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Private surgery clinics in an open medical market: Barcelona, 1880s-1936

Abstract

The main purpose of this article is to examine how a new medical technology – the operating room – resulted in the establishment of a model of private clinics in late 19th – century Barcelona. This research explains that this kind of private medical care happened in an open medical market and successfully met a growing demand. Since its origins in the 1880s, private surgery clinics rose to more than 50 in just half-a-century. Here, several business strategies put at work by those surgeons-entrepreneurs are considered, especially those related to publicity and the search of patients/customers. Several aspects played a paramount role in that success: medical technology, domestic comfort, and surgical efficacy. In a context where medical care delivered at hospital was provided by the city-state or the local bourgeoisie as a part of the medieval model of charity, a potential customer for the private surgery clinics was formed by the urban, popular and working classes through the model of mutual aid societies and health insurance companies. Moreover, private clinics also showed how the process of medical specialization was configured and what kind of relationships surgeons-entrepreneurs established with general practitioners to attract their patients. Here, medical directories and medical journals reveal as a useful source of information.

Keywords: Private surgery clinics; mutualism; medical specialties; medical technology; advertising; health care business; health insurances

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1. Introduction

Operating theatres developed and transformed the ways medicine was practiced at the end of the 19th century. Surgery revealed itself then as one of the most effective tools of healing. From a professional perspective, the new surgical practices allowed the development of new fields of work and consequently the emergence of new medical specialties. In this article we will examine how, in Barcelona at the end of the 19th century, this phenomenon also led to the development of a specific healthcare offer in the form of private clinics, established in the city's Eixample district. Using advertising techniques and location and communication strategies, the surgical business became widespread in the first third of the 20th century. The medical services available coincided with the growing demand from the urban middle classes, contributing to the establishment of a medicalization process. In order to explain these aspects, we have used different sources concerning the new medical practices: directories and guides of doctors; medical press and advertising exclusively aimed at doctors; and medical records as a complementary tool of mutualism to get to know the target audiences of the new private healthcare system. Description and analysis of these sources allow an understanding of such processes in terms of an urban history of medical practices. Thus, this article tries to join different spheres (architecture, medicine, politics, town-planning) to show how intersections shaped scientific practices and the identity of its actors (Dierig, Lachmund and Mendelson 2003).

The aforementioned transformations did not occur simultaneously and with the same growth rates in Western society. The variations between European and American countries were considerable and depended on multiple national factors. The weight of the state was more important in France or Germany when it came to institutionalizing the incorporation of

laboratory sciences in medical education. This was a fundamental characteristic, since the new space of surgery, the operating rooms, was based on the concepts and solutions developed in laboratory practice to overcome infection which was one of the problems of traditional surgery alongside with bleeding and pain. The institutionalization of operating theatres showed a different pace according to the local significance of public and private care models. The best known cases of private clinics show the importance of the urban environment and sustained demand.

In the case of Spain, the absence of a state with the capacity to provide investment and infrastructure for university medical training in the practical terms of the modernity that was gaining ground in Europe led to their replacement with private institutions. In fact, the appearance of surgeon-entrepreneurs at the end of the 19th century in the city of Barcelona was not only a response to personal intellectual interest and ambition. The context in which the surgeon-entrepreneurs developed was also facilitated by some specific circumstances. From the end of the 18th century, the population of Barcelona grew steadily as a result of the economic transformations arising from a commitment to industrialization and trade. Throughout the 19th century and the first decades of the 20th century, the urbanization of Barcelona intensified. The progressive establishment of a capitalist economy in Catalonia called into question the institutions and inertia of the medieval and modern health care model that still existed. The liberal state of 19th century Spain was not able to provide an economic solution to the collapse of those healthcare institutions. As a result, it transformed the new liberal model through public and private formulas based on the concept of charitable assistance. The hospital thus maintained a pejorative connotation as the destination for the sick poor, who were forced to submit to bourgeois charity and become subjects of medical research at the university. From the end of

the 18th century, the urban working classes, from the guilds to the factory workers, tried to cope with the hardships of illness by helping each other in the form of mutual aid societies. In this way, the healthcare business emerged and, in a highly dynamic urban context, a growing demand was met by an expanding medical supply. Thus, since the middle of the 19th century, the presence of doctors with home clinics became increasingly commonplace throughout the city.

In this context, the emergence of operating theatres as a medical tool was accompanied, in the case of Barcelona, by the emergence of private surgical clinics. At the end of the 19th century, the business was run by only a few individuals. These were years of knowledge acquisition, of communication of practices. Undoubtedly, therapeutic success also hid failure and impunity. However, the surgical benefits were becoming increasingly apparent. The first clinics were established in the historical center of the city, near the general hospital and the medical faculty, and were featured by two aspects: clinics were settled in private flats, without a specific architecture design, just offering one or two single rooms for convalescent patients and being their operating rooms based on antiseptic principles. But already in 1888, coinciding with the Universal Exhibition, a new model of private surgical clinic was set up in the Eixample district, in search of a bourgeois clientele. It was the result of an architecture design based on the scientific guidelines of the aseptic environment, technology and comfort. The advertising strategies of these first surgeon-entrepreneurs served to strengthen the model of the clinic and to promote medical practice as a product for consumption among large sections of the urban population. Throughout the first third of the 20th century, private surgical clinics multiplied, establishing themselves in strategic areas in the Eixample district and cultivating practices of direct communication with general practitioners, who were seen as intermediaries with their

private clients. Alongside the surgical clinics, the city was also the scene of new medical facilities —clinical analysis laboratories, diagnostic examination offices— where new technologies also contributed to that process of medicalization of society, to the configuration of medical specialties and to the definition of new forms of doctor-patient relations.

In 1936, the clinics in Barcelona, alongside the laboratories, clinical analysis institutes or the diagnostic clinics, were a reference point for doctors and for Catalan society as a whole. The surgical clinical care model thus played a fundamental role in the establishment of a private medical care model, based on payments for surgical interventions and hospital stays, and paid for by private insurance companies. An alternative model to the non-profit, charitable public and private hospital, which was also offered to other urban populations.

2. Laboratory medicine as a starting point

Since the middle of the 19th century, the work carried out in different types of laboratories – chemical, physiological, bacteriological – has shown the growing importance of basic science in medicine and the relevance of the laboratory as a new space for medical knowledge, next to the hospital and the bedside, the autopsy room, the museum and the library (Cunningham and Perry 1992). During this period, and from these foundations, the development of truly transformative medical technology took place. We are talking here about the progressive establishment of a new technological space, the operating room, and the consecutive development of a new invasive surgery. However, the penetration of laboratory medicine into higher education was not a simple process, quite the contrary – it was met with considerable resistance, and has been achieved slowly since the 1870s (Bonner 2000, 251-295).

In order to advance in the new realm of possibility that surgery offered to the medical sphere, the main barriers to be overcome were, evidently, the issues of pain, bleeding and infection. As a result of laboratory research, volatile substances, such as ethyl ether, chloroform and nitrous oxide, were produced from 1840 onwards, which when inhaled allowed anesthesia and longer operating times. Operative bleeding was combated by means of hemostasis techniques – clamping instruments, pressure and vessel suture –, although it was not until the first third of the 20th century that blood transfusion was developed. And finally, the circulation of theories about the role of microorganisms in the production of infection led to the development, firstly, of antiseptic surgery, from 1865, based on preventing the access of germs to the surgical field by spraying phenol on the wound, hands, instruments and room, and, from the middle of the 1880s, of surgical asepsis, which aimed to prevent the appearance of germs in the surgical act, operating in a completely sterile environment and with instruments that were pre-sterilized. This resulted in a real surgical revolution, facilitated by the increased working time available with guarantees of survival. The operating room evolved into a new work and learning space around which a new infrastructure, based on laboratory science, was to be built. These technological innovations were not introduced without controversy and dispute, and the changes they brought about were not immediate, but progressive and slow (Adams 2018).

In 1847, professors of surgery at the Medical Faculty of Barcelona started ether and chloroform experiments in dogs and performed the first operations in humans, which took place both in the clinic wards of the city's general hospital – the Hospital de la Santa Creu – or in the medical school's amphitheater. Since then, chloroform was the surgical method of choice and was applied in surgical operations such as amputation, bladder carving, tumor ablation, hernia reduction, treatment of fractures and so on. There was a significant surgical practice in the two

following decades but it remained in a low profile due to the strong weight of conditioning factors such as infection and bleeding (Hervàs 1986). More research is needed not only on the physiological mechanisms that could guide surgical treatment but also on other practices of clean surgery – students were taught to participate actively in the healing of the wounds of the operated patients – that were developed simultaneously, and later, in particular, asepsis, that made surgery safer (Worboys 2018). Significantly, the first operating room in the city was created around the year 1880.¹ Although we do not have precise information about the first surgical space in the city, we can characterize the peculiarities of the Barcelona case from the trajectory of some of the leading surgeons such as Salvador Cardenal or Miquel A. Fargas, among others (Hervàs 1986).

To begin with, it should be pointed out that the Spanish university model, which is hierarchical and centralized, with its main offices in the faculties of Madrid, was not based on an early commitment, with investment in spaces, materials and teaching content, to institutionalize the teaching of laboratory medicine.² In a fragmented manner and always linked to a few, prominent figures, this type of medicine developed slowly in Spain between the last quarter of the 19th century and the first three decades of the 20th century. In Barcelona, for example, the reforms introduced between the turbulent years of 1868 and 1874 did not result in the incorporation of the laboratory into medical education. In fact, in those years some young

¹ The concept of an “operating room” (*sala de operaciones*) is hardly used in Spain, where such a place is known as a *quirófano*, or an “operating theatre”. Due to the influence of the Spanish language this neologism was introduced in the other official languages of the country. Its origin can be found in a speech given by Doctor Andrés del Busto in 1892 after the inauguration of a room in the San Carlos Hospital in Madrid, to describe a place where operations could be seen by students without being present, separated by a transparent glass. The concept remains well-established to this day (Pera 2003, 291-295).

² In Spain, university medical education was dominated by anatomical study and clinical practice. The laboratory sciences had little room until the turn of the century, while the social sciences were systematically marginalized (Comelles et al. 2021).

students, such as Salvador Cardenal, created private associations to train in experimental medicine, giving rise to entities such as the Academy and Laboratory of Medical Sciences in 1874. This was a first step in the progressive introduction of the ideas and practices proclaimed in Europe by Claude Bernard, Rudolf Virchow or Louis Pasteur.

The social position of some of these young doctors enabled them to acquire a knowledge of foreign languages and, above all, the possibility of going on study trips to hospitals and clinics in the main European medical capitals and learning from the great masters of surgery. The European tour facilitated access to the theory and new surgical practice based on the antiseptic principle and publicized by Joseph Lister in England in 1867. The so-called prelistarian surgery still dominated in Spain during that period —being limited to amputations, removal of tumors and other external pathologies— and antiseptic surgical practices were only introduced in an isolated way during the 1870s. It is significant that, as a result of its application, Salvador Cardenal was one of the first surgeons to demonstrate his practical Listerian experience in Barcelona through the publication in 1879 of the book *Guía práctica para la cura de las heridas y la aplicación del método antiséptico en cirugía* (“A Practical Guide to Wound Healing and the Application of the Antiseptic Method in Surgery”, Riera 1969).

The deficiencies derived from a lack of a systematic and formal presence of laboratory medicine were compensated by the extraordinary amount of anatomical study performed in the dissecting room of Spanish university hospitals. In this case, it is worth noting the visit of Cardenal and Fargas to the dissection room and the Anatomical Museum of the Faculty of Medicine of Barcelona (Balagueró and Benito 1985). The anatomical training acquired there led to intensive practice by reproducing the surgical operations of the period on the hundreds of corpses dissected in the autopsy room. Without doubt, the precise knowledge of surgical anatomy was

at the foundation of the step that those surgeons were about to take: the access to very dense and complex areas of the body such as the abdominal cavity and the beginnings of a gynecological surgery that was then started by the first laparotomic surgery operations (Marí 2010).

In Barcelona in 1880, alongside gynecological surgery, ophthalmology was consolidated as a surgical specialty in the city's general hospital – the Hospital de la Santa Creu. At that time, Josep Presas and Josep Antoni Barraquer introduced intense specialization by introducing practices and technologies in a unique space: the dispensary (Fernández-Victorio 1905). The organization of the work that took place there turned the dispensary into a model place for teaching, clinical assistance and surgical practice. Since 1891, the dispensary has had an operating room attached to the cloister in the interior courtyard (Nadal-Abella 1992).

As we shall see, the importance of the Hospital de la Santa Creu – located in the old city, near the Ramblas, in a place of alluvium, still industrial and highly densified – in the nearby establishment of the first surgical clinics in the city is evident. It should be noted, however, that the development of new surgical procedures was still far from incorporating the medical practices that the laboratory was to bring. Not only antiseptic and aseptic surgery, which would come first, but also chemical, histological and bacteriological analyses (Schlich 2012). It is significant to remember here that it was at the time of cholera, when the city of Barcelona was hit by a new epidemic from 1884-1885, that the city council invested in studying the measures taken in France and supported the creation of the Municipal Microbiological Laboratory (1886), under the direction of doctor Jaume Ferran. There was then an entry into modernity, with all the public rhetoric, hand in hand with science. Experimental medicine, the laboratory and the

microscopic gaze were to inform many initiatives, programs, practices, architectures and urban planning in the city of Barcelona (Roca Rosell 1988).

3. The first clinics in the city, 1880s-1900s

During this period, the operating room was further established and became the central location around which a new care facility – the surgical clinic – and new medical practices were organized (Adams and Schlich 2006). We can certainly speak of the operating room as a transformative space. Not only in terms of understanding disease and illness, but also as a place for the development of new medical practices, mediated by a growing technological presence and favoring an irrepressible process of specialization, and new relationships with patients, who were gradually convinced of its high curative efficacy (Schlich 2007). Let us now examine how this model was established in Barcelona, and then describe the context and projection of the clinics in the first third of the 20th century.

During this period, the clinics were located in two different places: in the old city and in the Eixample district. This phenomenon was accompanied by an unmistakable determination based on the business search for a clientele. The first surgical clinics were established on both sides of the two main streets that surrounded the spaces of the Hospital de la Santa Creu and the adjacent medical school, understood as a central hub. In 1884, the gynecological clinic of Miquel A. Fargas, at number 133 Hospital Street; in 1885, the ophthalmology department of Manuel Menacho, at number 40 Carme Street; in 1891, the otolaryngology department of Ricard Botey, at 57 Carmen Street; in 1893, the gynecology clinic of Pere Manaut, at 43 Nou de la Rambla; and in 1900, the Centre Mèdic Espanyol dedicated to women's health, in the hands of doctors Segalà, father and son, at 41 Carme Street (Zarzoso and Fajula 2015).

There is no doubt about the pioneering character of surgeon Fargas, whose initiative also served as a guide for other cases. Surgical clinics then proved to be a profitable investment. In this case, the clinics were located on different floors, either on the second or the first floor (principal and primera planta, in Spanish). They did not occupy large areas. According to popular accounts, apart from the room used as an operating theatre, the Fargas and Botey clinics had four rooms and the Menacho clinic did not have a single recovery bed. An increasing number of surgical operations were carried out in these clinics. The data available for the Fargas Clinic indicate that in 1886 he had performed 10 ovariectomies and in 1907 his students honored him after reaching 1,000 laparotomies. In the first edition of his *Treatise on Gynecology* (Barcelona, 1903), drawn up on the basis of his clinical practice, Fargas states that between 1882 and 1902 he had treated 18,000 patients (Fajula 2013). It should be pointed out that, beyond the controversy aroused by some of these interventions and by a certain impunity in their execution, it is possible to speak of surgical success and of the consequent cultural impact on that society (Frampton 2018).

Fargas' publications provide a clear example of the introduction of new forms of medical work. They describe the different activities of the team members: the surgeon, the anesthetist, the instrumental assistants, photographers, analysts, etc. The analysis of these practices allows us to observe the circumstances and the strategies of persuasion that legitimized the communication of new medical knowledge, the phenomenon of specialization and the forging of a collective identity, that of the surgeon. The written and visual rhetoric displayed, through the representation of a team of experts and the presentation of techniques and new medical

spaces, highlights the heroic, masculine and modern nature of surgery (Lawrence 1992).³ The clinic in Fargas became a reference point for medical professionals beyond the city's borders. Not only is it evident from the texts that were addressed to the general practitioner, but the medical records themselves that have been preserved indicate that the origin of his female patients extended beyond Barcelona.⁴

The location of the clinics in this area of the city was limited to just over a decade, when there was a progressive move towards the bourgeois community located in the Eixample district (Aibar and Bijker 1997). Thus, in 1892 Fargas opened his new clinic at number 333 Consell de Cent Street, next to the Rambla de Catalunya, and Manuel Menacho moved the new clinic to Gran Via de les Corts Catalanes, next to Passeig de Gracia, in 1903. The decisions of those medical entrepreneurs must have been influenced by the construction of a new Faculty of Medicine and the Hospital Clínic, in the Eixample district, which had been started in the last quarter of the 19th century, with work being completed in 1906, the year in which the new facilities were inaugurated (Arqués 1985, 97-151). Also during this period, in 1902, work began on the construction of the hospital that was to replace the city's old hospital, the new Hospital de la Santa Creu i Sant Pau, whose facilities were gradually opened between 1920 and 1930 (García Martín 1990).⁵

The Eixample district subsequently became an increasingly popular destination for surgical clinics. The first of these was established in 1888 by Salvador Cardenal. We have already

³ The photographs of the clinic show women, both workers and patients, but they are either anonymous or auxiliary in their communication objectives. We know, however, the names of their team of collaborators, as well as their role in the new surgery that was being developed and communicated (Schlich 2018).

⁴ The collection is housed in the Fons Fargas, Històries Clíniques, 1884-1920, Museu d'Història de la Medicina de Catalunya.

⁵ Fernández Perez (2021) has written a chapter on large hospitals organization and management in early 20th-century Barcelona.

mentioned some of the features of his training as a doctor, having been employed as a surgeon at the private charity centre of the Hospital del Sagrat Cor, created in 1879 in Rosselló Street, and which he went on to run when he moved to his definitive headquarters in Borrell Street in 1883, again in the Eixample district. After an initial period of training, Cardenal consolidated and displayed his enormous medical capabilities in the Sagrat Cor operating room for a decade (Agustí Peypoch 1991). His conversion to a medical entrepreneur was a response to the public opportunity offered by the celebration of the Universal Exhibition of 1888 in Barcelona. This resulted in the creation that same year of a "healing house" established at number 13 Passatge Mercader. As in the previous cases, the clinic was also the surgeon's family home. There is hardly any information about the first years of operation of this clinic. However, surgical activity must have been intense, according to information published in the third edition of the *Manual de cirujía antiséptica* (Barcelona, 1894), where Cardenal explained his work in the 2,450 surgical operations performed up to 1893, 111 of which were laparotomies. At that time, abdominal surgery was a well-established reality in Barcelona, as was its relationship with laboratory medicine. This is made clear in this book, which also includes an extensive chapter written with Jaume Ferran on surgical bacteriology (Marí 2000).

In less than ten years, Cardenal's original clinic was remodelled and enlarged, occupying number 15 of Passatge Mercader and changing its name, which was since thereafter called "Clinicum".⁶ The modernizing transformation of the surgery clinic was oriented to meet a demand among the bourgeoisie and Cardenal developed a strategy of communication through

⁶ The change of name that takes place during this period is significant, even though it is now known as a "healing house", as it ends up being called a "clinic". There is a nominal differentiation here, perhaps strategic, with the name "hospital" and its pejorative connotation from a social, political and medical point of view. That is, a care space for the poor, governed by public and private charity and subject to the control of the body by doctors (Comelles 1997 and 2013).

pamphlets, books and journals, advertising and illustrating the new spaces. In 1899, he published an elaborately illustrated 39-page printed advertising pamphlet, describing in detail the new technical, architectural and comfort features, and addressed to general practitioners.⁷ This booklet showed all the elements of the new surgery and laboratory medicine through the incorporation of new technologies and medical innovations: antiseptic and aseptic facilities, two operating rooms, microbiological laboratory, x-ray chamber, darkroom for developing. A second axis was a well-planned comfortable environment based on the English private hotel model with different kinds of rooms-all designed according to the aseptic principle with fired mosaic floors and walls painted with varnish and permanent enamel, central heating, electrical facilities, running water, water closets, and a reading room and a garden for rest. A final argument was communication as it was very well connected by public transportation: close to Provença station on the Sarrià railway line and to Passeig de Gràcia station on the railway lines of Girona-France and of Tarragona-Southern Spain. So, Cardenal's Clinicum consolidated a modern medical space clearly different from the traditional model hospital. By addressing it to medical doctors he was aware of not being a rival but, on the contrary, he encouraged doctors to accompany their patients during their stay in a unique surgical premise where they could recover their health (Zarzoso and Martínez-Vidal 2016).

Cardenal strategically developed a rhetoric and display of modernity through written words and images of maps and photographs that perfectly established not only the new and modern, progressive and technological spaces that featured the identity of the new surgery but also the target audience of the bourgeoisie. In such an election of methods and aesthetic choices (Warner

⁷ *Clinicum. Casa de curación quirúrgica del Dr. Cardenal. Noticia descriptiva y extracto del reglamento* ("Clinicum. Dr. Cardenal's Surgical Healing House: descriptive news and extract from the regulations"). Barcelona 1899.

2014), this strategy hinged on some of the arguments developed by those medical doctors and entrepreneurs that settled the new clinics for the mentally ill after the collapse of the Hospital de Santa Creu in mid-nineteenth century Barcelona. A private healthcare alternative was then established, which proved to be the inevitable response to the indifference of the Spanish liberal state in terms of assuming administrative and financial responsibility for public hospitals (Comelles 1983 and 1988). The name chosen had a cultural significance: asylum and not house for the 'insane' or 'mad'. This was of paramount importance in the case of the Nova Betlem asylum, settled firstly in the town of Gràcia, next to Barcelona in 1857, and relocated in the peaceful village of Sant Gervasi, in northern Barcelona. The asylum's director and medical doctor Joan Giné Partagàs made an interesting use of brochures and pamphlets of the new clinic premises by advertising and defining the identity of its intended audience —the bourgeoisie— through visual images, maps, and a straight path of communication from downtown Barcelona (Pérez Nespereira 2003).⁸

In their pamphlets, Giné Partagàs (1874) and Cardenal (1899) offered detailed information about the prices of the services offered in their clinics. In both cases there was a division by class of patients. Hence, in the Giné Asylum, first-class pensioners paid 180 pesetas a month, second-class pensioners 125 pesetas a month and third-class pensioners 90 pesetas. These payments covered different qualities of room and board, as well as observation and clinical treatment. Tailors, dressmakers and shoemakers were available for the provision or patching of clothing and footwear, and their bills had to be paid "by the persons responsible for payment

⁸For more information see: *Reglamento del Manicomio Nueva-Belén en la villa de Gracia*. Barcelona: Narciso Ramírez, 1862; Giné Partagàs, Joan. *Descripción, marcha funcional y reglamento orgánico del manicomio de Nueva Belén*. Barcelona: Antonio Palou, 1874; Giné Partagàs, Joan. *Manicomio Nueva Belén: fundado en 1857 recién establecido en un edificio erigido ex-profeso en el término de San Gervasio de Cassólas junto al santuario de la Bona-Nova*. Barcelona: La Academia, 1880 and 1883.

together with the corresponding immediate monthly payment".⁹ In Doctor Cardenal's Clinicum, patients were divided according to the use of the room and two types of rooms were offered, with a variety of possibilities. The first class rooms had five rooms on the ground floor, with access to the garden and roundabout, and six on the first floor. The six second class rooms were on the first floor. All of them could be accessed by lift, which also allowed the transfer of patients to the medical intervention spaces. Lodging in the first class rooms varied from 9 to 11 pesetas a day and, in the case of bringing a companion, the total price was 18 pesetas a day. For the patient staying in the second class rooms, the price ranged from 6 to 8 pesetas per day, which amounted to a total of 12 pesetas if a companion of the patient also stayed with them. In this price, Cardenal included "room, board, service and ordinary medical assistance". It is important to point out the detail of this medical care, as it had nuances that increased the total cost of admission, and included: "visits from the director and the auxiliary doctors of the Clinic, the cures and the topics or materials necessary for these (excluding all surgical operations and medicines that have to be sought from the Pharmacy)".¹⁰

The Cardenal and Fargas clinics acted as a real pole of attraction and as a model of medical architecture —technology and comfort— and of entrepreneurial business for the establishment of new surgical clinics in the Eixample district. It is truly singular that the operating rooms of these two surgeons were known by their disciples as "Mecca" (Balagueró and Benito 1985; Escudé and Calbet 2007). Among the new clinics established in this area, we should mention the gynecological clinic of Sebastià Recasens located at number 359 València Street, next to the Passeig de Sant Joan. This student of Cardenal transferred the clinic, after winning a

⁹ Giné Partagàs, Joan. *Descripción...*, 1874, 26-28.

¹⁰ *Clinicum. Casa de curación...*, 1899, 36-38.

university professorship in the specialty in Madrid, to his colleague Francesc Rusca in 1898. A decade later, when this surgeon died prematurely, the clinic was acquired in 1909 by Enric Ribas Ribas, who had also trained with Cardenal, and was in turn head of surgery at the new Hospital de Santa Creu i Sant Pau. Thus, there was a great dynamism in the private surgical business and also the duality of the work of these professionals, distributing their work and gaining social prestige in the academic sphere or in the private or public charity hospital system (Agustí Peypoch 1991, 25-27). Another case of the clinic being moved from the old city to the Eixample was that of Ricard Botey, who established in 1898 an imposing ENT (Ear, Nose and Throat) clinic at 166 Rosselló Street (Zarzoso and Martínez-Vidal 2016, 83-90).

Some of the general medical journals of the time, such as the *Gaceta Médica Catalana*, offered their pages to describe the medical services, their scientific and technological basis and the comfort of the accommodation in detail. This was the case of the Clínica de Víctor Azcarreta (1895), which had its medical office in the centre of the city, in a flat in Fontanella Street, and offered urological surgery services in the clinic located in La Bonanova. This journal also encouraged the insertion of advertisements explaining the provision of these new surgical services in the city of Barcelona. Thus, the surgeon Jaume Queraltó Ros was able to announce the establishment of his "Clínica Gynecológica" at Passeig de Gràcia, 89, in the *Gaceta Médica Catalana* of 1898. It is important to emphasize here the audience for these writings and announcements, as the aim was not to address the general public but the general practitioners, as we have pointed out above, who could act as intermediaries between their patients and the new business surgeons, the latter having both expertise and the necessary technical and service infrastructure. In the intense process of medicalization that took place during this period, the

private gynecological clinic penetrated the cultural fabric of that society not only as a space for the treatment of gynecological conditions but also as a maternity clinic.¹¹

The clinic in Queraltó is also a good example of the progressive introduction of laboratory medicine into surgical practice. In fact, its team included not only six surgeons in charge of the aseptic and antiseptic departments, but also an anesthetist and three professors in charge of the photographic, histological and microbiological laboratories. The latter was under the direction of Ramon Turró, who had been teaching this subject in the laboratory of the Acadèmia i Laboratori de Ciències Mèdiques de Catalunya since 1897.

However, the division of labour in the clinic and the systematic use of the laboratory as a diagnostic tool were not yet fully integrated into university medical education. It is likely that this could have led to a slow normalization – both by general practitioners and the general population – of medical practices centered on fluids and tissues that completed the information on the disease acquired in other spaces such as the clinic or the autopsy room (Howell 1995). In fact, the Municipal Microbiological Laboratory, run by Ramon Turró since 1905, and the courses organized by a private association of doctors, the Acadèmia i Laboratori de Ciències Mèdiques de Catalunya, were the training facilities for dozens of doctors – many of whom became urban and rural medical general practitioners – in their practical laboratories of bacteriology, histology, histopathology, biological chemistry, hematology, etc. This association maintained the annual courses from 1897 to 1932, when it was considered unnecessary to carry out a task already provided by the university medical faculty (Fernández Simó 1971).

¹¹ As we shall see, this seems to indicate that the processes of medicalization of childbirth and the introduction of maternity insurance —which became obligatory in Spain in 1931— developed at around the same time. (Pons-Pons 2009).

Queraltó also promoted his own medical journal, *La gynecologia catalana* (Catalan Gynaecology) by Dr. Queraltó (1898-1899), which was published in Catalan and served both scientific communication and commercial advertising purposes. It was not, however, a new strategy. It was part of a tradition that had already been put into practice by other doctor-entrepreneurs. Thus, in the mid-19th century, the doctors who owned psychiatric clinics, Antoni Pujadas and Joan Giné Partagàs, founded journals on medicine and psychiatric care that also responded to the demand for bourgeois healthcare.¹² At the end of the century, public communication of private business and specialised medicine spread among these doctors and surgeons in Barcelona. Some examples are Fargas and his magazine *Anuario de la Clínica Privada del Doctor Fargas* (1892-1898), the surgeon Antonio Morales, medical director of the clinic and the magazine *Boletín Clínico de la Casa de Salud de Nuestra Señora del Pilar* (1897-1901), the gynecologist Pere Manaut launched the magazine *Malalties especials de la dona*, a newsletter of the Manaut Clinic (1901-1902) or that of the surgeon Ricard Botey, director of various medical journals in his speciality and specifically two related to his clinic, *Archivos Internacionales de Laringología, Otología y Rinología* (1885-1893) and *Anuario de la Clínica Oto-rino-laringológica* by Doctor Ricardo Botey (1927).

In the process of establishing the new model of private clinics, it is also worth mentioning the introduction of a new business strategy that took place in the "Casa de Salud de Nuestra Señora del Pilar" established in 1894, close to Gràcia station on the Sarrià railway line, and governed by the Sisters of Charity of Santa Anna. It was not strictly a clinic, but a private charity hospital, which provided medical and surgical services and had 18 rooms. The unfeasibility of the

¹² Pujadas created and directed the magazine *La razón de los sinrazón* (1865-1866) and Giné Partagàs the *Revista Frenopática Barcelonesa* (1881-1885).

institution led to the decision in 1897, under the direction of surgeon Antonio Morales, to focus exclusively on surgery and on its private clientele, provided by the doctors themselves. Consequently, the "Clínica del Pilar" placed its facilities at the service of any surgeon, opening a new model of professional practice and of exploitation of technological and hotel resources – known as "open" private clinics –, in which the surgeon would contract some administrative services with the clinic which, together with accommodation and food expenses, were finally paid by the patients (Marí 2010, 20-21).

X-ray technology, which was demonstrated in the faculties of science and medicine in Barcelona in February 1896, was also incorporated into the range of practices developed in surgical clinics at the end of the 19th century. The new Cardenal and Fargas clinics subsequently assigned specific rooms dedicated to this new diagnostic tool. However, the introduction of this technology was neither immediate nor fast (Howell 1995, 103-132). The growing use of the photographic record was, however, revealing (Torres 2001). In fact, the construction of radiological knowledge was a slow process, which took almost two decades of progressive training and consolidation among the new classes of doctors (Pasveer 2006). In this context, the strategic establishment of a Radiology Office in 1898 on the main floor of number 613 of the Gran Via de les Corts in the centre of the Eixample district is significant. The centre was run by doctors Cèsar Comas and Agustí Prió, who in turn were responsible for promoting photography and radiology at the Faculty of Medicine and the Hospital de la Santa Creu and, from the 1900s, at the Hospital Clínic and the Hospital de la Santa Creu i Sant Pau. Their prolific activity led them to play a fundamental role in the academic dissemination of medical radiology in Catalonia, and through intense advertising they helped to standardize the new visual language and diagnostic possibilities of X-rays among doctors and patients (Portolés 2004).

4. First phase: establishment of the clinics, 1900-1920s

During the first decades of the 20th century, Barcelona was the scene of profound demographic, social, economic and political changes. The population doubled from 537,354 inhabitants in 1900 to just over one million in 1930, although growth was concentrated in the last fifteen years of that period with a population increase of 400,000 inhabitants.¹³ A large part of this growth was due to migratory movements that were concentrated in the historical centre, in the Raval district, where the living conditions were extremely poor. During this period, and increasingly since the end of the World War I, the construction of housing, with considerable typological diversity, grew in the Eixample district and became more dense in the working class neighbourhoods of Sants, Poblenou, Clot, etc. and in the neighboring municipalities of the working class periphery in L'Hospitalet, Santa Coloma and Badalona (Oyón 2008; Colell et al 2009). End-of-century social reformism introduced important changes in social legislation, giving rise to the 1900 Law on Occupational Accidents which defined occupational risk and made companies financially responsible in the case of occupational accidents (Rodríguez Ocaña and Menéndez 2006). This gave rise to healthcare schemes, some already existing and others new, aimed at the working population: mutual aid societies, company medical services, employers' mutual funds and private insurance companies (Martínez-Gallego and Ruzafa 2009; Maza 2009). In industrial areas such as Barcelona and its mainly working-class suburbs, this situation significantly expanded the fields of medical care (Vilar-Rodríguez and Pons-Pons 2018, 60-75). Considered in terms of the medical market (Jenner and Wallis 2007), in this geographical space and in the framework of the transformations that took place, on the one hand, a growing monopoly of the said market can be observed by the representatives of official,

¹³ Data from censuses and registers drawn up by the Spanish National Institute of Statistics.

regulated and university medicine, in view of the persistence of a medical pluralism cultivated by all social classes, and, on the other hand, a multiplication of the hospital medical care offer, with beneficial roots, both public and private (Fernández-Pérez 2018; Fernández-Pérez and Sabaté 2019).

Given this panorama, it is worth asking whether the surgical practices offered by the clinics that emerged during this period reached the whole population. In a context in which the public – and also private – provision of medical care had a charitable character that marked the condition of the poor patient and given the capacity of the bourgeoisie to be able to face without problems the cost of the intervention, the stay and even the recovery period afterwards, it seems appropriate to ask whether the working and lower middle classes of the city, individually or through mutual societies, resorted to private surgical services in case of illness (Rodríguez Ocaña 1990). In fact, in this period, the healthcare subsidy offered by some mutual societies was part of a competitive market where consumer cooperatives, insurance companies and other forms of societies also participated (Solà 2003; Duch 2019). This was not a completely new form of healthcare service, as since the end of the eighteenth century, Barcelona has seen the use of guilds and associations to pay for medical care, outside the medieval and modern model of hospital charity, and in a context of the establishment of a capitalist economy where the health business grew inevitably (Zarzoso 2006, 85-112).

We do not have any studies on the sociology of the patients in the aforementioned clinics, of which there is hardly any trace left in the archives. Nor do the available data shed any light on this matter. Therefore, in the previously cited case of the surgical gynecological clinic of Fargas, a preliminary examination of the medical records for the years 1907 and 1908 only indicates the marital status and geographical origin of the women who underwent surgery. The source

points out in an irregular manner their specific addresses, although the appearance of the name of the town or village where they lived is consistent. As such, we can see not only the presence of women from the city of Barcelona and its neighboring towns, but also from the rest of Catalonia and even from different parts of Spain. There is no information on the occupations of these women. Given the clinical nature of the information, there is no data here on the price of the operations, the total cost of the stay or the methods of payment. Thus, it seems risky to infer from the domicile data, in the cases where it appears and in the absence of a systematic study, that the clinic was limited to a social sector with great purchasing power.¹⁴

Studies on Barcelona's mutual insurance industry in the first third of the 20th century show different strategies for survival, management and action, with illness and medical care benefits being a basis for their work. The cases of the *Federación de Sociedades de Socorros Mutuos de Cataluña* (created in 1896) or the *Agrupación Mutua del Comercio y de la Industria* (created in 1902) indicate a considerable increase of their members (Largo and Pujol 2016).¹⁵ Despite this, the high cost of medical expenses in this period, together with other factors such as inflation, made it difficult for this type of mutualism to survive after the Civil War (Largo Jiménez 2016). Another management strategy in the face of illness was provided by the *Quinta de Salut L'Aliança*, based on the interest in linking the mutual aid societies with medical benefits of a hospital nature. The association had its origin in the *Alianza Montepío de Camareros* of Barcelona (with headquarters at number 3 of Quintana Street, next to Boqueria Market), and had a medical assistance section directed by Josep Girona Trius, at that time one of the surgeons

¹⁴ Fons Fargas, *Històries Clíniques, 1884-1920*, Museu d'Història de la Medicina de Catalunya. Registers from 1907 and 1908.

¹⁵ Subsidies paid could be for medicine or major or minor surgery paid on a daily basis for a stipulated period between 40 and 90 days. The operation was therefore not subsidized.

of Doctor Cardenal's team in his *Clinicum*. The surgeon Girona most likely convinced his employers of the importance of having a clinic, which was then opened in April 1904 at number 3 of De la Torre Square in Sant Gervasi, with a capacity for 9 patients. Shortly afterwards it was decided to extend the services to other workers' associations, at a monthly fee of 0.10 pesetas, reaching 1,600 members by the end of that year. The growing number of members led to the clinic being moved to a new building, with a capacity for 25 beds, at 317 Còrsega Street, next to Torrent de l'Olla. The clinic offered medical and surgical services there between 1906 and 1917, when a new building was opened, known as the Palau de la Mutualitat, in Sant Antoni Maria Claret Street, very close to the Hospital de la Santa Creu i Sant Pau, which was still under construction and intended to accommodate poor patients. In 1917, the new clinic had 40 beds and the association had 26,000 members, and continued to grow and multiply its services over the following years: 80 beds in 1921 and 350 beds in 1930 (Prim and Campillo 1988).

Thus, the Aliança mutual society, with a diverse urban social base made up of workers, shopkeepers and the petite-bourgeoisie, is a clear example of growing medicalization and the influence of the health factor in the services provided by these societies. The data provided by Vilar-Rodríguez and Pons-Pons are conclusive: in 1923, in the province of Barcelona, 641 mutual aid societies welcomed 166,894 members who were offered medical care, mainly surgery, as well as benefits for disability and death. These historians place the average cost per day of illness of a member at almost 4 pesetas, when the average daily wage of an industrial worker in 1920 was 6.33 pesetas (Vilar-Rodríguez and Pons-Pons 2018, 60-61; Pons-Pons and Vilar-Rodríguez 2011 and 2019; Menéndez 2010).

The clinical histories of the patients of the ophthalmologist Frederic Hospital Prats help to understand the complexity of the Barcelona medical market of this period, the strategies of

diversification of work of the doctors and the sociology of the patients. This doctor had been trained at the aforementioned ophthalmology clinic at the Hospital de Santa Creu, where he practiced between 1911 and 1924. He worked intensively in Barcelona until the end of the Civil War. His clientele came from all urban social classes, as he was a doctor at the Gran Teatre del Liceu during this period. From 1911 he had a clinical practice on the first floor of number 13 of the Ronda de Sant Pere and two dispensaries in the working class neighborhood of Sant Martí de Provençals, at 114 Major del Clot Street and 165 Pere IV Street. The clinical records kept indicate personal and clinical data of its patients: names, addresses, pathologies, treatments, prices of visits. The patients attended at his clinic generally came from the two dispensaries, as well as from entities with which he had signed medical assistance contracts: the Aliança Mutual Insurance Company, the Highway and "Rajolers" Guilds, the Sant Martí de Provençals Association of Metalworkers, the CAMPSA company and the La Nueva Mundial and Rabassa insurance companies (Grabuleda 1998)¹⁶. In the years 1911-1912, the average cost of the visit was 5 pesetas. Here is a small sample of the men and women visited, inhabitants of La Sagrera, Poblenou, Clot, among other neighborhoods of the city: a young woman of 20, single, a weaver, from the Clínica de San Martín/CSM (dispensary); José Blanch, 50, lives in Amistat Street, 22, Poblenou, of the CSM; José Duran, 36, a barber, lives in La Sagrera, of the Clínica del Clot/CC (dispensary); Marina Minguella, 24 years old, seamstress, lives in Poblenou, of the CSM; Ignacio Puig-gros, 57 years old, market seller in Sant Agustí Vell, recommended; Benito Lora, 21 years old, single, worker in "Nuevo Vulcano", Barceloneta; a young man of 23 years old, single, glass painter, lives in Clot, of the CC; N. Pujadas, 30 years

¹⁶ Rabassa probably refers to Josep Rabassa Font, a health insurance promoter who joined doctors Joaquim Abelló and Ferran Rosell, founders of the insurance company Atlántida in 1927 and promoters of the Sindicat de Metges de Catalunya in 1919 (Balasch 2002).

old, single, owner of a perfume shop in Conde del Asalto (later known as Nou de la Rambla Street)¹⁷

It does not seem risky to say that, in the face of illness and despite the fragility of the domestic economy, an economic effort was made, especially when surgery showed curative efficacy. It is possible that this was also favored by an upward trend in real industrial wages. However, the jobs that have analyzed the working families' budgets do not explain this type of expenditure, but that of other consumer goods such as clothing, shoes, food, alcoholic beverages and education. Nor do they allow us to infer whether access to health, understood as a factor of consumption, showed inequalities between men and women within families (Llonch 2004; Borderías, Pérez-Fuentes and Sarasúa. 2014). The line separating the condition between the sick worker and the poor sick worker was very fine and, in the second case, public and private philanthropy allowed them to access hospital services. A hospital where bourgeois charity was the main emblem of the social order and where the poor sick man put his body at the service of medical science. Hence the resistance to ending up in the hospital, even in the new Hospital de la Santa Creu i Sant Pau. The historian Ealham has shown examples of workers' solidarity by talking about the presence of the disease in the face of the difficult survival conditions of the workers of the Raval in order to pay rent, food and even for second-hand clothes (Ealham 2005).¹⁸

As we can see, the dynamism of Barcelona's urban society in the first two decades of the 20th century reveals a growing medical market, characterized by a diversified healthcare offer and

¹⁷ Fons Hospital Prats, Històries Clínicas, 1911-1936, Museu d'Història de la Medicina de Catalunya. Records from 1911 and 1912.

¹⁸ The popular disrepute of the new Hospital de la Santa Creu i Sant Pau was in the public domain (Rodríguez and Cruz 2018).

a population that anticipates, invests in and tackles illness head-on. During this period, however, there was no significant increase in the model of surgical clinics that originated at the end of the 19th century. This did not imply a failure of the model. In fact, the clinics, which were run by these surgeon-professor-entrepreneurs with great social prestige and public influence, showed that they functioned as a business. And also that their location in a bourgeois, hygienic, ordered and urbanized environment such as the Eixample district had been a wise choice (Colell et al. 2009). The few clinics that were created thus all had three similar features, which had already been established by the first clinics: the practical training and teaching of some of their directors, the increasing fragmentation of surgery into different specialties and the location in the centre of the Eixample district.

Specifically, in the seven surgical clinics established in these years, two offered ophthalmic surgery services (Barraquer and Hospital Prats), three specialized in urinary tract surgery (Serrallach, Sacanella and Bartrina) and the other two, in the hands of professors, in general surgery (Esquerdo and Corachan). The geographical distribution in the city is also significant, and would be linked to strategic decisions by those business surgeons. This is why the ophthalmologists were located on the borders of the old walled city and the Eixample district. In 1903, at number 3 of the Ronda de Sant Pere, Josep Antoni Barraquer set up the clinic where his son, Ignasi Barraquer, worked until he moved to his well-known clinic on Muntaner Street in 1940. At number 13 of the same ring road, in 1911 Frederic Hospital Prats was established. These are not isolated clinics, but large floors fitted out for this purpose. On the other hand, the previous existence of clinics or the proximity of the two large hospitals served as a factor of attraction in other cases. In 1915, Manuel Corachan established himself near the Hospital Clínic, at number 189, Rosselló Street, and in 1921 he moved to a new clinic building on Buigas

Street, where it still exists today, after substantial architectural modifications and extensions. In 1910, Narcís Serrallach put into operation the healthcare and business strategy of a double professional location: he visited the clinic on a central floor, at 40, Pelai Street, and operated in the clinic at 250, Balmes Street, next to the Clínica del Pilar. We see similar planning in the case of the Surgical Sanatorium founded by Emili Sacanella in 1911 in a huge, quiet mansion next to the Sarrià train station. On the other hand, in the upper part of the Eixample district, bordering popular neighborhoods such as Sant Martí and El Clot, and on the transport line to the Hospital de la Santa Creu i Sant Pau, still under construction, Josep Maria Bartrina – in one solitary tower, as shown in the advertising photograph, located at number 760 Gran Via de les Corts – and Àlvar Esquerdo – next to the Diagonal, at 340 Provença Street, were established in the 1910s. These last two cases are also indicative of the profitability and durability of the private surgical business in these first decades. Thus, Bartrina's sons, who were also surgeons, continued to run the clinic beyond the 1930s. While the Esquerdo family, after his death in 1921, sold the clinic to surgeon Enric Seguí, who sold it to surgeon Sever Figarola at the beginning of the 1930s after building a new large clinic at 49 Salut Street, in the Sant Josep de la Muntanya district, which over time also became a quieter medical services area.

In addition to these clinics, during these years one can observe the establishment of auxiliary services, in the form of small medical companies, under the name of a 'gabinete' or institute, which complement the services of the surgical clinics and standardize new practices in medical diagnosis and treatment in the city. Two processes converged at its peak: the effects of laws on occupational accidents and the progressive shaping of radiological knowledge and laboratory medicine. In turn, the same pattern of geographical location can also be observed in all cases in the Eixample district: proximity to clinics and hospitals and proximity to means of transport.

And the same architectural formula: the fitting out of a large flat or the establishment in a "xalet" or a detached house. In 1904, doctors Ricardo Pi, Luis Gubern and Rafael Musterós built the Institute of Mechanotherapy at 44, Bruc Street. In 1910 three new centres were founded: two clinical analysis institutes, one at number 5 Pelai Street, in the hands of doctors Carles and Xifra, and another in Plaça d'Urquinaona, directed by J.A. Grífols Roig, Luis Celis and Ricardo Moragas, which would be moved in 1923 to Rambla de Catalunya, 102 (Sans-Ponsetí and Fernández in this special issue); and the Rontgenology and Electrotherapy office of Ignacio Canal, at Rambla de Catalunya, 5. Another similar radiological office was created in 1915 by the doctor Francesc Serra Casals, in the historic centre, at Tallers Street, 62. At the beginning of the 1920s it was moved a few meters away, to 33 of the Ronda de Universitat. Finally, in 1916, Dr. Joan Riera Vaquer opened a Physiotherapy Institute at 619 Gran Via de les Corts (Zarzoso and Fajula 2015 Zarzoso 2017).

Certainly, the architectural, urban, medical and business model of Barcelona's surgical clinics is unique and shows characteristics that bring them closer together and also differentiate them in this period from the concentration of medical services in London's Harley Street (Humphrey 2004), from the creation of a real medical neighborhood like Vienna's Medizin-Viertel (Rentetzi 2004), of the large hospital mansions in Melbourne far from the centre and with domestic surroundings (Bourke 2012), the "house-clinics" established by some doctors in Toronto (Adams and Burke 2008), or the design of the "surgical suites" – the operating room surrounded by small preparatory rooms – which characterized the North American hospitals designed by the architects Stevens and Lee (Adams 1999). In any case, it precedes and surpasses in number and presence the few clinics that were installed in those years in Madrid (Álvarez-Sierra 1952),

Valencia (García Ferrandis 2021), San Sebastián (Solórzano 2004), Toledo¹⁹ or Palma de Mallorca (Rodríguez Tejerina 1995), among other Spanish cities, during the period under study.

5. Second phase: expansion of the clinics, 1920s-1930s

The period from the 1920s to the beginning of the Civil War can be characterised by the splendour of the phenomenon of private clinics in Barcelona. In the same way that urban history has explained the growth of the city, the construction of a great variety of buildings and the concentration of the working class suburbs and the Eixample district, clinics flooded the urban landscape (see Map 1). In fact, we have been able to identify more than forty new private medical spaces between 1920 and 1936. Specifically, 29 surgical clinics, while the remaining twelve centres were specialized in other areas of internal medicine or in the form of auxiliary diagnostic services (see Table 1 and 2). The pattern of location maintained the predominance of the Eixample district for the clinics. This could indicate a segregation of activities by social areas or urban districts (Oyón 1999 and 2008). However, the massive establishment of private doctors' surgeries throughout Barcelona and the consolidation of the offer of mutual or business medical care management acted as intermediaries between the working and popular classes and the surgical clinics. The healthcare model thus became divided between public and private philanthropic hospital care based on charity and medical care based on the relationship between the free exercise of a given profession and the patient, understood as a consumer. It is no coincidence that the *Sindicat de Metges de Catalunya* was founded in 1920, in a context of political debate regarding the extent of compulsory insurance, fees and medical benefits,

¹⁹ Del Cerro, Rafael. 2017. "La atención médica en Toledo entre 1900 y 1936." *ABC*, January 29.

negotiations with occupational accident insurance companies and mutual benefit societies, and the free contractual relationship between doctors and patients (Martín Berbois 2012, 22-28).

The identification we have made of clinics and auxiliary establishments during this period is based on the study of medical guides and directories published in Barcelona between 1916 and 1936 (Zarzoso 2011a). As well as in various works we have carried out advertising exclusively aimed at doctors and published in medical journals during the first third of the 20th century (Zarzoso and Fajula 2010 and 2011).²⁰ With regard to medical guides, it should be noted that this is an exceptional source, used for other European and American cities from the middle of the 19th century to the first third of the 20th century, and that it allows the forms of self-representation, the processes of specialization and nomenclature and the communication strategies of doctors to be considered throughout these years (Weisz 1997 and 2005). Geographical information - the exact location of medical practices, clinics and care establishments - and communication strategies – advertising – should be added to these aspects.

The medical guides and directories of the city of Barcelona began in 1798 and were discontinued during the 19th century. Together with these sources, the general guides to the city published during that period also provide detailed information both on healthcare establishments and activities and on the name, address and activity of different healthcare professionals. The establishment of professional associations – the Barcelona Medical Association (1895) – led to the publication of various medical directories with identification of addresses and consultations between 1898 and 1945. During the first third of the 20th century, medical guides multiplied. On the one hand, thanks to the publishing initiative of Joaquim

²⁰ Advertising has also been studied in other contemporary journals: *Ciència* (García Lladó et al. 2013), *La Medicina Catalana* (Perona 2015, 184-224) and *Monografies Mèdiques* (Morera 2016, 151-198).

Domènech, supported by funding provided by the Ibero-American Laboratories, the Galeniana medical guide was published between 1916 and 1926.²¹ It is possible that the end of this initiative coincided with the activity carried out since 1924 by the *Sindicat de Catalunya*, with a generalised geographical implantation and with greater and quicker access to the sources, that is, to its members. The Medical Union (*Sindicat de Metges*) produced a series of very complete medical guides, with a diversity of classifications, detailed information and a great profusion of images and advertisements between 1925 and 1936.²²

An analysis of these medical guides shows the implementation of a new model of medical care in the city based on private medical consultation. This was a free service - through a private flat-rate contract or a contract with a mutual aid society - which completed and complemented the traditional model in which the doctor went to the patient's home. In the new model, the patient visits the doctor's surgery. The model was extended from the historical centre of Barcelona in the mid-19th century to the different neighbourhoods throughout the city from 1900. The practice became more common and was implemented in parallel with the urban transformation of the city caused by demographic changes and new forms of transport and communication (Knox, Bohland and Shumsky 1983). In Barcelona's urban landscape, medical guides from the first third of the 19th century show the overlap between this form of care for private patients and the development of private clinics. This is a clearly urban model, which rarely occurred in other cities in Catalonia. It is also linked to the growing process of specialisation that took place from the end of the 19th century and that has proliferated since

²¹ The latest edition indicates that this was the eleventh volume of a series introduced 11 years earlier. However, we have only been able to consult three issues: Galeniana, *Guía Médica de Barcelona* (year 1, no. 1, 1916); Galeniana, *Guía Médica de Cataluña y Baleares* (no. 5, 1920); and Galeniana, *Guía Médica de Cataluña, Valencia, Zaragoza y Baleares* (year 11, no. 11, 1926).

²² The *Sindicat de Metges de Catalunya* guides consulted here are: *Guia Mèdica de Catalunya* (1925), *Guia Mèdica de Catalunya* (1926), *Guia Mèdica de Catalunya i Balears* (1935 y 1936).

the period of the World War. Despite the growing importance of medical specialisation, the majority of doctors working in the city were general practitioners and were working in a medical market where job opportunities were provided by the demand for medical services, which had been growing steadily since 1900. As we have pointed out, the target audience for the advertising strategies of the surgeon-entrepreneurs were those general practitioners, given their intermediary status between the patients visited in their practice and the surgical treatment of various illnesses or injuries carried out in the surgical clinics.

In the medical guides and in the medical press of these years, the strategies of persuasion and communication developed by surgeon-entrepreneurs no longer needed to resort to the combination of an elaborate written description and a display of visual media - maps, plans or photographs.²³ The operating room and the surgery carried out there was a reality at the time that was solidly rooted. Together with the names provided by professional self-representation, the advertising strategy made it possible to define specialization, the precise location of the service, the availability of suitable technologies and the architectural environment inside and outside where everything took place. This advertising, which was exclusively aimed at doctors, took place in a very particular context. Firstly, between the last decade of the 19th century and 1938, around one hundred and fifty new medical periodicals were created in Barcelona, both general and specialized (Zarzoso and Fajula 2009). Along with subscriptions, advertising was their main source of funding. Moreover, these years witnessed both the professionalization of

²³ The advertising images of the above-mentioned clinics can be seen from the projects carried out at the Museu d'Història de la Medicina de Catalunya on the material culture of medicine in Barcelona in 1900: www.medicinaiarquitecturabarcelona.cat/cliniques.html and <http://www.premesamedica.cat/>

advertising and the flourishing of the commercial agent, representatives and distributors of medical materials and instruments (Liebenau 1986).

The new advertising strategy of the clinics was therefore based on the visual representation of the ideas to be communicated and, through a precise combination of image and short text, aimed to persuade general practitioners of the technical and comfort benefits of their facilities (Mendelson 1998). Illustrators, photographers and designers were involved in the execution of the clinic advertisements and, in general, full-page or half-page advertisements were chosen (Barjau 1999). In the presentation, photography was central: showing the exterior architecture and main facade of the clinic or some of the clinic rooms. In the latter case, the options were the operating room or the comfortable nature of the rooms or the dining room.²⁴ Framing the photograph, in the upper part, the header of the ad explained the name of the clinic and its surgeon owner, as well as the precise location and telephone number. In addition, in some cases, the proximity of a railway or tram station was also indicated. In this part or at the base of the illustration, the surgical specialty of the clinic was also indicated, as well as the conditions they were treating and the names of the members of the medical team and the area of specialization: from general and pediatric surgery to gynecological, urological, otolaryngological, ophthalmological and orthopedic surgery, etc. The lower part also contained, with different formulas of size, design and location, texts that reinforced certain characteristics of the clinics. Thus, without a fixed method, the advertisements for the clinics mentioned different factors: the great comfort of the establishment with a lift, central heating, bathrooms, interior telephones, chapel, gardens; the possibility of being accompanied by the family; the recent

²⁴ The architecture of the clinic and all the surgical units, as well as the building materials, were fully established in the 1920s (Kisacky 2017).

construction of the building "with the latest innovations"; the availability of competent auxiliary personnel; the possession of technological equipment for exploration – X-rays – , for surgery – aseptic operating rooms already designed with materials for this purpose – , for treatment – deep radiotherapy and electromedical equipment –; the price of the stay – "pensions from 12 pesetas a day", "independent rooms from 10 to 50 pesetas a day", "general room at 6 pesetas a day"–; or the target public beyond the bourgeoisie – "medical-surgical assistance in optimal conditions to the middle and working classes, freeing them from resorting to charitable hospitals".

The clinics (Table 1) were located in the Eixample district based on business strategies that responded to the progressive urbanisation of the city - both in terms of building and electricity supply -, the provision of means of transport - tram and bus lines, which in turn connected the previous railway stations, and since 1925 the underground - and the poles of attraction created by both the large hospitals and other medical centres of reference. Thus, the Passatge Mercader, location of the Clinicum of the Cardinal surgeon, became a real medical street, with a total of 6 clinics in the 1930s. In the centre of the Eixample district, between Balmes and Bruc streets, clinics and other auxiliary medical establishments were set up, seeking prestige and visibility in the heart of the urban bourgeoisie. From the historical centre, the rounds were another destination for the clinics, on the border with the new city. There, the tram lines that left from the University to the Hospital Clínic and the Hospital del Sagrat Cor along the streets Aribau, Provença, Casanova, Còrsega and Urgell were the destination of as many clinics, as well as dozens of private medical practices. At the other end of the Eixample district, from Passeig Sant Joan, taking advantage of the progressive urbanization of this part of the city and the tram lines that went up to Josepets Square and the Salut district, the clinics grew parallel to and at some distance from the Hospital de la Santa Creu i Sant Pau, which was still under construction. The

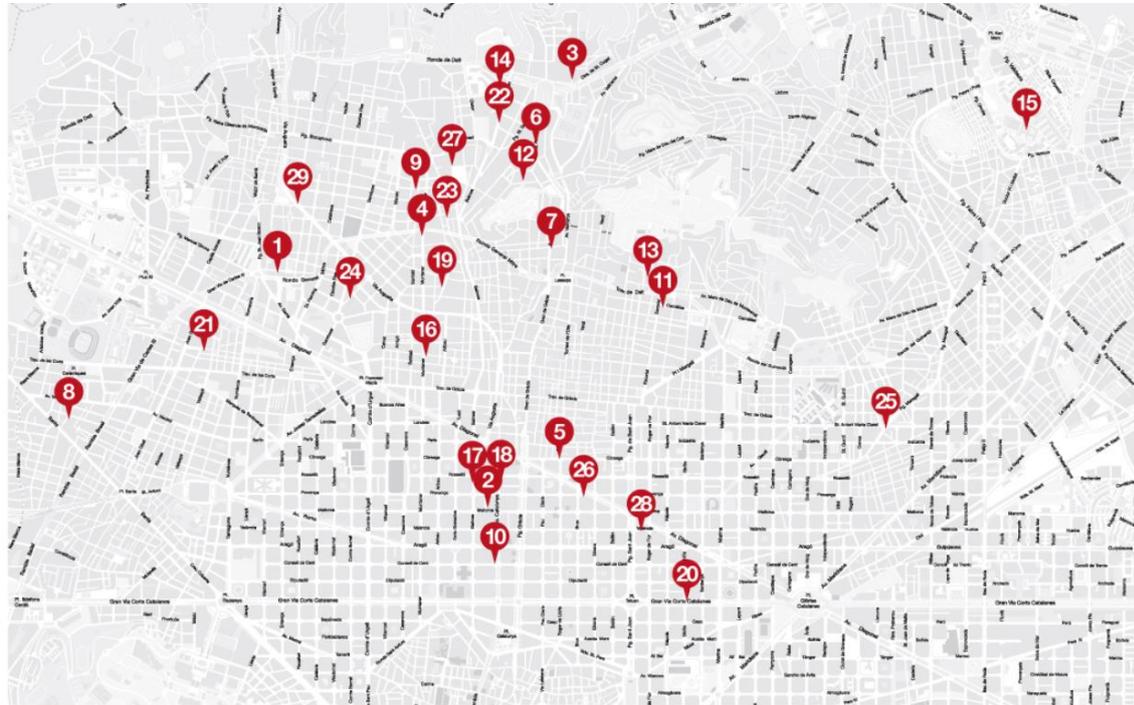
surgical clinics were also located in the areas between Putxet and Sarrià from the railway lines and the trams that crossed the city. Buildings of imposing architecture, in quiet, landscaped and well-communicated places. Finally, on the outskirts of the city, specifically in the popular and working class neighborhoods of Les Corts, Sants and Horta, a few surgeons decided to set up their clinics.

5. Conclusions

The network of private surgical clinics studied in this article survived the impact of the Civil War despite the fact that many of those entrepreneurial doctors closed their clinics and went into exile (Zarzoso 2011b). Overall, the surgical model was favored by the lack of competition in the public sector and, above all, by the continued cultivation of the working-class public provided by mutualism and by contracts with insurance companies, and also by collaboration with the Obligatory Health Insurance created in 1942. It should be noted that the model of small clinics gradually disappeared over time due to a lack of competitiveness and the cost of the resources needed to maintain them. On the other hand, the polyclinic solution such as the Clínica Platón or the Clínica Corachán or the specialized formula such as the Clínica Dexeus, in gynecology, or the Clínica Barraquer, in ophthalmology, meant a successful alternative to the small surgical company which was either absorbed by other clinics or became extinct with its owner (Comelles et al. 2017; Vilar-Rodríguez and Pons-Pons 2018, 229-250).

This article has showed how a new model of private clinics were established in late 19th-century Barcelona and developed in the first decades of the following century. Significantly, since its origins in the 1880s, private surgery clinics rose to more than 50 in just half-a-century. Here, this contribution has demonstrated how several business strategies were put at work by those

surgeons-entrepreneurs, mainly those related to publicity and the search of patients/customers, in order to attract the interest of general practitioners. Several key-factors played a principal role in that success: medical technology, domestic comfort, and surgical efficacy. Moreover, private clinics also showed how the process of medical specialization was configured and how it contributed to underpin those key-factors through a variety of surgical solutions. Medical directories and medical journals are a useful resource to understand how those strategies of communication were deployed. Interestingly, the use of a new language was of paramount importance as it can be seen in the utilization of the positive word clinic instead of the pejorative term of hospital. Actually, general practitioners never lost control over their patients and acted as intermediaries between them and private surgery clinics. Thus, all of them played a relevant role in the medicalization process of the Catalan society since the late 19th century. So, this research explains that this kind of private medical care happened in an open medical market and successfully met a growing demand. In a context where medical care delivered at hospital was provided by the city-state or the local bourgeoisie as a part of the medieval model of charity, a potential customer for the private surgery clinics was formed by the urban, popular and working classes through the model of mutual aid societies and health insurance companies. Surgery clinics established throughout this period contributed to configure and develop the Catalan healthcare model, which can be defined both in terms of hospital centrism and the dominant weight of its private nature.

MAP 1. Surgery Clinics established in Barcelona, 1920-1936

Source: <http://www.medicinaiarquitecturabarcelona.cat/cliniques.html> A website project of the Museu d'Història de la Medicina de Catalunya.

TABLE 1. Surgery Clinics settled in Barcelona, 1920-1936

Founding year	Map Number	Name of Clinic or surgeon-entrepreneur	Location
c 1920	20	Clínica del Remei, Dir./ Dolores Lucas, Almenara widow	Pau Claris 114 (transfer to the Salut neighborhood , 1920s)
c 1920	–	Clínica Drs. Roura and Farreras	Hospital, 4 (old dity)
c 1920	–	Clínica de Nostra Senyora de la Mercè, Drs. V. Lillo and Lluís Oller	Còdols/Ample (old city)
c 1920	–	Clínica Quirúrgica, Dr. Pere Huguet Puigderrajols	Pelai, 16 (transfer to Ronda Univ., 17) (old city)
c 1920	2	Clínica d'ORL, Dr. Lluís Vila d'Abadal	Passatge Mercader, 11
c 1920	18	Clínica d'ORL, Dr. Lluís Tomàs	Passatge Mercader, 15
c 1920	26	Instituto Policlínico Degollada	València, 216
c 1920	7	Sanatori Quirúrgic Dr. Ramon San Ricart	Ballester, 69
1923	10	Clínica Dr. Adolf Pujol Brull	Granados 83
1925	25	Clínica Victòria	Passatge Maragall, 52
1925	4	Clínica del Dr. Mariano Bretón Mutua General de Seguros	Muntaner, 474

Founding year	Map Number	Name of Clinic or surgeon-entrepreneur	Location
1926	5	Clínica de cirurgia general Dr. Cèsar Olivé-Gumà	Còrsega, 347
1926	23	Clínica Dr. Eduard Vilaseca	Santa Creu Street, 1 (Gràcia) transfer to Passeig Sant Gervasi/Craywinckel, ca 1930s
1927	11	Clínica Ginecològica, Dr. Víctor Conill	Camèlies, 2
1928	17	Institut Mèdic d'Ortopèdia Dr. Hermini Castells	Passatge Mercader, 7-9
1920-30	-	Clínica Gajo, Josep Gajo Pagès and Ramon Gajo Miro	Rambla Just Oliveras, 48 L'Hospitalet (West Barcelona)
1920-30	24	Clínica Quirúrgica Dr. Josep Soler-Roig	Modolell, 12 (Via Augusta)
1920-30	8	Clínica Drs. Llauradó and Julià (F. Llauradó Clavé, F. Llauradó Tomàs, R. Julià Rosés)	Roger Street, 316/ Jaume Roig Street, Sants
1920-30	21	Clínica d'Operacions Dr. J. Pi Figueras and Isidre Bogunyà Porta	Remei Street, Les Corts
1931	13	Clínica Dr. Seguí	Salut Street
1930s	3	Clínica Solarium , Drs. JM Vilardell and Vicenç Compañ	Violeta 1-Passeig Vall d'Hebron
1934	28	Clínica Oftalmològica Dr. Hermenegildo Arruga	Passatge Méndez Vigo
1935	14	Clínica Mater, S. Dexeus	Passeig Bonanova
1935	29	Clínica quirúrgica Drs. JM Reverter and Sixte Pérez	Anglí, 1
1935	6	Clínica de cirurgia Dr. Carles Sala Parés	Republica Argentina Avenue, 240/ carriage entrance C/ Gomis
1935	9	Clínica Quirúrgica dels Drs. Albert i Joaquim Escayola	Bèlgica Street (after Alfons XII) 51
1935	22	Clínica de Joan Pujol Matabosch	García Mariño/Tibidabo Avenue
1936	12	Clínica de Tocoginecologia del Dr. J. M. Andreu Bayer	Hurtado, 5 (Sant Gervasi)
1934-1941	16	Clínica Barraquer Oftalmologia Ignacio Barraquer	Muntaner/Laforja

Source: Author's elaboration from medical guides and medical journals published in Barcelona (1916-1936)

TABLE 2. Medical private firms established in Barcelona (1920-1935)

Year of creation or identification	Name of Entity of Auxiliary Services	Location
c 1920	Laboratori per a Anàlisi d'Orines, Dr. Joaquim Vellvé Cusidó	Ferran, 53
1922	Institut de Medicina Pràctica, Dr. Domènec Duran Arrom	Astúries, 89
1925-26	Institut Policlínic Sant Gervasi - Clínica Platón	Platón
1920-30	Centre Radiològic del Dr. Ramon Torres Carreras	Passeig de Gràcia, 83
1920-30	Institut de Diagnòstic i Terapèutica Física Dr. Vicenç Carulla	Còrsega, 285
1920-30	Institut Mèdico Pedagògic, Dr. Josep Córdoba	Brussel·les Street, Guinardó
1930	Gabinet tractament de l'Obesitat, Dr. Jesús Noguer Moré	Enric Granados, 116
1932	Institut de Gastroenterologia, Dr. Jacint Vilardell Permanyer	Bruc Street
1935	Laboratori Anàlisi i Transfusió de Sang, Dr. Manuel Miserachs	Bruc, 117
1930s	Casa Mèdica de Repòs Bonavista (August Pi Sunyer, Emili Mira, Belarmí Rodríguez.Arias, Jacint Vilardell)	Diagonal Avenue/ Pedralbes Road Sant Just Desvern
1930	Servicio de Transfusió Sanguínea, Drs. Antoni Armengol and Francesc Martínez Ribera	Rosselló, 255
1935	Institut d'Observació Psicològica La Sageta, Emili Mira	Teodor Roviralta, 21/ Tibidabo Avenue, 1

Source: Author's elaboration from medical guides and medical journals published in Barcelona (1916-1936)

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