The mass media at the service of the fight against venereal diseases and the protection of maternal-infant health (1900-50).

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História, Ciências, Saúde – Manguinhos, v. 13, n. 2, p. 113-38, Apr.-June 2006.

Focusing on posters about the protection of maternal-infant health and about venereal diseases, the article analyzes their use within the context of the health education campaigns that Spanish health institutions devised to disseminate scientific and technical knowledge, influence attitudes, and modify the behavior of the Spanish people. The study also analyzes the use of posters as a tool for attracting patients to health services. It further analyzes this craft's contribution - in conjunction with many other factors - to the construction of certain images: maternity, a healthy childhood, gender, and sexuality, all within the framework of the development of Spanish public health.

KEYWORDS: health posters; health propaganda; public health; Spain; twentieth century.

The use of images as important sources in the history of medical research is not new. However, until recent decades, historians have failed to explore its potential as a key element in historic reconstruction. Nonetheless, there is a number of examples of this type of phenomena (Dixon, 2004), including a monographic series on "picturing history" that contains publications of major interest (Gilman, 1995), and studies that refer to the world of medicine that come under the heading of visual culture (Cartwright, 1995; Treitchler et al, 1998; Sturken; Cartwright, 2001). Some of these works have dealt, at least partially, with the role of images as social representations, throughout the history of public health (Gilman, 1988; Fox and Lawrence, 1988; Jordanova, 1989). Among recent studies, iconographic representations in health education posters have received little attention despite their undoubted interest. There are other more general studies on posters and health, but the focus tends to be on pharmaceutical advertising (Helfand, 1981; Robert-Sterkendries, 1996 and 2004, Figuerola et al., 1998). In the specific case of public health posters, a number of studies have opened up the field of research (Helfand, 1990b). Some significant works have been published to date (Bernstein, 1998), while others are still in the early stages (Stein and Cooter, 2005). Other more superficial studies cover periods closer to the present (Fillaut, Garçon, 1995; Bueno, 2000).

In particular we should mention projects carried out by the National Library of Medicine (Helfand, 1990b, Boyle, 2003), and projects by the University of Amsterdam (1), the International Institute of Social History of Amsterdam, (2) the University of Kansas (3) and the University of Minnesota (4), among others. In Spain there has been specific interest in the area of posters on accidents at work. (Danger, 2002; Velasco, 2004).

At the end of the XIX Century and the beginning of the XX Century, the newly founded public health system in Spain (Rodríguez-Ocaña, 1994, 2002) became concerned with addressing collective health issues by educating the population. Not only did it use traditional media such as lectures and educational talks to spread its message, but it also employed mass media. Posters became popular early on, while it was not until the twenties, when the public health system was consolidated (Perdiguero, 2001), that new media such as radio and cinema also became widely accepted. This type of media was seen as a powerful method of spreading educational messages to broad sectors of the population. In this sense we can see that Spain followed a similar path to that of other countries (Lederer et al., 2000).

This article aims to analyse the use of health posters in the context of education campaigns designed by Spanish health institutions to spread scientific-technical knowledge, to influence

¹ Affiches Public Health. http:// dpc.uba.uva.nl/ affichespublichealth [consulted 13 February 2006]

² Tegen Rampspoed en Risico. Affiches arbeidsomstandigheden en veiligheid op de werkplek. http:// www.iisg.nl/ exhibitions/ rampspoed/index.html [consulted 13 February 2006]

³ Chinese Public Health Posters. http:// clendening.kumc.edu/ dc/cp/index.html [consulted 13 February 2006]

⁴ Social Hygiene Posters. http:// special.lib.umn.edu/ swha/exhibits/ hygiene/index.htm [consulted 13 February 2006] the Spanish population's attitudes, and to attempt to modify its behaviour. We will concentrate on posters that relate to the protection of mother-infant health and venereal diseases. Our research also analyses the use of posters as a way of attracting patients to health services, together with the contribution they made to the construction of a certain image of healthy motherhood and infancy, and seeks to reflect images of gender and sexuality in Spain's public health system.

Both of these contexts: the anti-venereal campaign and the protection of mother-infant health, coincided with health campaigns or battles related to social concerns and eugenics at the turn of the century in Spain and Europe (Davidson et al, 2001). The basic difference was that the gap between health and disease became blurred. Instead of a single concern (the patient), an entire section of the population became subject to the risk of contacting a disease by behaving in a particular way. This led to a change in public and private space. In order to guarantee a healthy society, authorities needed to control the population's private space. The beginning of what was known as Social Medicine came about through the understanding of health action in relation to the explicit mass-education component (Rodríguez-Ocaña et al, 1993 and Rodríguez-Ocaña, 1996, p. 164).

We know that the modern poster was born during the second half of the XIX century and was strengthened by the development of capitalism and the needs of commercial enterprise (Pérez et al, 2002, p. 21). There was an ancient and unusual tradition of posters in the field of bull fighting in Spain, however poster art did not arrive until the end of the XIX century (Satué, 1997, pp. 295-321). This was mainly due to the fact that competitions were organised to choose posters for commercial brands, especially in industrialised Catalonia (Eguizábal, 2002, pp. 77-80).

We also know, from a purely creative point of view, that during the early XX century the decorative style prevailed, characterising the period from the end of the XIX century to the start of the First World War. During the first years of the XX Century the historical vanguards of modern art evolved and had a major influence on the world of posters. (Piqueras, 2004, pp. 17-27). Using posters as a means of spreading propaganda during the First World War and during the Russian Revolution significantly influenced their subsequent development (Barnicoat, 1972; Gubern, 1994, pp. 184-188, Piqueras, 2004, pp. 30-35 and 70-79). As time went on they came to be considered less items of art and more technical means of communication. As the painter and symbolist poster-maker Maurice Denis pointed out in 1920: 'the important thing is to find an expressive figure that works as a symbol, which, by its shape and colour alone, is capable of attracting the attention of the multitude, of dominating the passer-by. The poster is a flag, an emblem, a sign: in hoc signo vinces' (Barnicoat, 1972, p. 49). Designed to attract attention and rapidly communicate a message, the aim of the poster was to persuade, sell, convince, and change a person's behaviour.

In the case of Spain the arrival of posters coincided with a strong desire to embrace modernity, to follow Europe, to adopt European life-styles and the aesthetic trends which had triumphed there. This motivation characterised the beginning of the XX century in Spain, where the poster became a path to modernisation (Piqueras, 2004, pp. 27-30).

Posters became a powerful method of moulding pubic opinion. They represented the earliest means of showing the same image to a lot of people. Thus they represented a basic means of social persuasion, and were used by both advertising authorities and political parties (Gubern, 1994, pp. 195-212; Clark, 1997; Brihuega, 2002; Art i solidaritat, 2003.). The success of posters in both of these fields led to the study of their usefulness in terms of modifying public opinion and improve health practices (Helfand, 1990a). As in the case of political posters, the objective of health posters was to transmit information simply and easily, ensuring complete comprehension on the part of readers and those who could not or did not have enough time to read short texts (Berstein, 2001, p. 96). We should bear in mind that the difference between this and other types of selectively chosen message is that posters are more popular because the entire population in their surroundings are targeted by them, and visual consumption does not depend on the free will of the consumer any more.

One of the methodological problems we must consider as regards any analysis of health posters is the context in which they were studied. As an analytical tool we will use a model that studied visual culture (Jordanova, 1990, p. 98), in relation to the three meanings of the term 'context': that is, the context of production (in this case, the set of circumstances under which organisms promoted the creation of posters), secondly, the context of presentation (the way posters appeared to the public, their content and meaning, both real and symbolic) and finally the context of consumption - the most difficult to measure.

The first health posters

The predecessors to the institutional health poster in Spain were the edicts issued by public and health authorities on issues related to health. The first health posters, like these municipal bills, were typographical and were produced in black and white. The information, which was intended for public spaces, referred to preventive health measures relating to epidemics and environmental hygiene matters (rubbish, human waste, animals, etc.) and did not contain illustrations. In 1870, the Mayor of Barcelona asked the citizens of the city to adopt a series of preventive measures that he summed up in the words "cleanliness, disinfection, peace of mind" in the context of a yellow fever epidemic.

Before the First World War there were some isolated examples of health posters. A famous example is the well-known poster by Ramón Casas: 'Syphilis. Absolute and Radical Cure in the Sanatorium for Syphilitics...' from 1900 (Figure 1), whose primary objective was communicative but which also contained specific information on the disease and how it was transmitted. The poster reflected images of the fear and consequences of prostitution, as did Félicien Rops in his work entitled *Syphilitica* and Edvard Munch in *Inheritance*, reflecting the consequences of syphilis (Bornay, 1990).

It seems that the first posters appeared in Catalonia and coincided with the modernisation of posters in Spain at the end of the XIX century (Satué, 1997, p. 301). Around 1918, Francisco de Asis Galí (1880-1965) (Satué, 1997, p. 315) created a poster for Barcelona's Laboratori Provincial d'Higiene entitled Per higiene, per estètica, per comoditat, per dignitat. Guerra a les mosques, (For hygiene, for aesthetics, for comfort, for dignity. War on flies), an 80 x 58 cm chromolithograph that popularised and spread the message that flies can transmit diseases. The poster showed death grabbing a child in its right hand, holding a plate of food surrounded by flies in its left: a series of swallows surrounded the figures, catching the flies in flight. The same author also produced a poster on infant hygiene as part of the institution's propaganda work. Around this time, the Town Council of Barcelona approved the printing of a health poster by the Academia de Higiene de Cataluña also referring to '... the



Figure 1 – Poster advertising Dr. Abreu's sanatory for patients with syphilis, 1900. Ramón Casas (1866-1932)

urgent need to destroy flies, as it has been clearly shown that they transmit and propagate very serious diseases like cholera, typhus, infant diarrhoea, TB, dysentery, smallpox, etc'. Another important factor was the propaganda drive by the Servei de Sanitat mounted by the Mancomunitat de Catalunya (the first autonomous government of Catalonia) in the last five years of its term (1920-1924), which was based on an incipient malaria research service set up in the Secció de Ciències of the Institut d'Estudis Catalans, and run by Gustavo Pittaluga, and other organisms in the same institution. Despite the limited nature of the initiative, all the health issues the Mancomunitat addressed had a propaganda budget. In addition to a series of publications focusing mainly on malaria (Bernabeu, 1998), various posters were produced (Mancomunitat de Catalunya, 1923, pp. 96-110) recommending anti-flu hygiene measures, indicating anti-malaria measures, and announcing the start of the Servei's antituberculosis work, under the direction of Ramón Casas (Giralt, 2005). The anti-flu epidemic poster of October 1918, which the Institut d'Estudis Catalans published, described the personal hygiene measures people were advised to adopt to avoid contacting the disease, as well as measures that reduced the danger of the patients for those taking care of them. This example is particularly significant, as the special circumstances in which the health measures of the incipient autonomous actions of the Mancomunitat were carried out meant that they complemented the health and social measures of the central state (Balcells et al., 1996, pp. 369-371). In this context health propaganda was deemed extremely important, however the central state failed to develop it to any significant degree. We should point out that posters were used to combat malaria throughout Spain but we do not have precise details on their production background, apart from the fact that they were sent to all parts of the country in large numbers (Rodríguez-Ocaña et alli, 2003, p. 195).

The twenties: propaganda becomes institutionalised. Posters from the public anti-venereal propaganda office

The earliest institutionalisation of health propaganda action took place during the fight against venereal disease (Castejón, 2001a, pp. 176-207). The coercive strategies designed to combat venereal diseases – measures to control and treat the infected - were not governed by legal regulations in Spain until 1930, when the 'bases for the prophylactic reorganisation of the anti-venereal struggle' were created. These coercive strategies co-existed alongside the development of other voluntary strategies from the end of the 1920s, and when the II Republic was established in 1931 the latter found a more receptive political climate. The development of treatment programmes was also accompanied by individual prophylaxis measures, anti-venereal propaganda and anti-venereal sexual education (Castejón, 2001b). In 1928 the Anti-venereal Executive Committee, a central organism dedicated to the fight against venereal disease, declared: 'we have clearly managed to communicate that wiping out syphilis is not only a question of science, but a question of culture'. It continued: 'In addition to prophylactic treatment, health propaganda should appear in all types of media, advice, cinema, posters, radiotelephony lectures, leaflets, drawings, etc.'. Effectively, until the end of the twenties the official anti-venereal body failed to organise a specific health propaganda campaign. However, there were individual experiences, mainly lectures in clinics, arts and science associations, work meetings, etc. – normally organised by doctors of venereal prophylaxis-, and there was also the military experience.

However, it was not until 1924 and 1928, when the Azúa Clinic and the Martínez Anido Clinics opened in Madrid, that propaganda for anti-venereal activities began in an organised way. In the latter, Julio Bravo, a dermatologist who was trained in several European countries and in North America (Domínguez, 1999 and 2002), managed the centralisation of all affairs relating to antivenereal propaganda in the form of an office (Anti-venereal Executive Committee, 1928). In 1929 the office published and distributed 18,000 posters and organised a poster exhibition with posters from other countries. It also made a fictional documentary film called La Terrible Lección (The Terrible Lesson) (Minguet, 1997; Castejón, 2001a, pp. 188-192; Elena, 2002, pp. 65-69). The Anti-Venereal Executive Committee's office was the first of its kind that was specifically devoted to the issuing of health propaganda in Spain. This office was the first in Spain, as far as we know, devoted specifically to health propaganda, and came to influence the creation in 1931, under the new Republic, of a Social Hygiene and Propaganda Department within the General Health Board (Castejón, 2001a, p. 176).

However, the Anti-Venereal Executive Committee was distributing posters referring to the anti-venereal struggle at least as early as 1927, when a competition was convened to choose suitable posters. That year, prizes went to the posters *Detrás de la cortina de la ilusión* (Behind the Curtain of Illusion), *La oferta peligrosa* (A Dangerous Proposal) (Figure 2) and *Ciego de amor* (Blind by Love), which warned of the dangers of 'venereal pleasures'. The first two contained the same message as Ramón Casas' poster *Syphilis*: showing the path of *femmes fatales*. The first (*Detrás de la cortina de la ilusión*) reflects the style of the twenties, while the other (*La oferta peligrosa*) presents a notable end-of-century artistic influence, which after its carnal content, then shows Death in the

background. Bornay has synthesized these images in the equation: woman-vice-disease-death (Bornay, 1990, p. 256). The images these posters present established a connection between the transmission of venereal diseases and sexually dangerous women (Berstein, 2001, p. 102).

Throughout 1928 Julio Bravo continued to produce text and composition for posters. 'A Spanish Gentleman', 'Don't live in the Dark', 'Your Health is not only Yours', 'Do You Want to Increase Your Income?', 'Strength is a Smile' and 'Spain Needs Strong Healthy Men'; all had the following text at the bottom of the poster:

'If you have, or you think you have a venereal disease, consult a competent and trustworthy medical specialist immediately, and if you lack funds remember that the State will not let you down.



Figure 2 – A Dangerous Proposal. Manchón. Winning poster of the 1927 contest, Antiveneral Executive Committee

The Azua Clinic, Segovia, 4, and the Martinez Anido Clinic, Sandoval, 5, are model institutions of their kind and offer you free medical care paid for by the State'.

These posters tackled a broader range of issues than in 1927, and their vision was not limited to warning men about the risks of visiting prostitutes or "fast" women. Julio Bravo was educated in the U.S., where anti-venereal propaganda was wide-ranging and the campaign demanded self-control as a moral and patriotic duty (Brandt, 1987). The topic of these posters centred on the man's responsibility and obligation to take care of his family, society and race. This obligation was reflected in the poster 'Your Health is Not Only Yours', which showed a man's wife and child as innocent victims of potentially irresponsible behaviour. As in the film La Terrible Lección, the images used in the posters were quite explicit in terms of their moral tone. The moral position was constructed in terms of sexual habits concerning the debate about the body, health, the health of the nation and race (Kuhn, 1985, p. 102). As indicated by Soviet anti-venereal posters, the central role of gender in the representation of good and bad health is common, as is the figure of the dangerous single woman (Berstein, 2001, p. 94).

The posters included very Spanish themes like the Spanish Gentleman, who is asked to: '...strive to earn the title he is given, without par', and to 'respect women as he respects his sister'.

References to the economic value of a person's health also appear: 'Increase your body's productivity', 'Invest your money in health and you will reap the positive rewards'; as well as allusions to activities helping people abstain from sex: 'Alternate work and recreation', 'Join a sports club', within the context of an evaluation of physical vigour and strength: 'Improve your strength', 'Sooner or later victory comes to the strong'.

Self-control, innocent and honest fun, and physical education were the necessary conditions for sexual abstention. These new values were emphasised in order to break the double sexual standards that approved different sexual behaviour for the two sexes. This new stance was fiercely defended by abolitionists and relied on the support of the feminists. In 1929 Clara Campoamor expressed the support of the feminists during a series of lectures on venereal prophylaxis at the Martínez Anido Clinic:

'Nothing can match medical intervention, not only because it provides optimal scientific care, but because the doctor can also make mistakes, if he or she limits his or her care to communicating the message that indolent hygiene is dangerous, and by drawing away from the notion of moral responsibility that does not oppose scientific disclosure, but on the contrary, is necessary to facilitate understanding among our youth, to whom the message is directed, and who have the right to be healthy and pure' (Campoamor, 1929).

Intruders, who were represented as vampires in posters were another object of attention in the fight against venereal disease: 'it is not the disease that kills, it is ignorance', 'Do not ask for advice about your illness from people who do not know anything about medicine' and 'Do not try to cure yourself with blood depuratives', were all messages that aimed to do away with the custom of selfcures and the entry of unqualified people into the profession.

The composition of Julio Bravo's posters, as stated above, was characterised by an adherence to the figurative poster tradition and lack of artistic interest. These propaganda posters played an important role in the rise in demand for services among the population. It was clear that the anti-venereal services available were being under-utilised – due to a social perception that there was a strong link between prostitution as well as the moral considerations surrounding the disease. In this context, posters were used as a tool to increase demand. Some doctors involved in the anti-venereal struggle accomplished their objective, at least in part. In 1930, Eduardo de Gregorio from the Saragossa clinic stated, in relation to the rise in demand for services:

'This rapid increase was due to the positioning of anti-venereal propaganda posters, which the Executive Committee was astute enough to distribute to all Health Inspections Offices in Spain; we, more than anyone else, have been able to appreciate the efficiency of this type of prophylactic propaganda' (García-Serrano, 1930).

Health posters during the II Republic

Not until the beginning of the 1930s and the Republican victory did the public health services consolidate (Atenza et al., 2002) and begin to place greater emphasis on health campaigns. The importance of the propaganda task, even before the Republican victory, can be seen in the work of the Escuela Nacional de Sanidad (National School of Health), once it was re-launched in 1930, where Medical Officers had their education (Bernabeu, 1994). One of the subjects students had to pass was expressively entitled: 'Museum, iconography, propaganda and spreading health culture' (5). The fact that it was included in the curriculum of future public health specialists was clear evidence of the importance granted to this area. As part of his or her job, every public health specialist had to consider the need to connect with the population and make them aware of relevant health messages in order to prevent disease and improve health.

⁵ Royal Order dated 14 October 1930 (*Gaceta de Madrid* of 21 November 1930).

Interest in health propaganda beyond the area of venereal disease crystallised on 13 October 1931 with the creation - within the General Health Board - of a Social Hygiene and Propaganda Department, which oversaw all the propaganda action taking place within the framework of different health campaigns. The purpose of creating a separate department signalled the need for '[...] firstly a suitable body of experts and secondly a management body capable of dealing with issues affecting public health, including social hygiene, alcoholism, venereal diseases, sexual diseases, cancer, etc. and with the scientific and administrative convenience/power of investing a department with the responsibility for personal and public hygiene propaganda. This Department hardly existed due to the lack of organisation, but it was an element of maximum importance in the development of a technical-medical programme [...]'. Julio Bravo was appointed Medical Chief of the service, on the bases of his experience in the area of anti-venereal propaganda (6).

During the years that followed, and in advance of the civil strife, the organism promoted poster competitions and made it obligatory for commercial screening halls to run health propaganda films, as testified by a new norm (7). A series of health propaganda posters was distributed to advertise the struggle against infant mortality and an entire series of material was published (stamps, post cards, posters, leaflets, instructions) to inform the public of matters relating to mother-child health. To our knowledge, posters published with and without the help of the department covered other issues including: tuberculosis, mental hygiene and the prevention of work accidents. During the war, some posters were published, though they were not targeted towards the soldiers, promoting the use of anti-venereal services: 'Venereal and skin diseases are scientifically cured free of charge in State clinics'.

One of the main policy goals of the Republican health authorities was the formalisation of infant care and its extension to rural areas. When the Propaganda Service was launched in 1931, an Infant Hygiene Department was set up within the General Health Board, whose services initially developed at the provincial level and later, in an irregular way, in Secondary Rural Hygiene Centres at a regional level. This body set up a mobile infant hygiene service. These advances reflected one of the Republic main health objectives for the State which was to combat infant mortality (Rodríguez-Ocaña, 2001).

The medical press gave official health propaganda against infant mortality a good reception. The press considered this type of propaganda to be effective in terms of reaching the population of the capital (Morales, 1932; Pando, 1932). In addition to initiatives run by the central propaganda body, there were others that need more detailed local studies. One example is the School of Childcare of

⁶ The Decree was published in *Gaceta de Madrid* on 14 October 1931.

⁷ Order dated 27 April 1933 (*Gaceta de Madrid*, 2 May 1933). Valencia. In association with the Infant Hygiene Department of the Provincial Hygiene Institute of Valencia, it distributed information throughout the province via travelling lectures on childcare that showed the film *Valencia*, *protectora de infancia* (Valencia, Protector of Children) (Perdiguero et alli, 2006), which organised 'A Day of Struggle Against Infant Mortality' on 20 October 1932. This event involved a series of acts aimed at reminding the population of the importance of promoting infant health. The success of the first edition led to a second event a year later, which had a greater propaganda effect. The posters published by the General Health Board and the Infant Hygiene Department completely covered the Valencian capital, urging the population to comply with children's rights (Barona et al, 2000).

The School of Childcare of Valencia convened a poster competition in April 1930. The winning entries were used in the Infant Hygiene Booklet published by the institution and in other educational materials produced by the Valencian school.

Likewise, in Catalonia the main pre-war issue was the struggle against infant mortality. In addition to the health propaganda of the health and social services of the Generalitat (the autonomous government of Catalonia) in relation to tuberculosis and leprosy, it was Segell Pro-Infancia institution which was the most active in the field of propaganda. Segell Pro-Infancia institution was founded in 1933 under the aegis of the Generalitat, to imitate what other countries in Europe were doing based on the Danish model of 1904. The Danish example consisted of raising funds by selling stamps over the Christmas period. To raise more funds, the institute published posters throughout the four campaigns between 1933 and 1937. These posters were chosen in competitions in which some of the best Catalan poster artists took part, as testified by the poster used in the 1935 campaign by Josep Morell, one of the most famous artists of the time (Martí, 2002) (Figure 3). Posters were distributed in proportion to the number of inhabitants in each town. A short silent film was produced in 1935 to promote the sale of segells (stamps). The film message tackled the need to fight infant mortality in order to create a populous and prosperous Catalonia. Moreover, two posters with advice on child hygiene were distributed among Catalan schools (Perdiguero et al., 2004).

What kinds of images were used in the posters depicting infant mortality? As to be expected, they were not unlike those that had been used previously in the process of persuasion (as described in a separate article in this issue), and were aimed at placing children's health in the hands of new specialists, employed for this particular purpose. The drama of infant mortality was presented in histograms illustrating infant mortality with coffins. They showed Spain's flagging position in relation to the rest of Europe as well as the improvements that could be made. Another poster sought dramatic effect by showing a child in a very poor state of health as a result of not being breastfed. The topic of breastfeeding was extremely important. The health of the children of the nation depended, as one poster stated, on the notion that nutrition passed 'from the breast to the lips'. In fact breastfeeding was also the subject of the image and text of the winning posters in 1933. The winner of the first prize was the illustrator Serny (1908-1909), whose entry showed a mother breastfeeding her child, followed by the caption:



Figure 3 – Poster used in the 1935 Pro-Infantia Stamp Campaign. Josep Morell (1899-1949)

'The best way of preventing young babies dying is mother's milk'. The second placed poster created by Ruiz and Moyano, underlined other basic themes in the fight against infant mortality: the need for medical supervision. In comparison to the goodness of mother's milk, artificial feeding was presented as the source of all evil in various images showing both babies' bottles and flies. Every element of social persuasion was aimed at imposing the point of view of experts. Perhaps it is worth emphasizing that Republican posters show images of working class women (Figure 4), far removed from the values of the middle classes who tended to dominate discussions on maternity and the domestic environment at the time and clearly far removed from the sophisticated and modern women appearing in the illustrated magazines (Pérez, 1997). These images were certainly not as powerful as those that appeared during the war, showing female members of the militia the exception rather than the rule – (Nash, 1999, pp. 90-99).

As in the anti-venereal campaign, an important objective of antiinfant mortality health propaganda was to encourage the population - in this instance, mothers - to use infant hygiene services. From a political point of view, the authorities wanted to present the development of these tools as part of the II Republic health policies. Some wartime examples were the posters featuring headlines like: 'PREVIOUSLY thousands of children died in maternity wards: sons of workers, farmers and employees. TODAY the Republic takes care of mother and child' published in Madrid by the Undersecretary of Propaganda in 1938 (Figure 5) and 'Before the Republic there was no infant hygiene service', published in Barcelona by the Ministry of Public Education and Health, probably in 1938. Despite the importance of posters as a means of spreading messages and propaganda during the Civil War, we have decided not to enter the discussion of health propaganda used during this period. Such an issue is important enough to warrant more in-depth attention than this study can offer. However, we should reiterate that as regards the structure of Republican posters from the Civil War period, that is, Republican-produced posters, many continued to reflect the experimental and multidisciplinary nature of the vanguards of the 1920s and 1930s. This positioning, within the borders of the most modern design, was a unique characteristic of Spanish posters during the Republican period. In fact one particular author has coined this period 'the decade of design' (Satué, 2003). This practice was cut short by the defeat of the Republic.

Health posters during Franco regime: an end to the 'vanguards'

It is not our intention to perform an in-depth study of health posters during Franco regime, although such a study is still pending. We simply want to record the contrast between the posters published during the period prior to the Civil War and the new regime, given that the work it performed was directly opposed to what Republicans had previously done.



Figure 4 – One of the posters distributed by the General Health Board to fight against infant mortality

The winning side chose to create a service that would deal with all health propaganda, which was of considerable importance, as in the case of any totalitarian regime (Pizarroso, 1993, pp. 356-357). A decree issued on 28 May 1938 organised an 'Information and health propaganda service' to concentrate on '[...] moulding the public's health awareness [...]'. This service was designed to tackle infant mortality, which persisted, as the decree explained,



Figure 5 – Poster published by the Undersecretary of Propaganda in 1938, in Madrid

'[...] through negligence, ignorance, non-trained public opinion, and because health problems were considered academic and beyond popular understanding [...]'. The aim was to use any kind of propaganda, from traditional discussion and lectures to cinematic films. Propaganda would cover all health matters, especially information relating to motherhood, childcare, pre-school and school-age children, infectious diseases, sexual hygiene, mental health, nutrition, employment, and urban and rural health matters. Other issues covered were tuberculosis, physical education, malaria, trachoma, leprosy and hookworm. The regulations of the Service were published shortly afterwards (31 May 1938).

The importance of propaganda, in relation to the focus of interest of this article, continued with the passing of the Law of Infant and Mother Health. This law governed the important role of institutions under the control of the National Movement (the Francoist political organization) in a context of political indoctrination, which various authors have already discussed (Bernabeu et al, 2001, pp. 167-186; Bernabeu, 2002; Jiménez et alli, 2002). The Falange and the Sección Femenina were to play a significant role in essential propaganda activities under the new regime's populist ideology.

We should also point to some of the elements of the 'Mother and Child Propaganda Plan' (Yturriaga, 1943), which was presented at the First Annual Meeting of Childcare Doctors of the State, in 1943. The plan was ambitious in the sense that it advocated that women be obliged to report their pregnancies to facilitate stricter control of all pregnant women in Spain. The plan also involved the opening of clinics and health centres to provide correct medical care. It was interesting in the sense that it gave a certain overview of what was to be done and offered a clear indication of the new ideological context.

The following passage describes how propaganda progressed under the new regime:

'[...] To foresee, as a primordial condition, an adaptation, a symbiosis between chosen propaganda procedures and our racial psychological characteristics, of which exemplariness has a place of honour [...].' (Yturriaga, 1943, p. 84).

Julio Bravo, who by now was once again Head of the Propaganda Department of the General Health Board (Yturriaga, 1943, p. 92), had advised of this years before (Bravo, 1928) and returned to the issue in his short work on health propaganda. (Bravo, 1951, pp. 8-9).

As far as results were concerned, and in addition to the systematic or more discreet disregard of the work of the Republic, his assessment of the achievements of what he described as the '[...] cornerstone of propaganda: the Health Instructor [...]' was

not very flattering. (Yturriaga, 1943, p.85) He also noted how cinema had scarcely been used to spread health propaganda. Later on, NO-DO newsreels played a more central role in spreading propaganda about the regime's health successes (Medina et al., 2005). One certainty was that the new regime continued to invest most of its resources in pictures, leaflets, postcards, hallelujahs and posters in later years, despite the author doubting their immediate effectiveness and regardless of the difficulties involved in making them. It was said:

[...] In our opinion the most effective method is to present a natural realist picture - avoiding impressionist futurist paintings that show figures that are out of proportion, deformed and even monstrous, which offend our most sensitive artistic fibres. Motherhood for example, a matter which has been handled countless times in lots of ways, demands goodness, pure lines and even romanticism, which is at clear odds with these audacious pictorials that fortunately tend to fall into disuse [...]' (Yturriaga, 1943, p. 95).

Much trust was also invested in travelling childcare exhibitions and Julio Bravo was involved in an advanced project.

The propaganda ideas were captured in a series of posters that were far from vanguard, and which the Propaganda Section of the General Health Board published at the end of the 40s. The photographs used were chosen by means of a specially convened competition. They tackled the same issues as Republicans, but this time there was no interest in presenting images of working women. Instead, the images reflected smiling, blond babies with captions such as 'First Steps', 'First Teeth', 'Children Should Sleep in their own Cots', 'Bath Children Every Day'. These posters tended to hide rather than reflect reality. However, not all posters lacked artistic interest. A poster with the caption: 'Breast-feeding. The most effective way of fighting infant mortality' (Figure 6) dated 1949, was produced by Morell, who was praised earlier for his *Segell Pro-Infancia* poster.

Even though the composition of these posters resembles all the references made to breastfeeding –a mother breastfeeding her childthey merit special mention for their artistic quality and the counter position they present. They communicate the positive value of breastfeeding, highlighted by the tenderness of the maternal image, compared to the negative value assigned to artificial feeding, reflected in the branded baby's bottle surrounded by flies. Technically speaking, these posters stood out on account of the photomontage techniques used to create them '…exposing the risks of artificial feeding…'. Likewise they used a type of poster known as 'hallelujahs' to '…instruct children about basic hygiene matters and the dangers of traffic' (Bravo, 1951). We do not need to stress that posters from the Franco period strongly reinforced the moral and social value assigned to women as mothers, investing health propaganda with a clear ideological content and making it an instrument of a wider political project.



Figure 6 – Poster published by the Section of Propaganda of the General Health Board in 1949. Josep Morell (1899-1949)

Conclusion

Health education posters represented the first major opportunity for authorities to communicate health messages to a large number of people via images. This opportunity was utilised in several areas and was marked by the Republican government's emphasis on public health. The posters analysed herein should be mentioned in the framework of the period in which they appeared, and thus in relation to the particular ideologies of each, which tended to reinforce the message of certain health-related behaviour beyond the context of the social and economic determinants. According to the messages, propaganda was designed to communicate to the population that the ideal of living a healthy life could be attained regardless of the social and economic situation of the population. This ideal of health was also a sign of modernity, which was a characteristic of the period: efficient, rational, and scientific.

Making the victim responsible for his of her health seems to undercut many of the messages and in this respect there is little difference between propaganda produced from one period to the next, reflecting different political stances, in the fight against venereal diseases and infant mortality.

Ignorance, especially among mothers, was portrayed as the cause of infant mortality. This message appeared in much of the antiinfant mortality propaganda. Mothers were deemed responsible for infant mortality, and breastfeeding was depicted as a basic way of combating infant mortality and was a basic element in the images used in these posters. The way mothers and children were depicted varied. The Republican period was more successful in terms of the quality of posters, and vanguard art was employed to the benefit of health education.

The image of the baby's bottle and all the dangers it implied, was a counter image to the breastfeeding mother. Besides this pairing, which most of the posters captured, posters communicated the need for medical guidance in all matters relating to motherinfant health, which represented another extremely important and powerful ideal (Waters, 1987, pp. 65 and 89-91). Experts gained ground that was previously dominated by women or social support networks, thus helping to achieve hegemony in the health area.

The images used in the venereal campaign were quite explicit. The moral position was constructed in terms of sexual practices; so for example, women were depicted in clearly differentiated ways. They appeared either as the source or the transmitter of the diseases or as receivers. Women were assigned this image, based on deviations from the dominant sexual norm, that is, sexual morality. A female taxonomy was established and it divided women into mothers and wives, or victims of disease, and on the other hand, women of 'easy' or active sexual conduct and prostitutes, who were linked to the cause and depository of disease and its transmission to men (Berstein, 2001). Thus health and morality, illness and immorality appear closely linked. At the same time posters showed the eruption of the idea of male moral responsibility, which is linked to 'healthy' sexual behaviour in Spain in the twenties.

This idea contributed to the construction of a new masculine sexuality that was self-controlled and responsible, which feminists had been demanding in order to confront the consequences of 'uncontrollable' masculine sexuality, including the high rate of venereal disease.

Posters used to fight anti-venereal diseases reflect the scientificmedical debate on sexual health and gender. They allowed us document the changes that were taking place in relation to masculine sexuality and the dichotomy of the representation of female sexuality based on its attachment to morally sanctioned sexual practice.

We are unable to draw any conclusions as regards consumption. However, some accounts (Morales, 1932; Pando, 1932; García-Serrano, 1930) indicate that the view held by certain professional sectors was that propaganda was effective: especially in the case of the anti-venereal campaign aimed at attracting the population to health services. We do believe, nonetheless, that the images analysed enable us to understand how health propagandists sought to transmit certain messages in a particular way.

BIBLIOGRAPHY

Art i solidaritat	Els pintors espanyols i el cartelisme sociopolitic.
2003	Valencia: Patronat Martínez Guerricabeitia.
Atenza, Juan; Martínez	El Centro Secundario de Higiene Rural de Talavera de la Reina y la sanidad
Pérez, José (ed.)	española de su tiempo.
2001	Toledo: Junta de Comunidades de Castilla – La Mancha.
Ballcells, Albert; Pujol, Enric; Sabater, Jordi 1996	La Mancomunitat de Catalunya i l'autonomia. Barcelona: Proa.
Barnicoat, John	<i>Los carteles.</i> Su historia y su lenguaje.
1972	Barcelona: Gustavo Gili.
Barona Vilar, Carmen; Martínez Pons, Manuel 2000	La lotta contra la mortalità infantile nella provincia di Valencia nel quadro della Seconda Republica (1931-1936). In: Pozzi, L. y. Tognotti, E. <i>Salute e malattia fra '800 e '900 in Sardegna e nei paese dell'Europa Mediterranea</i> . Sassari: EDES, p. 293-307.
Bernabeu Mestre, Josep 2002	Madres y enfermeras. Demografía y salud en la política poblacionista del primer franquismo, 1939-1950. <i>Revista de Demografía Histórica,</i> v. 20, n. I, p. 123-43.

Bernabeu Mestre, Josep 1998	Cultura, ciencia y política: la lucha antipalúdica en la Cataluña de la Mancomunidad, 1914-1924. <i>Medicina e Historia</i> , v. 73, p. 5-28. (Tercera época.)
Bernabeu Mestre, Josep 1994	El papel de la Escuela Nacional de Sanidad en el desarrollo de la salud pública en España. <i>Revista de Sanidad e Higiene Pública,</i> v. 68, p. 65-89.
Bernabeu, Josep; 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, I.; Krige, J. (ed.) <i>Images of disease</i> . Science, public policy and health in post-war Europe. Barcelona: European Communities. p. 167-86.
Berstein Frances 2001	Visions of sexual health and illness in Revolutionary Russia. In: Davidson, R.; Hall, L. A. (ed.) <i>Sex, sin and suffering</i> . Venereal disease and European society since 1870. London/New York: Routledge. p. 93-119.
Berstein, Frances 1998	Envisioning health in Revolutionary Russia: The politics of gender in sexual-enlightenment posters of the 1920s. <i>The Russian Review</i> , v. 57, p. 191-217.
Bornay, Erika 1990	<i>Las hijas de Lilith.</i> Madrid: Ed. Cátedra.
Boyle, Eric s.f.	<i>Visual culture and public health posters</i> . Disponible en: www.nlm.nih.gov/ exhibition/visualculture/vchome.html, consultado el 7 de febrero de 2006.
Brandt, Allan M. 1987	<i>No magic bullet</i> : a social history of venereal disease in the United States since 1880. New York: Oxford University Press.
Bravo, Julio 1951	Algunas consideraciones sobre propaganda en general y propaganda sanitaria en particular. Madrid: Dirección General de Sanidad.
Bravo, Julio 1928	Algunas consideraciones sobre propaganda sanitaria. <i>Ecos Españoles de Dermatología y Sifiliografía,</i> v. 4, n. 31, p. 487-96.
Brihuega, Jaime (ed.) 2002	Arte y política en España, 1898-1939. Granada: Instituto Andaluz del Patrimonio Histórico.
Bueno Cañigral, Francisco J. (ed.) 2000	Carteles de salud pública de la comunidad valenciana. Valencia: Conselleria de Sanitat, Dirección General de Salud Publica.
Campoamor, Clara 1929	Protección social a las menores. Dispensario Martínez Anido (curso de 1928 a 1929). Ciclo de conferencias de profilaxis venérea. <i>Ecos Españoles de Dermatología y Sifiliografía</i> , v. 4, n. 1, p. 335-60.
Cartwright, Lisa 1995	<i>Screening the body</i> . Tracing medicine's visual culture. Minneapolis: University of Minnesota Press.
Castejón, Ramón 2004	Las enfermedades venéreas y la regulación de la sexualidad en la España contemporánea. <i>Asclepio</i> , v. LVI, n. 2, p. 223-41.
Castejón, Ramón 2001a	<i>Moral sexual y enfermedad</i> : la medicina española frente al peligro venéreo (1868-1936). Granada: Universidad de Granada-Instituto Alicantino de Cultura 'Juan Gil-Albert'.
Castejón, Ramón 2001b	Las enfermedades venéreas: Moral y sexualidad en la medicina social española. In: Atenza, J. y Martínez, J. <i>El Centro Secundario de Higiene Rural</i> <i>de Talavera de la Reina y la sanidad española de su tiempo</i> . Toledo: Junta de Comunidades de Castilla – La Mancha. p. 149-71.
Clark, Toby 2000	<i>Arte y propaganda en el siglo</i> XX. La imagen política en la era de la cultura de masas. Madrid: Akal.

Comité Ejecutivo Antivenéreo 1928	Algo de su labor en la lucha contra las enfermedades venéreas. Dispensarios y sifilocomios. Madrid: Imprenta Clásica Española.
Danger 2002	Colección de carteles de prevención de accidentes laborales (1925-1937) del ANC. Barcelona, Viena.
Davidson, Roger; Hall, Lesley A. (ed.) 2001	Sex, sin and suffering. Venereal disease and European society since 1870. London/New York: Routledge.
Dixon, Laurinda S. (ed.) 2004	<i>In sicknes and in health.</i> Disease as metaphor in art and popular wisdom. Newark: University of Delaware Press.
Domínguez Lasierra, Juan 2002	María de Montblanc. In: Bravo, J. <i>María Bellesguard</i> . Zaragoza: Prames. p. 9-31.
Domínguez Lasierra, Juan 1999	Acerca de la vida y obra de Julio Bravo Sanfeliu. In: Bravo, J. <i>El contemplanubes y otros filósofos menores.</i> Zaragoza: Institución Fernando el Católico. p. 9-34.
El cartell en les institucions de la Catalunya Autónoma 1985	Barcelona: Departament de Cultura de la Generalitat de Catalunya.
Elena, Alena 2002	<i>Ciencia, cine e historia</i> . De Méliès a 2001. Madrid: Pirámide.
Eguizábal, Raúl 2002	Carteles del siglo XIX en la Biblioteca Nacional. In: <i>Memoria de la seducción</i> . Carteles del siglo XIX en la Biblioteca Nacional. Madrid: Ministerio de Educación, Cultura y Deporte. p. 33-304.
Figuerola, Iris; Salgado, Isabel; Borrell, Àngels 1998	Els cartells del Museu de la Farmacia Catalana. Barcelona: Universitat de Barcelona.
Fillaut, Thierry; Garçon, Jack 1995	<i>Quand la santé publique s'affiche</i> : 1945-1995, 50 ans, 50 affiches. Rennes: ENSP.
Fox, Daniel M; Lawrence, Christopher 1988	<i>Photographing medicine</i> : Images and power in Britain and America since 1840. New York: Greenwood Press.
García-Serrano, Gregorio 1930	Profilaxis antivenérea. Memoria anual del servicio clínico en el dispensario antivenéreo. <i>Ecos Españoles de Dermatología y Sifiliografía,</i> v. 5, n. 52, p. 195-218.
Gilman, Sander L. 1995	Health and illness. Images of diference. London: Reaktion Books.
Gilman, Sander L. 1988	<i>Disease and representation</i> : images of illness from madness to Aids. Ithaca/London: Cornell University Press.
Giralt Miracle, Daniel 2005	Ramón Casas y el cartel. V alencia: Muvim.
Gubern, Román 1994	<i>La mirada opulenta.</i> Exploración de la iconosfera contemporánea. 3. ed. Barcelona: Gustavo Gili.
Helfand, William H. 1990a	Art in the service of public health: The illustrated poster. <i>Caduceus</i> , v. VI, p. 1-37.

Helfand, William H. 1990b	<i>To your health</i> : An exhibition of posters for contemporary public health issues. Bethesda (MD): National Library of Medicine.
Helfand, William H. 1981	<i>Medicine & pharmacy</i> : 100 years of poster art. New York: New York State Museum.
Helfand, William H. (ed.)	<i>The picture of health</i> . Images of medicine and pharmacy from the William H. Helfand Collection. Philadelphia: Philadelphia Museum of Art.
1991 Jiménez Lucena, Isabel; Ruiz Somavilla, Mª José; Castellanos Guerrero, Jesús	Un discurso sanitario para un proyecto político. La educación sanitaria en los medios de comunicación de masas durante el primer franquismo. <i>Asclepio,</i> v. 44, n. 1, p. 201-18.
2002	
Jordanova, Ludmilla 1990	Medicine and visual culture. Social History of Medicine, v. 3, n. 1, p. 89-99.
Jordanova, Ludmilla 1989	<i>Sexual visions</i> : Images of gender in science and medicine between the Eighteenth and Twentieth Centuries. New York: Harvester Wheatsheaf.
Julián González, Inmaculada 1993	El cartel republicano en la Guerra Civil Española. Madrid: Ministerio de Cultura.
Kuhn, Anette 1985	<i>The power of the image</i> . Essays on representation and sexuality. London/New York: Routledge.
Lederer, Susan E.; Rogers, Naomi 2000	Media. In: Cooter, R.; Pickstone, J. (ed.) <i>Medicine in the Twentieth Century</i> . Amsterdam: Harwood Academic Publishers. p. 487-502.
Mancomunitat de Catalunya 1923	<i>La obra realitzada</i> . Anys 1914-1923. Barcelona: Palau de la Generalitat.
Martí, Marc 2002	<i>Morell carteles.</i> Barcelona: Marc Martí.
Medina Domenech, Rosa; Ménendez, Alfredo	Cinematic representations of medical technologies in the Spanish official newsreel, 1943-1970. <i>Public Understanding of Science</i> , v. 14, p. 393-408.
2005	
Minguet, Joan M. 1997	La terrible lección. In: Pérez Preucha, J. (ed.) <i>Antología crítica del cine español, 1906-1995</i> . Madrid: Cátedra. Filmoteca Española, p. 68-70.
Morales Díaz, J. 1932	Propaganda sanitaria. <i>La Medicina Íbera,</i> v. 26, n. 1, p. cxvii-cxix.
Nash, Mary 1999S	<i>Rojas</i> . Las mujeres republicanas en la Guerra Civil. Madrid: Taurus.
Pando Baura, J. L. 1932	Educación sanitaria. <i>La Medicina Íbera,</i> v. 26, n. 1, p. clxxxiii.
Perdiguero, Enrique 2001	Hacia una organización sanitaria periférica: brigadas sanitarias e institutos provinciales de higiene. In: Atenza, J.; Martínez Pérez, J. (ed.) El Centro Secundario de Higiene Rural de Talavera de la Reina y la sanidad española de su tiempo. Toledo: Junta de Comunidades de Castilla – La Mancha. p. 43-73.

Perdiguero, Enrique; Ballester, Rosa; Castejón, Ramón	Films in Spanish health education. The case of child health (1928-1936). <i>Hygeia Internationalis</i> . (En prensa.)
2006	
Perdiguero, Enrique; Castejón, Ramón 2004	El Segell Pro-Infancia y la propaganda sanitaria. In: VII Trobada d'Història de la Ciencia i de la Tècnica. <i>Resums de comunicacions i postres</i> . Barcelona: Societat Catalana d'Història de la Ciència i de la Tècnica. p. 46-7.
Pérez Rojas, Javier 1997	<i>La Eva moderna</i> . Ilustración gráfica española 1914-1935. Madrid: Fundación Cultural Mapfre Vida.
Pérez Rojas, Javier; Alcalde Delgado, José Luis	Un siglo de carteles de la feria de Xàtiva. Valencia: Generalitat Valenciana, p. 13-61.
2002	
Piqueras Moreno, José 2004	<i>Maestros del arte en el cartel.</i> Alicante: Caja de Ahorros del Mediterráneo.
Pizarroso, Alejandro 1993	Historia de la propaganda. Madrid: Eudema.
Robert-Sterkendries, Marine 2004	La santé s'affiche. Bruselas: Therabel.
Robert-Sterkendries, Marine 1996	Posters of health. Bruselas: Therabel.
Rodríguez Ocaña, Esteban	Los servicios de salud pública en la España contemporánea. <i>Trabajo Social y Salud,</i> v. 42, p. 91-116.
2002 Rodríguez Ocaña, Esteban 2001	La higiene infantil. In: Atenza, J.; Martínez, J. (ed.) <i>El Centro secundario de Higiene Rural de Talavera de la Reina y la sanidad española de su tiempo</i> . Toledo: Junta de Comunidades de Castilla – La Mancha, p. 215-33.
Rodríguez Ocaña, Esteban 1996	Una medicina para la infancia. In: Borras Llop, J. M. (dir.) <i>Historia de la infancia en la España contemporánea</i> . Madrid: Ministerio de Trabajo y Asuntos Sociales. p. 149-92.
Rodríguez Ocaña, Esteban 1994	The making of the Spanish public health administration during the first third of the Twentieth Century. <i>Quaderni Internazionale di Storia della Medicina e la Sanità</i> , v. 3, p. 49-65.
Rodríguez Ocaña, Esteban; Molero, Jorge 1993	La cruzada por la salud. Las campañas sanitarias del primer tercio del siglo veinte en la construcción de la cultura de la salud. In: Montiel, L. (coord.) <i>La salud en el estado de bienestar</i> . Análisis histórico. Madrid: Ed. Complutense. p. 133-48.
Rodríguez Ocaña, Esteban; Perdiguero, Enrique; Ballester Añón, Rosa 2003	La labor dispensarial: observatorios contra el paludismo. In: Rodríguez Ocaña, E. et al. <i>La acción médico-social contra el paludismo en la España metropolitana y colonial del siglo XX</i> . Madrid: CSIC, p. 117-200.
Satué, Enric 2003	Los años del diseño. La década republicana (1931-1939). Madrid: Turner.
Satué, Enric 1997	<i>El diseño gráfico en España.</i> Historia de una forma comunicativa nueva. Madrid: Alianza Editorial.

Stein, Claudia; Cooter, Roger 2005	Cultures of visualisation: public health posters and the reconfiguration of the modern body. In: <i>Cultural history of health and beyond. EAHM/SSHM Conference.</i> Paris, 7 al 19 de septiembre de 2005. Programme and Book of astracts, p. 121.
Stuker, Marita; Cartwright, Lisa 2001	Scientific looking, looking at science. In: <i>Practices of looking</i> . An introduction to visual culture. Oxford: Oxford University Press. p. 279-314.
Summers de Aguinaga, Begoña 2005	<i>Estudio global de la obra de Serny (1908-1995)</i> : Dibujo, pintura, diseño y grabado. Tesis Doctoral, Universidad Complutense, Facultad de Bellas Artes, Madrid.
Treichler, Paula A.; Cartwright, Lisa; Peney, Constance 1998	<i>The visible women</i> . Imaging technologies, gender, and science. New York/London: New York University Press.
Velasco Murviedro, Carlos (ed.) 2004	<i>Accidentes y prevención</i> : carteles españoles del siglo XX. Barcelona: Fraternidad Muprespa.
Waters, Elizabeth 1987	Childcare posters and the modernisation of motherhood. In: <i>Stornik</i> : Study group on the Russian Revolution, v. 13, p. 65-93.
Yturriaga, Enrique de 1943	Plan de propaganda sanitaria maternal e infantil. In: <i>Estudios oficiales de la Primera reunión anual de Médicos Puericultores del</i> <i>Estado</i> . Madrid, p. 83-98.

Submitted on Fabruary 2006. Approved on May 2006.