



Science and social persuasion in the medicalization of childhood in 19th- and 20th-century Spain

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The article explores how childhood visits to doctors first became routine in Spain. The introduction of new models of prenatal care, childbirth, and childrearing required the extension of academic medicine into a terrain traditionally occupied by practitioners of popular medicine. Focusing on the status quo for most of the population in the final third of the nineteenth century, the study examines the repercussion of the era's scientific outreach campaigns (expressions of harsh criticism of what popular culture had constructed) and the spread of free health assistance. In particular, it highlights how attention to the nutritional needs of nursing mothers helped these women gain familiarity with the medical assistance available in the case of illness – so much so that by the second half of the twentieth century, the issues of health education and promotion had been relegated to a secondary plane within the medical profession.

KEYWORDS: *childrearing; popular medicine; popularization; Spain; nineteenth and twentieth centuries.*

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In 1909, a commercial directory, *The Yearly Health Book of Spain*, reported the names and addresses of almost 14,000 doctors. Only 10 of them were identified as pediatricians, none of them living in big cities, and as few as a dozen were listed as obstetricians. In fact, the list did not even include existing university professors of gynaecology or of pediatrics, not even those professors of Pediatrics from the Universities of Madrid, Barcelona, Valencia and Saragossa, all of them prolific writers in their matter. However, by 1946, the same source shows that 12.7% of all professional physicians recognised themselves as specialists in maternal and infant medicine, a figure that comprised 800 pediatricians and 727 obstetricians.

What do these figures tell us?

Professional specialization started as a subordinate practice to general medical work inasmuch as it was not able to produce a sufficient income for a doctor by itself alone, thence the little interest of specialized doctors to be known as such. However, forty years later, the recognition as a specialist identifies an autonomous professional endeavour and there is a social visibility of this professional profile: specialists have found a public.

The process that generated the medical specialty of Pediatrics, or Children's Medicine, was made of different elements. One — which is not followed in this paper— is the development of its scientific contents, the change brought by the consideration of children's bodies as objects worth to be studied and scientifically managed. On the other hand, the birth and development of Pediatrics has to be seen in connection with a certain social conception of childhood, which implied the consideration of this time of human life to be worth to the families, to the nation and to the state (Ballester and Balaguer, 1995). This was achieved through the spread of medical care to the masses of the population, where it displaced other forms of care, traditionally based on popular wisdom, in situations such as pregnancy, delivery and child raising. Most of these processes had been traditionally opaque to male practitioners, and now would turn under the domain of certified medicine. There was the need to create a public for the specialized practice, as well as to build the institutions (welfare devices, social insurances for maternity and for illnesses) and to produce the number of professionals that had to serve them.

This paper was born from the assumption made by both authors that a precise outlook on this complex situation could be gained from the union of their previous independent work on the subject (Rodríguez Ocaña, Ortiz and García-Duarte, 1985; Perdiguero, 1993, 1995; Perdiguero and Bernabeu, 1995, 1997 and 1999; Rodríguez Ocaña, 1996 and 1999). We hope that this common synthesis will make easier the intellection of the process that shaped Pediatrics as a medical specialty in Spain around the turn from the 19th to the 20th centuries.

Some basic arguments and a starting point

As it has been said, to take for granted the visit to the doctor as a routine procedure demanded a substitution of agents and practices in child care, introducing a scientific image of both 'child' and 'mother' as a dominant feature in the realm of popular culture (Apple, 1980 and 1995). This was a prominent aim in the turning of the 19th to the 20th century in Spain due to the rise of the professional class of physicians, according to the development of a bourgeois society, the relevance of the so-called 'regenerationist' movement and the extended consciousness of infant and child mortality as a social problem among elites.

A combination of means was put forth to reach such aim: 1) a harsh, non-stop campaign of criticism against what was constructed as 'popular culture'. Popular practices were discredited and opposed as contrary to health; 2) the offer of scientific guidance and professional control of pregnancy, delivery and child upbringing through free dispensaries sponsored by city councils and by private philanthropic actions; 3) the management of child breeding by using sterilised milk under control of health experts, at low costs; and, 4) free access to physicians in case of need through the same welfare institutions. Institutional practice was intended, in all cases, to be of educational nature, that is to say actively opposed to old ways of behavior through new routines (i.e., the weekly register of body weight became obligatory, as opposed to the right to receive extra benefits as low-priced milk, free clothes and so on) as well as through the implementation of a explicit program of courses and lectures, 'schools of maternology', and so forth.

Health education¹ (including the willingness to accept pediatricians) did seem the royal road to the defence of the nation when the political leit motiv centered on 'regeneration', a key-word highlighted by the 1898 military defeat imposed by the US and the loss of Puerto Rico, Cuba and the Philippines, and the problems of social divide brought about by the rise of working classes. To cope with this situation, reformism was born including the conceptualising of the relations between medicine and society known as "Social Medicine" (Rodríguez Ocaña, 1987 and 2006). Spanish medicine would take over the task of 'peacemaker' among the great masses of population. Only physicians — founded upon the nature of their expertise— would have the right and the duty to lead the ways of the population, which did not mean to rule them but to show them 'the only path to prosperity', that which dwelt upon the health of the people (Tolosa, 1903, pp. 10-11). Such a position as high counselors had already been acquired by some medical institutions such as the Royal Academy of Medicine or the

¹ The term 'health education' is not given the meaning of a technical procedure as it is customary in the present health literature. Instead, we use them as the label for any way of giving scientific health notions to the population.

Spanish Society of Hygiene, groups controlled by members of the political oligarchy of the 'Restoration period', and was exerted upon the field of urban planning and sanitary reform (Rodríguez Ocaña, 2001). But if in this field the leading position of doctors had to give to that of architects and engineers, as well as in the field of social insurance lent to lawyers, actuaries or economists, in the domain of child care only the expertise of teachers had to be included and that was always in a subordinate role.

Modern scholarship has shown that the concept of 'popular medicine' in itself was a construction of academic doctors, as a central piece in their strategy to win the favour of the population in the management of health and disease (Martínez & Comelles, 1994). 'Popular medicine', characterised by its fragmentation and multiplicity in local varieties, stood before the universality and efficiency of 'doctors' medicine'. Physicians were not left alone in such undertaking. With their studies, Spanish folklorists, sometimes doctors themselves, in the last years of the 19th century, mostly through written inquiries, in Andalusia, Extremadura, Asturias or Catalogne, composed a view of popular medicine as a stable, illogical deviance that offered a great deal of opposition to the acceptance of certified medicine (Perdiguero & Bernabeu, 2003).

The process of creation of a 'medicine for children' as a medical specialty was grounded upon certain institutions for practice and learning (such as hospitals, university chairs and welfare centers), upon networks of publications (specialized journals) and self-protecting networks such as professional societies. This all the first happened in France and thereof spread to Spain along with the translations of the most important works or the review of recent publications in medical journals. Within the first decades of the 20th century, a German influence of no lesser importance can be felt (Seidler, 1974; La Berge, 1991; Klaus, 1993).

At the Schools of Medicine, this knowledge about children was initially integrated within Obstetrics under the name of 'Delivery clinics and diseases of women and children' (as in the national regulation of 1845) or 'Obstetrics and Pathology of women and children' (as in the regulation of 1857). From 1886 on, they became independent as 'Children Diseases', or 'Pediatrics' after 1928. A first specialised hospital was founded by a philanthropic association in 1876, under the name of Jesus Child (*Hospital del Niño Jesús*) in Madrid, as part of the never-fulfilled project that aspired to build one such hospital in every province of the kingdom. The most notorious director during the first years of this institution was Mariano Benavente (1818-1885), the doctor of the children of the aristocracy of the court and the first Spanish specialist of Pediatrics, according to Granjel (1965). His panel of clients was inherited by Manuel Tolosa Latour (1857-1919), the promoter of an association

for the building of sea sanatoria, following instructions of the First International Conference for the Protection of Childhood (held in Brussels, 1883). In 1897 the first and only row was opened in Chipiona, province of Cadiz. Wards for children were opened in several Poor Hospitals, particularly in those linked with Schools of Medicine since the middle of 1880s (Figure #1). Ambulatory facilities were created according to learning needs, although they kept a discontinuous profile. At least five other hospitals and a lot of dispensaries for children were open before 1910 in several cities on private charitable basis. At the municipal level, the welfare schemes (*beneficencia municipal*) of some big cities included specialized services for children. In Madrid, consulting rooms for sick children were opened in 1892 and 1893 in some of their relief centres, that evolved into a Municipal Infant Welfare Institute in 1913.

An atmosphere of social alarm over infant mortality in Spain can be found in a vast number of publications that used demographic data regularly available from the Civil Registry (like Aguirre, 1885, on Madrid; Borobio, 1893, on Zaragoza or Comenge, 1899, on Barcelona; cf. Gómez Redondo, 1992). Until the statistical virtuosity of Marcelino Pascua (1934), most of these publications, directed to the general public, shared the open aim of promoting certain medical and social actions by using a 'rhetoric of catastrophe', so to speak. An example was the report on infant mortality of Madrid (*Informe acerca de la mortalidad infantil de Madrid, sus principales causas y medios de combatirla*) presented by Rafael Ulecia in 1903 to the City Health Board.



Fig. 1 – Andrés Martínez Vargas teaching Pediatrics at the Barcelona University Hospital. Source: Martínez Vargas, A. *Tratado de Pediatría*, Barcelona, 1915

Traditional patterns of mother and child care

Our main sources of knowledge about traditional practices related to the health of mothers, infants and children (apart from a number of remaining tools and objects) are justly those belonging to the authors implied in the medicalization campaign that we are describing. Therefore, once we know their purpose, they must be dealt with caution. There are texts full of information such as *Mother and Child. Scientific doctrine and popular mistakes in Obstetrics and Gynecology* (Madrid, 1898). Its author, Enrique Salcedo Ginestal, sent an inquiry to all certified practitioners living in villages and many of the cities, asking for the collection of all kinds of ‘faults, superstitions, sayings and popular proverbs’ related to his topic. In opposition to folklorists, these collections lent no positive value to popular flavor; moreover, they sought to expose the ‘ridiculous side [...] and even the criminal side’ of those practices judged by science. He led a pitiless fight against ‘lies, faults, intentions to cheat’ (Salcedo, 1898, p. XII) that they found everywhere in the popular world.

Mariano Benavente, already known, recalled his first years as medical practitioner in a little Castilian village, Villarejo de Salvanes, circa 1855, that the commonest children diseases were ‘dribble, strained stool, and evil eye’ (*la baba, el asiento colado y el mal de ojo*; Benavente, 1883a). The evil eye was carefully studied by Rafael Salillas (1905) using the answers to the inquiry circulated by the Ateneo of Madrid on the field of popular habits around three most characteristic facts of life: birth, marriage and death at the beginning of the 20th century (Perdiguero, 2004, p. 140-142).

Dribble and strained stool were also the most habitual illness of childhood in urban popular quarters. The strained stool (Bernabeu, 1995 and 2002a, p. 153-158) seems to be the folk diagnosis for symptoms such as indigestion and constipation, and it led to avoid the collection of noxious substances by means of purgatives, rubbings and massages. A Madrid municipal doctor emphasized that ‘to overcome the strained stool’ (*levantar el asiento*) was the highest title of honor of the lay female practitioners (*saludadoras*) that were active in low-class neighborhoods (Aguirre 1885, pp. 168-169). These ‘massages’ of folk therapy were introduced in medicine, given a physio-pathological explanation and included as empirical procedures within other expertise (Salcedo, 1898, p. 661).

The dribble, included all inflammations and suppurations as its main feature was the flow of harmful liquids or humors. In times of teething, dribble was synonymous to diarrhoea, and both were thought to represent a healthy condition to the extent of exciting or provoking them by artificial means or syrups in case of absence. Certified medicine intended to integrate these notions under the

label of 'accidents of teething' to show the danger of developing (or ignoring) diarrhoea. Nevertheless, a healthy meaning for diarrhoea was held among mothers until further on the 20th century (Huergo, 1884, pp. 87-88; Lozano, 1883, pp. 154-157; Arteche, 1928, p. 62).

Could we say that the relationship between scientific culture and popular culture was of absolute opposition? At first sight, it would seem so; but, we just pointed out some bridges in theory and practice. The analysis of 'teething' as label diagnosis has shown a true acculturation process, in so far popular knowledge of the end of 19th century –rejected by science– came directly from what was a medical theory one hundred years ago (Perdiguero and Bernabeu, 1995). The lack of a parallel evolution of popular and medical culture had been pointed out as the cause of differences in meanings: 'in the medical profession, concepts are born [...] which lack precision [...] one of the inconveniences they bring about [...] is that lay people take them as general concepts' (Juarros, 1919, pp. 70-73). At the same time, changing certified medicine's thoughts about infant nutrition (as, for instance, on wet-nurses, as studied later in this paper), show that lay people practices, sanctioned by general customs or traditions, exerted themselves influence on proposals that came from the ranks of science but nothing at all strangers to the social and cultural context.

At the end of 19th century rapid changes into medical conceptions generated a conflict with slow-motion concepts and traditions that were an obstacle to the development of the former, particularly in relation to the building of a professional medical career. A lucid statement of 1891 shows that 'in many cases, and behind the back of doctors, the evil eye carries off the faults in the management of nursing because children develop illnesses of a very difficult or impossible cure' (Valera, 1891, p. 29). The obvious conclusion in 1891 as well as in 1925 was the need to enforce a hygienic education, a 'preventive medicine or health prophylaxis' (Canoura Balado, 1925, p. 12), which in the field of child rearing was called Puericulture.

Puericulture as a path towards the jurisdiction of medicine

The goal of Puericulture (or infant welfare) was to make available to the public scientific rules for mother and child care, especially those related with feeding regimens. This was to become the scientific core of the professional expression of a campaign to prevent infant mortality that, although it started under the direction and almost exclusive competence of doctors, turned by the 1960s into a niche for subordinate (mainly female) health occupations, such as paramedic auxiliaries, and midwives. However, Puericulture was the first Spanish medical specialty that followed a fixed program of learning and counted on a particular training center (the National

School of Puericulture, created in 1923 and opened since 1926). Health officers in search of the standard training required by Social Medicine (between 1926 and 1960) or would-be pediatricians that looked for regular training on prevention and hygiene were their usual students.

It should first be noted that the initial children's doctors sustained efforts to promote breastfeeding. Of the three generic modes of infant feeding –breastfeeding, wet-nursing and artificial (usually bottle) feeding– physicians were unanimously and overwhelmingly in favor of the first, inflexible in their censure of the second and completely against the third. However, the effect was opposite to that which was expected: the steady spread of bottle-feeding. Artificial feeding technologies were an immediate priority at maternal and child welfare centres. As they involved a set of instruments and rules external to and separate from women's bodies, they reinforced the technical orientation of infant hygiene, while at the same time such tendency became more suitable to social needs arising from the industrial tendency that drove women outside the home (Wolf, 2001).

Puericulture centres started from the conjunction of welfare centres (especially free milk dispensaries, which could also provide other food for infants and sometimes also to mothers, as well as other traditional charitable benefits such as clothes or even money) and health education goals. According to what has been said, artificial feeding technologies were an immediate priority that helped them to attract a clientele (Figure #2). In Spain milk depots first appeared in 1902, and baby clinics in 1904. Almost all centers provided sterilised milk delivery, as did the first such center established in Madrid by Rafael Ulecia (1850-1912) (Rodríguez Ocaña, Ortiz and García-Duarte, 1985) (Figure #3). At the peak of public child welfare services in the mid-nineteen fifties there were fewer than 500 centres in the entire country, a figure far below those in other European countries: France had more than 4.500 centres in 1933, and in Belgium there were no fewer than 900 public baby clinics by 1924 (Rollet-Echalier, 1990, p. 387 & 392).

[Before the Second Republic, public maternal and child welfare in Spain was made by a combination of private charity and municipal interventions through autonomous, urban centres. Most of them were devoted to infant care (e.g., the municipal milk depots of Madrid, Bilbao or Alicante), whereas few others provided services for both mothers and infants (e.g., the municipal and voluntary centers in Barcelona).

The educational function of child welfare centers was most clearly demonstrated in the creation of Schools for Mothers, whose goal was to provide women, school girls and mothers with training in maternal and child hygiene. During the Republic each depot was

required to hold weekly lectures for mothers during six months of the year, and to organize required courses for girls at Municipal Schools. In 1930 it was estimated that about 18,000 mothers and 6,000 students had attended lectures in Madrid since the start of the programs in 1918 and 1921 respectively. General public was also targeted through health posters, radio broadcasting and films, as it is shown in another paper in this issue. From the middle of the 19th century, there existed also a formal teaching in schools, particularly addressed to females, aimed to the strengthening of a 'domestic moral' so to speak. This teaching was strongly implemented during the Francoist regime until 1970 under the explicit title of 'home teaching'. A recent study on its contents and aims has been made by using as sources a great number of approved school texts (de Haro, 1999). As Table #1 shows, however, upbringing was not relevant among its priorities, clearly tending toward more general hygienic subjects on housing, personal cleanliness or clothing.

Especially after 1880, there flooded a vast number of publications that gave 'counsels to mothers', a constant albeit decreasing production until mid-1960s. For instance, *Practical advices on the health of infants*, written by Vidal Solares, had ten editions between 1882 and 1915, plus more than fifteen of a shorter version (called *Instructive dialogue on children's hygiene*, or *Instructions on the health of infants*) between 1886 and 1916. *The art of child rearing*, by Rafael Ulecia had five editions between 1904 and 1924, or the *Catechism of Puericulture*, by Juan Bosch Marín, that reached 14 editions between



Fig. 2 – Machinery at the City of Barcelona's *Casa de Lactancia* (Milk depot) c. 1916. Source: Arrizabalaga, J.; Martínez Vidal, A.; Pardo Tomás, J. *La salud en la història d'Europa*, Barcelona, Residencia d'Investigadors-CSIC, 1998 [portada]



Fig. 3 – Dr. Ulecia counselling at the First Baby Clinic of Madrid, 1904. Source: *Libro conmemorativo del cincuentenario (bodas de oro) de la institución Primer Consultorio de Niños de Pecho, en Madrid (Gota de Leche)*, 22-1-1904, 22-1-1954, Madrid, 1954. p. 60

1933 and 1966 are further examples. Under the format of *A first reader on infant health or Puericulture*, as well as in the pages of the general press, this type of publication, focusing on women and children, associated to public welfare and private philanthropy multiplied in the country, (Perdiguero, 1993). Its clear aim was to contribute to the substitution of traditional family practices — systematically discredited as harmful — by those depending on the counseling of medical expertise.

Table n. I. Main subjects present in school texts for ‘home teachings’ in Spain (1857-1970)

	1857-1900 (44 out of 94 texts*)	1901-1939 (39 out of 58 texts*)	1940-1969 (100 out of 275 texts*)
Housing conditions	61%	52%	48%
Clothing	70%	44%	37%
Body cleanliness	63%	50%	49%
Nutritional regime	54%	44%	39%
Care to people	27%	29%	19%

* NN texts analysed out of the total amount YY of approved schooltexts for the given period

Source: Made from data given by Isabel M.^a de Haro Oriola. *La educación de las mujeres como promotoras de salud en la España contemporánea. Cambios y pervivencias* (unpublished PhD Dissertation, Universidad de Granada, 1999; chapters 3.1.1, 3.1.2 and 3.1.3).

Rural areas were disregarded until the Republic, when the Child Hygiene Service was created under the auspices of the Department of Public Health through its provincial delegations and health centers in 1932. The National School of Puericulture provided specific training for doctors, midwives and certified and non-certified nurses in order to staff the new service. Between 1927 and 1963 its competence was distributed to sixteen regional or provincial centers. This scheme survived the Civil war and was secured by the 1941 Law on the Health of Mothers and Children. By 1956, the highest number of secondary health centers was reached, around 107. Public health activities were greatly aided by two brand-new agencies, depending on the single francoist party, the ‘National Movement’: *Auxilio Social* (the social relief agency) and *Sección Femenina* (the Women’s Section of the former fascist party, the *Falange*).

The National Agency for Social Relief (López, 1967; Orduña, 1996; Carasa, 1997) developed since 1937. It came to administer infant centers, maternal welfare centers, maternity hospitals, soup kitchens for pregnant and breastfeeding women, homes for orphans and foundlings, day nurseries, and other centers. In connection with one another, from September 1954 on this network distributed the

American social aid program (a project of the national Catholic Welfare Conference of the U.S.A. to dispose the agricultural surplus in the hands of the government) through provincials boards to approximately four million children.

The Women's Section of the Falange (Sánchez, 1990, p. 34, and 40-43; Gallego, 1983, pp. 124-125; Mata, 1994; Bernabeu, 2002b) did not limit itself to institutions but played a decisive role in field work in the rural areas. The educational service was carried out by a volunteer corps that, after a basic training period, were sent to towns and villages on missions of inspection, vaccination, delivery of medications and clothing, and basic public health training. The WS was instrumental in the campaign against nutritional disorders run by the Department of Public Health: between 1941 and 1946 volunteers made more than one and half million home visits and provided care and counseling for about 180,000 children. In 1947, WS established a program of mobile training sessions in maternal and child welfare and health that reached out many thousands of persons in rural areas.

The Compulsory Health Insurance program started in 1944 took advantage of the technical plans and assets of the Compulsory Maternity Insurance, instituted in 1931. This latter program assumed responsibility for postpartum and postnatal medical care. In 1935 this service was provided through 12 clinics in its own and 60 associate private centers, while in 1947 it counted on 250 public owned clinics and 9 maternity hospitals, all of them incorporated within the Compulsory Insurance System. Between 1956 and 1964 the Health Insurance program managed 8 maternity hospitals, 185 baby clinics and 99 maternity clinics (Bernabeu-Mestre and Perdiguero-Gil, 2001) (Figure #4).

The establishment of social insurance measures for childbirth meant that medicine approached territories where it had previously not been active. In Saragossa, it was pointed out that more than 90% of all childbirths were attended by 'a midwife or an amateur' in the previous era (Gómez Salvo & Camón Gironza, 1936, p. 6). While the Maternity Insurance program was in effect during the Republican government, professional midwives continued to be the sole practitioners responsible for attending normal home childbirths, although they were to lose this preeminence with the Regulations for Health Services under the Compulsory Health Insurance system of January 1948. This new institution eliminated the midwives' independence, reducing them to physician's helpers in all cases of birth and fomented institutional deliveries through the provision of free hospital stays of up to 8 days for normal births. Financing for maternity 'residences' –a title that separated them from traditional hospitals for the poor- together with referrals for what was termed 'social dystocia' (hospitalization because of poor

housing conditions or lack of suitable care in the home: a condition that applied to the 61.3% of all hospital childbirths registered between 1947 and 1949), helped to overcome reticence toward hospitalization, and to make the physician's presence to be perceived as necessary. A plan was designed in the mid-1960s to construct 'maternity residences' (in fact, maternal-infant hospitals) to 'bring all births into hospital, and prevent a single beneficiary mother from giving birth in the unsuitable setting of her own home' (Asistencia, 1967, p. 8). By 1968 the Insurance program covered 40-45% of the whole population and more than half of all childbirths.

At the beginning of the Insurance program, its regulations stipulated that they should hold pediatric clinics for three days a week, and infant welfare clinics on the other three working days, a division set aside in 1958. This single aspect of the insurance for children's medicine shaped the development of the specialty of Pediatrics that subsequently became a hospital based one, and lost its links to child hygiene.

'To change good for bad'. The contents of the program for popularizing scientific health counselling

The title of this section comes from a statement made by a welfare municipal doctor of the city of Madrid in 1885: 'It is an urgent need to guide the ignorant and to stop those [...] that make mistakes [...] to transform little by little what is bad into good, what is



Fig. 4 – Activity at the First Baby Clinic of Madrid, 1954.

Source: *Libro conmemorativo del cincuentenario (bodas de oro) de la institución Primer Consultorio de Niños de Pecho, en Madrid (Gota de Leche), 22-1-1904, 22-1-1954*, Madrid, 1954. p. 97

common and ordinary custom into a scientific and purposeful practice' (Aguirre, 1885, p. 241). And these words attracts our attention because they reveal the inner rationale of the program for popularizing infant health.

Popular customs and beliefs were 'the real bad thing' which opposed children health (Bernabeu, 2002a, p. 151-153). It was emphasized that a main cause of infant lethality was 'the lack of hygienic knowledge and training of parents, more particularly on the side of mothers, the absence of common sense and the great load of superstitious drills' (Sáiz de Llavería, 1914, p.164). 'Errors and worries of the public concerning diseases are paid with the life of a great number of children', says in 1917 a children's doctor from Huesca (Loste, 1917, p. 32), while in 1925, another author was able to split in two broad groups the main causes of infants' deaths: those from one group were mostly unavoidable, but those from the other group depended on the 'countless violations of hygienic rules [...] that result from the present state of instruction of women' (Canoura Balado, 1925, p. 11). Such opinions came out of a gendered understanding of women as pure biological bodies, sole guardians of their children and homes, by God's will, and weak minds prone to error: 'Women's brain is the best soil to allow for the flowering of this kind of aberrations; it is always ready to accept wonders, marvels, supernatural schemes, wild plans brought about by ignorance and fanaticism, by stupid vanity and by illiterate stubbornness' (Salcedo, 1898, p. 15). Franco's dictatorship recovered such perspective of women (Bernabeu, 2002b, Jiménez Lucena, Ruiz Somavilla and Castellanos Guerrero, 2002, p. 208-210), and the faulty women hard to reach for the doctor had to be approached by means of the 'woman to woman' work undertaken by public health voluntaries (Lecciones, 1945, p. 16). Same contents and periodization have been shown in a recent work on school texts for 'home teaching' (de Haro, 1999).

From a medical perspective clear dangers loomed, grounded on the ambivalent consideration of popular culture, innocent because of its ignorance and not innocent because of its radically strange contents. Ignorance in itself was an innocent feature, as far as it stemmed from the *natural* distance (i.e., the lack of education) that separated poor classes and the elites. At the same time it was deemed guilty due to its 'indelible stigma' of stubbornness, that caused the most ferocious resistance to expert advise (Salcedo, 1898, pp. 4-5, 14). This consideration of popular culture put it far away from medical counsels, and the hugest obstacle in the medicalization process, as mothers would always prefer lay aid instead of sound medical expertise (Salcedo, 1898, p. 628). The worst risk in deliveries, particularly among poor people, stemmed from the intervention of "wise neighbors [...] outsiders to science" (Aguirre, 1885, p. 29).

The cultural closeness, “the same level of instruction”, allowed the practice of those women, called *saludadoras*, who kept “clinics” for children and who, according to doctors complaints, participated a great deal in the solution of health problems of mothers and children. (Perdiguero, 2004, p. 137)

In some other cases, the population is referred to as a waste land, where, thanks to the plough made by medical advice, the seeds of health would flourish (Bravo, 1927, 21). In this context, mothers and women are not considered so much as the enemies, but as the privileged helpers of doctors in the care of children and to highlight health practices throughout the whole population (Tolosa, 1891).

A delicate question was the religious load of many elements of the antagonist popular culture, due to the aggressive catholicism of the times between the 19th and 20th centuries. Votive offerings and amulets related to infant and child health were usual (see those compiled by Borrás, 1996, pp. 46-54), particularly dedicated to teething. One of the like alternatives insisted in the widening of the gap between the spiritual and the material world – as Salcedo did, in line with its positivist discourse – to emphasize that the doctrines of the Catholic Church were against any sorceries and superstitions (Salcedo Ginestal, 1898, pp.9-10; 857). Another, more pragmatic alternative was to accept traditional customs but with a change of meaning. For instance, Benavente, discussing about the evil’s eye, offered mothers to christianize their beliefs, by substituting fancy amulets fastened to child’s clothes by ‘a wallet with the Saint Gospels’ to protect their children against diseases such as croup or cerebral palsy, that were real threats to health instead of “the eyes of suspected witches” (Benavente, 1883b).

The intimacy of families became the target of the educating campaign in search of changing values that, according to the moralizing tradition of hygiene, leaned on confidence in and compliance with all authorities, including medical authority: expert advice should be followed uncritically. To make it real and in the absence of other means, a military procedure was sought: ‘the practice of command, expedient and infallible’ (Criado, 1925, p. 131; Bravo Frías, 1927, p. 21). These testimonies come from the time of the first military dictatorship undergone by Spain during the 20th century, albeit Criado, professor of Pediatrics at the University of Madrid, was a previous defender of this model of education. In 1918, in a lecture about harmful nursing, he made clear that ‘the essential core of education is [...] the complete subordination of the child’s will to the authority of his parents [...] Children need not to be convinced, they just must be given orders’ (Conferencia, 1918). And metaphorically, in the case of health education, doctors play the role of parents. Under Franco’s rule, such view was obviously very common (Bernabeu, 2002b).

The limits assigned to people's education show its null emancipating character. In *The mother and child*, one of the journals that convey this message of medicalization, when speaking about 'domestic medicine' in 1883 caution against an excessive illustration of mothers was present; the aim is to take mother to accept medical intervention, not to empower them with a 'deadly training, a dangerous confidence [in themselves]' (Pereira, 1883). Doctors' help had to be sought as soon as the slightest change in health is seen, establishing a program much more ambitious than ever since medical popularizing was born in the 18th century. And since public charity allows access to medical care, poverty should not be taken for excuse (Salcedo, 1898, p. 604).

The 'maximum program', so to speak, for medicalization of childhood would include the hiring of a doctor by each family, a certified physician who would attend delivery, order him hygienic rules of nursing, especially the feeding routines, as well as, later on, to dispose over physical exercises and sea baths (Rojo, 1895, pp. 533-534; Sáiz de Llavería, 1914, pp.164-165). It is a program well suited to a commercial context of medical practice, restricted as a rule to the well-off layers of society. A first-class example is furnished by the question of the wet-nurses. Among some class of families, the employment of a wet-nurse for the breeding of a new born was a sign of status, as exemplified by an old custom of the Spanish Royal Family; on the other side of the social spectrum, to hold a position as wet-nurse in a foundling home was a sure job for women. Probably most city councils in the last years of the 19th century secured grants or pensions to feed infants to some poor families.

Medicine concerned distinctly about wet-nurses of both kinds, although with the single purpose of putting them under professional control. Since the last years of the 18th century, medical literature constructed an all-black image of women engaged in wet-nursing, as 'bearers of faulty traditional knowledge' (Buchan, 1808, p. 357); they were depicted as ignorant and rude, clad in 'all errors and anxieties of the populace and most of its vices' (Furió, 1881, p. 29). This basic condition explained the high infant mortality registered in institutions and, conversely, it was taken for granted that the introduction of a wet-nurse in a bourgeois home would lend a negative outcome.

Here, however, medicine found a contradiction in the spread of this supposedly bad habit among the so-called accommodated classes that generated their clientele. Therefore, medicine had to resign to the fact that wet-nurses came out of need, for there was 'quite a few women' that lacked enough milk (in quantity or quality), although it was firmly stated that new born should not leave the home (Peiró, 1875; Cirera, 1882, p. 98).

But the academic definition of ‘complete motherhood’ —that is, the motherly function would not end in delivery, but extended to breast-feeding due to biological, moral (or Christian) and patriotic imperatives (see the compilation of authoritative sources given by Martínez, 1887, pp. 315-333)— shortened the number of technically allowable exemptions, so that, in the end, ‘women that are unable to nurse are just a few’ (Vidal, 1903; Sáiz de Llavería, 1914). Nevertheless, the ‘wet-nursing industry’ was only replaced by the ‘hygienic milk industry’. In 1893, to Baldomero González Álvarez (1851-1927), one of the doctors with responsibilities in the provincial Foundling Home of Madrid and physician of the Royal family, the existence of wet-nurses was a necessary evil (González Álvarez, 1893, p. 30), and some years later Catalan authors stated their preference for wet-nursing to bottle-feeding (Vidal, 1903; Comenge, ca. 1906). In the 1933 and 1938 editions of his *Catecismo de Puericultura*, Juan Bosch still defended the employment of wet-nurses at home, engaged through a scrupulous selection under medical advise.

And that was the point, the introduction of a doctor into the process of child raising. The prescription of the feeding regime as well as the very election of the nurse must be controlled or supervised by experts. There is hardly a text in this domain of literature that would not include this claim. ‘Only doctors are called to dictate this measure’, or, ‘never a wet-nurse can be hired without a previous medical report’ (Martínez, 1887, p. 73, p. 76).

In 1877, the civil government of the province of Madrid opened a section of Wet-nurses’ Hygiene, including the establishment of a register-book, as it was made in the twin service of Hygiene of Prostitutes (Castejón, 2001); Barcelona tried a similar bureau in 1888 (Coll, 1890). At least two private agencies, with the same aims, were active in Madrid in 1886; one of them examined and certified the health and milk conditions of circa 600 women a year (Martínez, 1887, pp. 76, 96-107). A campaign organised by Manuel Tolosa and the Spanish Society of Hygiene led to the passing of a Law for the Protection of Childhood (1904), with the ambitious aim of controlling all children “given to wet-nursing and all those who lived in institutions”, although the final influence of this legislation in health matters was scarce (Perdiguero and Robles, 2004).

Conclusion

Scientific and institutional factors acted in the process of development of medical services specialized in children, but they were accompanied in a prominent fashion by a broadly sustained social campaign of persuasive power that helped to bring people closer to certified medicine and to turn medical explanations and

practices familiar to all. The offer of services such as Milk Depots and Well Baby Clinics, including those created by social insurance programs, —insofar as they helped to make easier extra-domestic employment for women— played a crucial position in this process. Nevertheless, the underpinning ideology within this campaign was overtly gender-minded, conspiring to build a passive, harmful and subordinated image of women as far as mothers. The leading rhetoric weapon employed displayed an opposition between evil ignorance —corresponding exclusively to popular beliefs and practices, including traditional practitioners— and truth and kindness, exclusive attributes of the scientific proposals. In this way, changes and mistakes of certified medicine were concealed, as the scientific origin of many of popular beliefs and customs. Also, a curtain was drawn upon contradictions accepted by doctors between their hygienic reasoning and the attaining of their professional interests, as in the case of wet-nurses. Looking back at this strategy, it can be understood why if the medicalization campaign was born under a cover of preventive services (puericulture) of primarily educational nature, after 1958 the offer of the public schemes of social insurance forgot all about that to concentrate on diagnosis and treatment instead. Puericulture, the first regulated medical specialty in Spain, became then and afterwards a diploma for subordinate practitioners at the lowest level of health professions.

BIBLIOGRAPHY

- Aguirre y Barrio, Juan
1885 *Mortalidad en la primera infancia, sus causas y medios de atenuarlas.* Madrid: Tip. Hispano-Americana.
- Apple, Rima
1995 Constructing mothers: Scientific motherhood in the nineteenth and twentieth centuries. *Social History of Medicine*, v. 8, n. 2, p. 161-78.
- Apple, Rima
1980 To be used only under the direction of a physician. Commercial infant feeding and medical practice 1870-1940. *Bulletin of the History of Medicine*, v. 54, n. 3, p. 402-17.
- Arteche Aramburu, Ignacio
1928 *Consejos a las madres.* El arte de criar a los niños. Zarauz: Ed. Vasca.
- Asistencia sanitaria de la Seguridad Social en España, (La)*
1967 Madrid: Ministerio de Trabajo.
- Ballester, Rosa;
Balaguer, Emilio
1995 La infancia como valor y como problema en las luchas sanitarias de principios de siglo en España. *Dynamis*, v. 15, p. 177-92.
- Benavente, Mariano
1883a Errores populares. Teta y gloria. *La madre y el niño*, v. 1, p. 2-4.

- Benavente, Mariano
1883b Errores populares. Mal de ojo.
La madre y el niño, v. 1, p. 35-7; p. 69-70.
- Bernabeu Mestre,
Josep 2002a Cultura médica popular y evolución de la mortalidad: los cuidados de salud en la infancia durante la España contemporánea.
Revista de Demografía Histórica, v. 20, n. 2, p. 147-62.
- Bernabeu Mestre,
Josep 2002b Madres y enfermeras. Demografía y salud en la política poblacionista del primer franquismo, 1939-1950. *Revista de Demografía Histórica*, v. 20, n. 1, p. 123-43.
- Bernabeu Mestre,
Josep 1995 Malaltia, cultura i població: factors culturals en l'anàlisi demogràfica i epidemiològica. In: Barona, Josep L. (ed.) *Malaltia i Cultura*. València: Seminari d'Estudis sobre la Ciència. p. 153-63.
- Bernabeu Mestre,
Josep; Perdiguero Gil,
Enrique 2001 At the service of Spain and Spanish children: mother-and-child healthcare in Spain during the first two decades of Franco's regime (1939-1963). In: Löwy, Ilana; Krige, John (ed.) *Images of disease*. Science, public policy and health in post-war Europe. Luxembourg: European Communities. p. 167-86.
- Borobio Díaz, Patricio
1893 *La mortalidad de los niños en Zaragoza*.
Sus causas y sus remedios. Zaragoza: C. Ariño.
- Borrás Llop,
José María (dir.)
1996 *Historia de la infancia en la España contemporánea, 1834-1936*. Madrid: Ministerio de Trabajo y Asuntos Sociales; Fundación G. Sánchez Rui Pérez.
- Bravo Frías, Julio
1927 *Mortalidad infantil en Madrid y medios para aminorarla*. Madrid: Imp. Municipal.
- Buchan, Guillermo
1808 *El conservador de la salud de mujeres y niños*. Madrid: Imp. F. Villalpando.
- Canoura Balado,
Ramón 1925 *Principales preceptos higiénicos aplicables a la primera infancia*. Zaragoza: Talleres editoriales del Heraldo de Aragón.
- Carasa, Pedro
1997 La revolución nacional-asistencial durante el primer franquismo (1936-1940). *Historia Contemporánea*, n. 16, p. 89-140.
- Castejón Bolea, Ramón
2001 Doctors, social medicine and VD in late nineteenth and early twentieth-century Spain. In: Davidson, Roger; Hall, Lesley (ed.) *Sex, sin and suffering*. Venereal disease and European society. London: Routledge. p. 61-75.
- Cirera Sampere, Juan
1882 *Guía de las familias o sea compendio de preceptos higiénicos en relación a la mujer y al niño*. Barcelona: Est. Tip. Sucesores N. Ramírez y Cía.
- Coll y Bofill, Juan
1890 *Instituciones creadas en diversos países a favor de la infancia. Dispensarios para niños enfermos*. Conferencia pública dada en el Ateneo Barcelonés en la noche del 30 de noviembre de 1889. Barcelona: Imp. Barcelonesa.
- Comenge, Luis
1899 Estudios demográficos de Barcelona. Mortalidad infantil, 1889-93; 1894-98. *Gaceta médica catalana*, v. 22 y 24, *passim*.
- Comenge y Ferrer, Luis
c.1906 *Generación y crianza o higiene de la familia*. Barcelona: José Espasa editor.
- Criado Aguilar,
Francisco 1925 *La mortalidad en España*. Discurso leído en la sesión inaugural del curso 1925-26 en la Real Academia Nacional de Medicina. Madrid: Imp. J. Cosano.
- Criado y Aguilar,
Francisco 1918 Conferencia del Dr. Francisco Criado y Aguilar.
Pro-infantia, v. 15, p. 303.
- de Haro Oriola,
Isabel María *La educación de las mujeres como promotoras de salud en la España contemporánea*. Cambios y pervivencias. Tesis doctoral, programa

- 1999 "Estudios de las Mujeres", Dpto. Historia Contemporánea, Universidad de Granada.
- Furió y Roldán, Manuel
1881 [La lactancia mercenaria] *Discurso leído en sesión pública celebrada el día 11 de septiembre de 1881 para conmemorar el primer aniversario de la creación de la Academia Médico-Farmacéutica de Albacete*. Albacete: Imp. Provincial, p. 21-36.
- Gallego Méndez,
M^a Teresa
1983 *Mujer, falange y franquismo*. Madrid: Taurus.
- Gómez Redondo, Rosa
1992 *La mortalidad infantil española en el siglo XX*. Madrid: CIS-Siglo XXI.
- Gómez Salvo, Vicente;
Camón Gironza, Ramón
1936 *Los médicos ante el Seguro de Enfermedad*. Enseñanzas que el de Maternidad nos ha proporcionado en la Caja de Aragón, 1931-36. Zaragoza: Heraldo de Aragón.
- González Álvarez,
Baldomero
1893 *Higiene de la alimentación de los niños desde el nacimiento hasta la segunda infancia*. Lactancia y destete. Madrid: Carrión Hermanos, impresores.
- González Revilla,
Gerardo
1923 *Escuela de puericultura (cuidado de los niños) y de educación sexual*. Bilbao: Imp. Echeguren y Zulaica.
- Granjel, Luis S.
1965 *Historia de la pediatría española*. Salamanca: Imp. Cervantes.
- Huergo, Faustino
1885 *Cartilla de higiene de los niños para uso de las madres que crían a sus hijos*. 3. ed. Oviedo: Impr. Flórez Pintado y Cía.
- Jiménez Lucena, Isabel;
Ruiz Somavilla, M^a José;
Castellanos Guerrero,
Jesús
2002 Un discurso sanitario para un proyecto político. La educación sanitaria en los medios de comunicación de masas durante el primer franquismo. *Asclepio*, v. 44, n. 1, p. 201-18.
- Juarros, César
1919 *La crianza del hijo*. Madrid: Mundo Latino.
- Klaus, Alisa
1993 *Every child a lion: the origins of maternal and infant health policy in the United States and France, 1890-1920*. Ithaca: Cornell University Press.
- La Berge, Anne F.
1991 *Mothers and infants, nurses and nursing*. Alfred Donné and the medicalization of child care in nineteenth century France. *Journal of the History of Medicine and Allied Sciences*, v. 46, n. 1, p. 20-43.
- Lecciones de
Puericultura e higiene
para cursos de
divulgadoras
sanitario-rurales.
1945 Madrid: Sección Femenina de F.E.T. y J.O.N.S.
- López Cano, J.
1967 *La Obra Nacional de Auxilio Social. Evolución, situación y perspectivas*. In: *Problemas fundamentales de beneficencia y asistencia social*. Madrid: Ministerio de Gobernación. p. 91-114.
- Loste Echeto, Luis
1917 *La mortalidad infantil*. Causas que determinan su excesiva proporción. Medios de disminuirla. Madrid: Impr. San Roque.
- Lozano y Ponce de
León, Pablo
1883 *Higiene de los niños y su educación consagrada especialmente a las madres*. Madrid: Imp. Enrique Rubiños.

- Martínez y Suárez,
Fermin
1887
La lactancia bajo todas sus manifestaciones.
Madrid: R. Velasco, impresor.
- Martínez Hernández,
Ángel; Comelles,
Josep M^a
1994
La medicina popular. ¿Los límites culturales del modelo médico?
Revista de Dialectología y Tradiciones Populares, v. 64, n. 2, p. 109-33.
- Mata Lara, Ana María
1994
Control social y vida cotidiana de la mujer en la España de Franco.
In: Ramos Palomo, Dolores (coord.) *Femenino plural*. Palabra y memoria de
mujeres. Málaga: Universidad de Málaga. p. 221-32.
- Orduña Prada, Mónica
1996
El Auxilio Social (1936-1940).
La etapa fundacional y los primeros años. Madrid: Escuela Libre.
- Pascua, Marcelino
1934
La mortalidad infantil en España.
Madrid: Dirección General de Sanidad.
- Peiró y Serrano,
Francisco de Paula
1875
Ventajas de la lactancia materna. In: *Discursos pronunciados en la
inauguración de las sesiones de la Academia de Medicina de Valencia en el año
1875*. Valencia: Imp. Ferrer de Orga. p. 19-34.
- Perdiguero, Enrique
2004
Magical healing in Spain (1875-1936): medical pluralism and the search for
hegemony. In: Blécourt, Willem de; Davies, Owen (ed.) *Witchcraft
continued*. Popular magic in modern Europe.
Manchester: Manchester University Press. p. 133-50.
- Perdiguero, Enrique
1995
Popularización de la higiene en los manuales de economía doméstica en
el tránsito de los siglos XIX al XX. In: Barona, Josep L. (ed.) *Malaltia i
Cultura*. València: Seminari d'Estudis sobre la Ciència. p. 225-50.
- Perdiguero, Enrique
1993
La popularització dels coneixements científic-mèdics a la Restauració:
el cas de la premsa periòdica d'Alacant. In: Navarro, Víctor et al. (ed.)
II Trobades d'Història de la Ciència i de la Tècnica.
Barcelona: Institut d'Estudis Catalans. p. 171-80.
- Perdiguero Gil, Enrique;
Ballester Añón, Rosa
2003
Federico Rubio y el folclore médico. In: Carrillo, Juan L. (ed.) *Medicina y
sociedad en la España de la segunda mitad del siglo XIX*: una aproximación a la
obra de Federico Rubio y Galí (1827-1902).
El Puerto de Santa María, Ayuntamiento. p. 475-97.
- Perdiguero, Enrique;
Bernabeu, Josep
1999
La Gota de Leche de Alicante (1925-1940). In: Beneito Lloris, Angel et al.
(ed.) *Beneficència i Sanitat en els municipis valencians (1813-1942)*.
Alcoi: Seminari d'Estudis sobre la Ciència. p. 291-310.
- Perdiguero Gil, Enrique;
Bernabeu Mestre,
Josep
1997
Burlarse de lo cómico nacido de la tontería humana. El papel otorgado a
la población por la divulgación higiénico-sanitaria durante la
Restauración. In: Montiel, Luis; Porras, Isabel (coord.) *De la responsabilidad
individual a la culpabilización de la víctima*. Madrid: Ed. Complutense. p. 55-66.
- Perdiguero, Enrique;
Bernabeu, Josep
1995
Morir de dentición. ¿Una creencia popular? In: Arquiola, Elvira; Martínez-
Pérez, José (coord.) *Ciencia en expansión*: Estudio sobre la difusión de las
ideas científicas y médicas en España (siglos XVIII-XX).
Madrid: Ed. Complutense. p. 469-87.
- Perdiguero, Enrique;
Robles González, Elena
2004
La protección a la infancia y la Sociedad Española de Higiene.
In: Perdiguero Gil, Enrique (comp.) *Salvad al niño*.
Valencia: Seminari d'Estudis sobre la Ciència. p. 93-120.
- Pereira Pull, F.
1883
Medicina doméstica.
La madre y el niño, v. 1, p. 53-4.
- Rodríguez Ocaña,
Esteban
2006
Medicine as a social political science.
The case of Spain c.1920. *Hygiea Internationalis*. (En prensa.)

- Rodríguez Ocaña, Esteban
2001
Comodité, ornementation, hygiène. Modernisation urbaine et hygiénisme à l'Espagne du 19^{ème} siècle. In: Bourdelais, Patrice (dir.) *Les Hygiénistes: enjeux, modèles et pratiques*. Paris: Belin. p. 297-318.
- Rodríguez Ocaña, Esteban
1999
La construcción de la salud infantil. Ciencia, medicina y educación en la transición sanitaria en España. *Historia contemporánea*, n. 18, p. 19-52.
- Rodríguez Ocaña, Esteban
1996
Una medicina para la infancia. In: Borrás Llop, José M^º (dir.) *Historia de la infancia en la España contemporánea, 1834-1936*. Madrid: Ministerio Trabajo y Asuntos Sociales/Fundación G. Sánchez Ruipérez. p. 149-83 y p. 189-92.
- Rodríguez Ocaña, Esteban
1987
La constitución de la medicina social como disciplina en España, 1884-1923. Madrid: Ministerio de Sanidad y Consumo.
- Rodríguez Ocaña, Esteban; Ortiz, Teresa; García-Duarte, Olga
1985
Los consultorios de lactantes y gotas de leche en España. *Jano*, v. 29, n. 663-H, p. 1066-72.
- Rojo Prieto, C.
1895
Paralelo entre los niños de las altas esferas sociales y los niños pobres. *El Siglo Médico*, v. 42, p. 532-5 y 550-3.
- Rollet-Echalier, Catherine
1990
La politique à l'égard de la petite enfance sous la III^{ème} République. Paris: PUF/INED.
- Sáiz de Llavería, Trinidad
1914
La ignorancia de la mujer en los conocimientos de higiene y puericultura como primera causa de la mortalidad infantil. *Gaceta Médica Catalana*, v. 37, n. 1, p. 161-8.
- Salcedo Ginestal, Enrique
1898
Madre e hijo. Doctrina científica y errores vulgares en obstetricia y ginecología. Madrid: Imp. Ricardo Rojas.
- Salillas Panzano, Rafael
1905
La fascinación en España. Estudio hecho con la información promovida por la Sección de Ciencias Morales y Políticas del Ateneo de Madrid. Madrid: Eduardo Arias.
- Sánchez López, R.
1990
Mujer española, una sombra de destino en lo universal. Trayectoria histórica de la Sección Femenina de Falange, 1934-1977. Murcia: Universidad de Murcia.
- Tolosa Latour, Manuel
1903
La protección a la infancia en España. Leyes y proyectos. Madrid: Est. Tip. Ricardo Fé.
- Tolosa Latour, Manuel
1891
La política doméstica y la higiene. Discurso inaugural leído en la apertura del curso académico de 1891 a 1892. Madrid: Sociedad Española de Higiene.
- Ulecia y Cardona, Rafael
1904
Arte de criar a los niños (nociones de higiene infantil). Madrid: Administración de la *Revista de Medicina y Cirugía Práctica*. [1. ed., 1904; 2.0 ed., 1906; 3.0 ed., 1914; 4.0 ed., póstuma, 1919; reimpr. 1924]
- Ulecia y Cardona, Rafael
1903
Informe acerca de la mortalidad infantil de Madrid, sus principales causas y medios de combatirla, presentado a la Junta Municipal de Sanidad. Madrid: Impr. Municipal. [El mismo trabajo se presentó al congreso de Deontología Médica, Madrid, 3 a 5 de mayo de 1903 y fue publicado por la Administración de la *Revista de Medicina y Cirugía Práctica*]
- Valera Jiménez, Tomás
1891
Consejos a las madres. Conferencia en la Sociedad española de Higiene. Madrid: Lucas Polo.
- Vidal Solares, Francisco
1916
Consejos a las madres. Aforismos sobre puericultura e higiene de la primera infancia. Barcelona: Tipo-litografía de J. Casamajó. 1903, 1905, 16. ed. (del autor).

- Vidal Solares, Francisco
1915 *Consejos prácticos sobre higiene de la primera infancia, con un apéndice sobre enfermedades de niños.* Barcelona: Librería Puig, 1885, 1886; 1887, [Barcelona y Madrid: Librería E. Puig y Admón. Revista Medicina y Cirugía Prácticas. 1891], 1898; *Consejos prácticos sobre puericultura e higiene de la infancia, con 170 aforismos.* Barcelona: Tipo-litografía de J. Casamajó. 8. ed., 1903; *Puericultura e higiene de la primera infancia.* Barcelona: Luis Gili, librero-editor. 10. ed.
- Wolf, Jacqueline H.
2001 *Don't kill your baby.* Public health and the decline of breastfeeding in the 19th and 20th centuries. Columbus: Ohio State University Press.

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