right pill to them at the pharmacy counter.

A pharmacist often finds he must provide information on the products his customers come to purchase at the counter. Among these, the birth control pill is on the order of the day – for example, Noracycline. Since these products have only been on the Brazilian market for a few years and since they involve such a delicate matter, to wit, birth control, there is still of course much controversy, many biases, and much fear about them (As pílulas..., fev. 1965, p.5).

It's necessary to know how to answer questions

If there is one matter where Pharmacy can in no way remain at a distance, it is Therapeutics and progress in Medicine. The customer always has a question to ask, some curiosity to be satisfied, a doubt to be eliminated. The men of pharmacies must read, and read constantly. Few are the newspapers or magazines that do not have a column dealing with medical topics today. These columns have to be read and even clipped. Books that provide information on health and medicine must likewise be read (É preciso..., set. 1967, p.32).

What pharmacies need to know about the pill

The birth control pill has been in use the world over for ten years. The number of women on the pill has grown every year. ... Since this topic is still taboo in certain less well-educated regions, pharmacists must be ready to answer questions, provide guidance, teach (O que..., ago. 1970, p.28).

The pharmaceutical industry apparently had a firm understanding of the field of professional action open to pharmacists during the years under study and, moreover, contributed to its renovation and consolidation, focusing on two dimensions of their activities: clinical-therapeutic and economic. The consolidation of the pharmacy's role as a crossing point for the birth control pill should also be understood within the context of the relations between industry and the pharmacy world in this period. During the pill's first two decades on the market, the pharmaceutical industry enforced strategies similar to those used in advertising products of an ethical nature, that is, products that require a medical prescription and cannot be advertised directly to the consumer (Frenkel et al., 1978). Since laboratories could not advertise directly to the consumer, they turned to other strategies, targeting physicians and professionals from the pharmacy world, who were the key disseminators of these drugs. With their knowledge of therapeutics and pharmacology, these professionals guaranteed the legitimization of the practices used in the dispensing and consumption of hormonal contraceptives (this included their purchase directly at the pharmacy, without the "mandatory" doctor's prescription).

Displaying all the "bias" and "one-sidedness" alluded to in the article cited at the beginning of this section, laboratories invested generously in pharmacists' technical and scientific skills and knowledge, thus contributing to their political and professional project as "public health agents at the service of the ill." Many of *A Gazeta* articles on the

birth control pill cited specific trademarks and were published alongside pharmaceutical laboratory ads for the same products. In the full-page article entitled “As ‘pílulas’ anticoncepcionais” (The contraceptive pill), which appeared alongside a department labeled “Respostas a dúvidas” (Answers to questions), a Ciba ad announced Noracycline as a “menstrual period regulator that inhibits ovulation” and “the best solution for a large number of gynecological problems.” A number of indicated uses for the pill are listed near the feet of a sad, crestfallen stork, which covers a large space in the ad (As pílulas..., fev. 1965, p.5). An advertisement for Previson, a pill combining norethynodrel and ethinyl estradiol, produced by Sarsa laboratory, declared that the drug contained the “hormones that have been most tested worldwide in long-term treatment.” The image of a bird’s nest holding three tiny eggs, which covers half the page, suggests that this was the number of offspring the birds had planned (Previson, jul. 1966, p.9). Two ads for Fontoura-Wyeth’s pill Anfertil, which were full-page in some issues, provide an eloquent illustration of the relation between industry and the pharmacy world, where science and business came linked, as mentioned earlier. The first ad features piles of pill boxes, with Anfertil touted as safer and more effective and as offering potential profits.

Which of them offers greatest safety?

This one of course. It is the most up-to-date form of menstrual control, due to the reduced hormone dosage, affording maximum comfort and safety. That’s why physicians prescribe ‘Anfertil.’ It does not present those disagreeable unwanted symptoms. It is even indicated for patients who have not tolerated previously available medications. Buy and sell ‘Anfertil,’ well-being, safety, and comfort. ‘Anfertil,’ therapeutic safety and profit safety. Speak to your F-W Representative (Qual deles..., fev. 1968, p.29; emphasis in the original).

The other ad carries the title “Reunião de lucro\$... \$eu\$ lucro\$...” (Gathering profit\$... your profit\$). A photograph in the middle of the ad shows six middle-aged white men in suits seated around a meeting table, with the following text:

Whenever this group meets, they discuss and draw up objectives and goals aimed at boosting consumption of Fontoura-Wyeth products, and so your profits rise. Take ‘Anfertil,’ for example: it is the most-widely prescribed anovulatory agent, because it does not cause either weight gain or nausea and does not prompt complaints; it affords the greatest well-being and is even indicated for patients who cannot tolerate other anovulatory agents. We, the group shown here, design advertising campaigns that tell and show physicians all of this, and that’s why ‘Anfertil’ is the most-widely prescribed anovulatory agent. We also discuss other plans. Ask your F-W salesman for further information. Boost your profits even further. Sell ‘Anfertil’ (Reunião..., fev. 1970, p.31; emphasis in the original).

These advertisements, which were considered an important strategy for promoting the new product, demonstrate how the pharmaceutical industry turned its attention to the promising hormonal contraceptive market in the 1960s and 1970s (Souza Júnior, 2006). In the pages of *A Gazeta da Farmácia*, these messages conjoined interests of a technical and scientific nature with those of an economic concern and enlisted the pharmacy world in practices to disseminate the birth control pill.

Final considerations

The articles from *A Gazeta da Farmácia* that were analyzed in this study provide information on an important part of the biography of the birth control pill and the construction of its market. They reveal the pharmacy world as a strategic point along the pathway of the pill, from production to consumption. This analysis of the periodical also sheds light on how the introduction of this new birth control method impacted the pharmacy world, within the context of the challenges then facing pharmacy professionals. The birth control pill appeared as an “opportunity pill,” for it could yield profits while also elevating the position of pharmacy professionals and restoring their importance and prestige in the scientific, clinical-therapeutic, and political arenas. There was a remarkable co-construction of user and technology (Oudshoorn, Pinch, 2003). Along this two way street, one was an important crossing point for the other.

This article prompts a reflection on the importance of studies that propose to trace the path of biomedical objects in order to understand how they act and how they relate to the world around them, producing social life and being (re-)produced as products with new meanings within the distinct contexts where they circulate.

NOTES

¹ Available at: <<http://bndigital.bn.gov.br/hemeroteca-digital>>.

² It was not possible to obtain detailed information on sources of funding for *A Gazeta* over the course of its life. Based on information found in the newspaper and on statements made during informal conversations with members of the Brazilian Pharmacy Association (Associação Brasileira de Farmácia), we can infer that until around the 1950s, *A Gazeta* was funded by subscriptions and advertisements placed by Brazilian pharmacies and laboratories and, later, by major pharmaceutical laboratories as well.

³ Evaldo de Oliveira (1916-1989), physician and pharmacist, professor at the School of Pharmacy of Rio de Janeiro State University (Universidade do Estado do Rio de Janeiro), and member of the National Academy of Medicine (Academia Nacional de Medicina), was an active defender of his profession, working through such major professional organizations as the Brazilian Association of Pharmacists (Associação Brasileira de Farmacêuticos) (ANM, s.d.).

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