An Analysis of Health-Related Advertising in Spanish Radio [1]

Análisis de la publicidad relacionada con la salud en la radio española

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RESUMEN

Los dos principales objetivos de este estudio son identificar los reclamos engañosos en la publicidad de productos relacionados con la salud y cuantificar la presencia de mensajes que proponen beneficios saludables. Para su consecución, se llevó a cabo un análisis del contenido de 430 cuñas publicitarias emitidas en la radio española a partir de un marco de codificación basado en la normativa nacional sobre la publicidad de productos con pretendida finalidad sanitaria. Los resultados de la investigación muestran que las cuñas con reclamos engañosos relacionados con la salud suponen el 15,81% del total de anuncios emitidos por radio y que la categoría de salud representa el 69.09% de las alegaciones ilícitas. El trabajo de investigación revela las limitaciones y contradicciones del sistema de supervisión y evaluación de la publicidad engañosa en España.

Palabras clave: Reclamos de salud, mensajes sobre salud, publicidad engañosa, radio

ABSTRACT

The two main objectives of this study are to identify misleading claims in advertising of health-related products and quantify the presence of messages that offer health benefits

An analysis of the content of 430 radio spots in Spain was conducted using a coding framework based on national regulation for advertising products with intended healthcare purposes. The results of the research show that spots with misleading health-related advertising comprise 15.81% of the total number broadcast by radio. Health represents 69.09% of unlawful claims. The investigative work uncovers the limitations and contradictions that the Spanish system for monitoring and evaluating misleading advertising poses.

Keywords: *Health claims, health messages, misleading advertising, radio*

1 This article is part of a larger investigation of the Universidad Rey Juan Carlos on deceptive advertising and violation of the law.

1.INTRODUCTION

The definining element of the most advanced postindustrial societies is based on the systematic improvement of life expectancy and the population's life quality. The discourse concerning healthcare that is spread by the media as a whole and in particular advertising, is derived from these two concepts, the first being quantitative and the second qualitative. According to this logic, the market, always looking to discover latent needs in consumers to satisfy them, constantly offers new products that supposedly contribute to the improvement of the physical and mental health of the population in order to enhance its beauty and well-being. In general, this offer is beneficial: it increases purchasing options and enables the consumer to make the best decision according to his or her particular needs and preferences. The problem arises, however, in more competitive markets where quite a few brands try to reach potential customers by offering identical products with almost the same benefits; the communication becomes aggressive, and in some cases, lacks the truth and violates the current law.

Misleading advertising, therefore, not only affects the work and transparency of each market, but it can also alter the cognitive system of the listener who is exposed to these illicit messages (Obermiller, Spangenberg, & MacLachlan, 2005; Olson, & Dover, 1978; Schutz & Casey, 1981). In this respect, Daynard maintains that "The practice is actionable because it creates a reasonable likelihood that consumers will purchase or use the service or product to their economic or physical detriment" (2004, p. 25). The *Eurobarometer* report confirms that 69% of Spanish consumers claimed to have encountered some type of misleading advertising or offer during 2009, compared to an average of 54% in the European Union. Only 28% were satisfied with how their complaints were settled (The Gallup Organization, 2010, p. 31). It is accurate to state that due to "the vast number of advertisements which appear every day, it appears impossible to determine whether each advertisement actually misleads consumers," (Grunert & Dedler, 1985, p. 154) among other reasons, according to Russo, Metcalf and Stephens, "because verification is technically impossible or prohibitively expensive" (1981, p. 119). Nevertheless, this difficulty, far from being an obstacle, should motivate the development of investigative works such as this one; the main objective is to point out the abuses of advertisers who are taking advantage of the fact that public authorities excercise little control and dictate excessively light sentences for this type of unlawfulness. Our work attempts to show the magnitude of misleading advertising in a sector where the consumer is very vulnerable to certain topics related to physical or mental health, and is particularly susceptible towards purchasing specific products that promise quick and guaranteed benefits.

The logical sequence that must tie communication, advertising, radio and the socio-demographic profile of the audience presents an essential restriction that limits the production of a theoretical framework for our empirical work. Unfortunately are not published references that allow us to base an orthodox theory of item from which to derive variables and hypothesis that link the health-related advertising and the radio spots. For this reason, departing from a rigorous scientific observation, we have chosen to do this empirical effort as the first approximation to a reality that in -spite of being daily- serious theoretical reflections and that does not possess works based on samples of the dimension of the one that our work presents.

The review of literature concerning health-related advertising messages demonstrates three proposals that coincide with the communicative components of advertising: "The advertiser, the message itself, and the resultant consumer beliefs about the advertised product" (Russo et al., 1981, pp. 119-120). Therefore, research focused on the perceptions of a particular target market (mostly young people) that deals with advertising for tobacco, alcohol or diet products is predominant; several investigative works with a specific focus on children and problems with obesity have also shown how food advertisements can influence consumer behaviour. Furthermore, public institutions frequently carry out analysis of advertising campaigns for social purposes, for example the fight against drugs, tobacco or alcohol consumption; preventive campaigns which attempt to deter consumption from the start; and awareness campaigns to fight against the spread of diseases, especially sexually transmitted ones such as AIDS. Lastly, we would like to highlight the vast number of works about direct-to-consumer advertising (DTC), which is only permitted in the United States and New Zealand.

Focusing our research on the advertising of health-related products, a clear predilection towards television, newspapers or magazines can be observed regarding the chosen media. In the first format, the investigative work of Story & Faulkner (1990) stands out, which analysed how food and eating behaviors are portrayed on prime time television (8:00 pm-11:00 pm) through 11 programs—only featuring dramatic or situational comedy series—and the advertisements broadcast; or the work of Wallack and Dorfman (1991), which quantified the presence of different health-related commercials—advertisements, public service announcements, editorial, and promo-

tions—by time slot and product type. Content analysis was also the research technique used by Byrd-Bredbenner and Grasso (2000) to compare this same type of commercial over two separate years in order to determine the congruence of this information with current health recommendations. The author illustrates one of the main reasons why he chose this technique: "The potential effects of television advertising on knowledge, attitudes, an behaviour have generated considerable concern (…), particularly those promoting health-related products such as medications and foods" (Byrd-Bredbenner & Grasso, 2000, p. 61). Finally, Hill, Lindsay, Thomson and Olsen (2003) carried out a content analysis of health-related products on TV infomercials.

Press and magazine advertising is also the one preferred by researchers, because as Parker maintains, it will "typically provide detailed product information" (2003, p. 50). The two works closest to our research objective are as follows: first the work of Wofford, Pinson, Folmar and Moran (1995), which analysed the presence and patterns of representation of health-related advertisement messages in the 11 most popular American magazines, according to seven categories (prescription medication, over-the-counter medication, exercise-related product, health service, health device, diet/health-related food and other) and also measured the representation of people by gender, race and age; and second, research by Aiello and Larson (2001), which describes and analyses trends in advertising of hygiene-related products in selected lay journals. Each advertisement was classified according to four categories (personal hygiene, dishwashing, laundry, or house cleaning) and then analysed to determine the presence of four key claims advertised about the products: aesthetics, health effects, time-saving and microbiol effects.

Futhermore, no other work has been found about advertising and health-related products on radio. This lack of investigative work has been verified by Manganello and Blake (2010) in a a study where all research carried out through the analysis of content in the US media over a period of almost 20 years was reviewed. We would also like to point out the presence of a work concerning medicaments or drug advertising, food labelling information, functional foods, nutrient content and food claims for health-related advertising, much of which has been based on the rules established by the FDA (Food and Drug Administration) (Ippolito & Mathios, 1993; Katan & De Roos, 2004; Parker, 2003; Roe, Levy & Derby, 1999; Van Trijp & Van der Lans, 2007; Zwier, 2009) an organisation with considerable activity (Roe, Levy & Derby, 1999), which our analogy lacks—or the relevant equivalent—in Spain. Finally, we would like to highlight a few studies that analyse health-related legislation, particularly in the United States and the European Community (Brennan, Czarnecka, Dahl, Eagle & Mourouti, 2008; European Commission, 2003; Greene, Prior & Frier, 2001; Hawkes, 2004).

One of the aspects that emphasises the original nature of this research is the fact that radio and the analysis of its messages has been selected as the focal point for the study; it is an ephemeral medium, less attractive (Belch & Belch, 2001) and quite uncomfortable to analyse for the majority of researchers. Therefore, there are two main reasons why we chose this media: first, it constitutes the media with the second largest audience in Spain after television (21,472,000 listeners compared to 34,916,000 viewers); and second, due to the limited creativity that professionals dedicate to the radio advertisement (Muela Molina, 2001), designed as advertising that is repetitive, monotonous, antiquated, realistic, unimaginative and exaggerative, thus undermining the credibility of commercial communication as a whole. Furthermore, the patience and capacity of the auditor for listening suffer from poor campaign planning. The advertising blocks are saturated with spots similar in style and that abuse the figure of the communicator who praises the products or services with such flippancy based on the certainty of impunity; it is damaging not only to the pocket, but also towards product expectations, which in some cases, may affect the health of the consumer.

Everyday listening to any radio station demonstrates the amount of advertisements for products beneficial to our health which are likely to deceive the listener. Therefore, the starting point for our research stems from the resolutions issued in 2009—the period selected for our study—by *Autocontrol (Association for Commercial Communication Self-Regulation)* [*Asociación para la Autorregulación de la Comunicación Comercial*], the self-regulatory organisation for the advertising industry in Spain. These resolutions are based on the application of its own codes of conduct and the current legislation. Therefore, in the case of radio, this perspective for evaluating the text of an advertising message will be used for the purposes of our investigation. In particular, the annual report for the activity of the association indicated that of the 192 settled cases, only 2% were complaints related to radio, compared to 40% in television or 29% in newspapers[2] . The results are shocking if compared to the ASA (Advertising Standards Authority) in the United Kingdom, where in the same year and only in radio, 444 out of 785 claims presented[3] were settled.

2 The four resolved cases responded to the same unlawfulness in a deceitful advertising for health-related products: Adipesina (Retrieved from: http://www.autocontrol.es/pdfs/pdfs_resoluciones/rest1124.pdf), Ceregumil (Retrieved from: http://www.auc.es/Documentos/Reclamaciones%20Autocontrol/Reclam2009/Salud/Resolucion%20favorable%20CEREGUMIL.AAP.pdf), Dememory (Retrieved from: http://www.auc.es/Documentos/Reclamaciones%20Autocontrol/Reclam2009/Salud/Promesa%20de%20cese%20DE%20MEMORY.pdf) and Harmony Zen Antiestrés (Retrieved from: http://www.autocontrol.es/pdfs/pdfs_resoluciones/rest1123.pdf); see AUTOCONTROL DE LA PUBLICIDAD, Trabajamos por una publicidad responsable. Retrieved from: http://www.autocontrol.es/pdfs/balance%2009%20AUTOCONTROL.pdf.

3 Retrieved from: http://bcap.org.uk/About-Us/~/media/Files/ASA/Annual%20reports/ASA_CAP_Annual%20Report_2009.ashx.

Our study so it is based on an analysis of radio advertising messages from a legal policy perspective that regulates products with intended health purposes. Specifically, the objectives of the research are as follows:

(1) To detect and quantify all spots with health messages and determine how they are distributed among existing product categories.

(2) To identify illicit messages in healthcare according to current legislation, and place them in a statistical relationship with different types of products.

(3) To compare the reality of misleading health-related advertising on the radio with the monitoring carried out by competent authorities.

2. METHOD

2.1 CRITERIA FOR SELECTION OF ADVERTISEMENTS

The theory and objectives behind this work require research of a quantitative nature, based on the analysis of the content of a sample that is representative of advertising spots on Spanish radio during 2009. In order to avoid localisms and geographic peculiarities, only national radio stations were selected, which preserves the homogeneity of the sample. Similarly, of all advertising formats that can be contracted on radio, the spot was selected: it is the predominant format for this media and presents a more uniform structure, thereby facilitating the analysis of the core research. The month of June was selected, as it has the largest advertising volume according to the *Infoadex* yearly report for investment in Spain (2010, p. 225).

In order to select the radio stations with the most audience, the General Study of Media (EGM, *Estudio* General de *Medios*) was consulted, which provided us with listener data from April to May, 2009. Once the public and regional radio stations were identified and excluded, the sample was extracted from the commercial radio stations with national coverage: four generalist radio stations (Cadena Ser, Onda Cero, Cadena Cope and Punto Radio) and seven thematic stations (40 Principales, Cadena Dial, M80, Radiolé, Cadena 100, Europa FM y Kiss FM). Consequently, we analysed the spots that reached 8,820,000 generalist radio listeners (81.12%) of the overall audience (10,872,000), and 9,087,000 listeners from thematic radio (76.3%) of total thematic audience (11,910,000).

By listening to 96 hours of programming (24 hours for each of the 11 stations), we registered the exact moment that each spot was broadcasted in order to ascertain broadcast frequency. Then we recorded the transcript of each advertisement and eliminated all local advertising and offers. We are aware of the fact that radio is considered a local media, therefore our research has been focused on national coverage, similar to the practice for other media (newspaper, television, magazines, etc.), in order to subsequently carry out comparative studies with the same broadcast parameters.

2.2. SAMPLING AND VARIABLES

The total sample comprises 430 different spots—after removing duplicates—from which an integral transcript of the texts was recorded. In order to study the sample, a series of nominal type variables were designed. The first variable series refers to the product category in which each spot has been classified; the configuration was developed according to the typology applied by *Infoadex* with 22 products/services: Food; Cars; Drinks; Beauty and Hygiene; Construction; Culture, Education and Media; Sports and Leisure; Distribution and Restaurants; Energy; Office Equipment; Electronics/IT and Retail; Finance; Home; Industrial, Work Material, Agriculture; Cleaning; Personal Items; Health; Public and Private Services; Tobacco[3]; Telecommunications and Internet; Textile and clothing; Transportation, Travel and Tourism; Miscellaneous.

The rest of the variables applied—exactly sixteen—have been divided according to dichotomous attributes (absence/presence), of the Article 4 of the Royal Decree 1907/1996, 2 of August, concerning the advertising and commercial promotion of products, activities or services with intended health purposes [Real *Decreto* 1907/1996[4], de 2 d*e agosto, sobre publicidad y promoción comercial de productos, actividades o servicios con pretendida finalidad sanitaria*]. This regulation refers to those products which aid in health improvements and can be obtained freely without a prescription or recommendation from a healthcare authority; therefore, they are not considered medications or pharmaceutical products governed by their own regulations. Specifically, we aim to identify the advertising spots that present one or various unlawful messages as described under current legislation. The fact that one particular advertisement can deceive listeners in various ways requires the creation of a specific variable for each section of Article 4 of the Royal Decree previously cited. Otherwise, we would be incorrectly assuming that these sections can be configured as exclusive attributes of one unique variable. Viewed from this perspective, the coding of each advertising message was established by detecting the presence or absence of each illicit message, according to the aforementioned Article which constitutes it as: "any type of advertising or promotion, direct or indirect, for the

4 The Tobacco category will not appear in the results as its advertising is banned in all media, including radio, according to Article 9 of Act 28/2005, of 26 December, concerning health measures to combat tobacco and the regulation of its sale, supply, consumption, and the advertising of tobacco products.

masses or directed towards the individual, for products, materials, substances, energies or methods with intended health purposes and it is strictly prohibited in the following cases":

(1) Those directed at preventing, treating or curing communicable diseases, cancer, or other tumoral diseases, insomnia, diabetes, or other metabolic diseases.

(2) Those which claim to have specific weight-loss attributes or help fight obesity.

(3) Those which claim to be of therapeutic use for one or more diseases, and do not comply with the requirements and obligations under the Medicines Act and all other applicable regulations.

(4) Those which claim to provide relief or certain cures.

(5) Those which use as a basis for credibility claims of authorisations, approvals, or permits from healthcare authorities in any country.

(6) Those which refer to its use or distribution in health centres and pharmacies.

(7) Those which claim to provide professional healthcare testimonials of famous, publically well-known people, real or supposedly real patients, as a means for inducing consumption.

(8) Those which seek to replace common food or nutrition regimens, especially in the case of maternity, breastfeeding, infancy or the elderly.

(9) Those which attribute specific or concrete preventative, therapeutic or healing agents to certain forms, presentations or brands of food products for daily consumption.

(10) Those which attribute preventive or healing agents or other traits to food products intended for special or dietary regimens, which are different from those usually found in such products according to special regulation.

(11) Those which attribute qualities to cosmetic products that are different from those usually found in such products according to special regulation.

(12) Those which suggest or indicate that its use or consumption increases physical, mental, sportsive or sexual performance.

(13) Those which use the term «natural» as a characteristic linked to intended preventative or therapeutic effects.

(14) Those which attribute a superfluous nature or claim to substitute the use of legally well-known medicines or healthcare products.

(15) Those which attribute a superfluous nature or claim to substitute the need to seek advice or care from healthcare professionals.

(16) Those which claim to have specific preventive or therapeutic effects that are not backed by sufficient technical or scientific testing accredited and expressly recognised by the State Healthcare Administration (1996, pp. 24323-4).

After describing the sample as outlined above and obtaining the corresponding contingency table, we have contrasted the levels of significance and the application of adequate statistics in accordance with the specificities for each cross-reference. It is important to note at this point that the study of misleading advertising in healthcare from 16 dichotomous variables based on the current legal framework and its relationship to the product category requires applying the Contingency Coefficient where X^2 is appropriate for tables in which one variable has only two attributes (Sánchez Carrión, 1999, p. 347).

3. RESULTS

Of the 430 different spots that comprise the sample, 15.81% present some type of misleading message associated with healthcare. This type of misleading advertising is concentrated in 166 different spots and is distributed among 4 out of 22 existing product categories: food, drinks, beauty and hygiene and healthcare. As previously mentioned, one particular spot can contain more than one illicit message covered by current legislation, and in fact this happens quite frequently. Analysing the 430 different sample spots broadcasted (see Table 1), the 46 that correspond to the health category present 237 deceitful messages of this sort, representing an overall 69.09% of deceitful messages related to health (343). Additionally, the beauty and hygiene category reveals 89 illicit messages, reaching a total of 25.95%. The food category, with a total of 15, accumulates 4.37% of this type of deceitful message. The drinks category presents only 2 illicit messages out of 15 spots broadcasted and its relative weight reaches 0.58% of the total number of deceitful messages related to health identified.

A significant relationship exists between spots broadcasted and misleading messages identified. In the health category, for every different spot broadcasted (in our sample, there is a total of 46), 237 illicit messages have been identified, resulting in a proportion greater than 5 deceitful messages per spot broadcasted. In the case of beauty and hygiene products, the proportion between deceit and spots broadcasted is positioned with 3 unlawful traits per message for this type of product. The food and drinks categories show proportions less than the unit, concretely 0.58 for the first and 0.13 for the second.

In short, of the 430 different spots that this sample comprises, 314 do not present any unlawful message related to health. Similarly, misleading messages were concentrated in 4 product categories, covering the 116 remaining spots and accumulating 345 misleading traits. Therefore, we can summarise the analysis by stating that for each spot classified in one of the four categories

5 This Decree, currently in force, has been chosen because it regulates advertising for a number of health-related products including but not limited to pseudo-medicines, some drinks, food, cosmetics and diet products. It was also selected because it is in line with other national laws, specifically the Act 34/1988, of 11 November, concerning General Advertising Law [Ley 34/1988, de 11 de noviembre, General de Publicidad] and the Act 29/2009 of 30 December, modifying the laws governing unfair competition and advertising in order to improve the protection of consumers and users [Ley 29/2009, de 30 de diciembre, por la que se modifica el régimen legal de la competencia desleal y de la publicidad para la mejora de la protección de los consumidores y usuarios] or European Directives related to this product type or category for example, the Directive 2006/114/EC of the European Parliament and of the Council of 12 December 2006 concerning misleading and comparative advertising and the Regulation (EC) Nº 1924/2006 of the European Parliament and of the Council of 20 December 2006 on nutrition and health claims made on foods.

Table 1. Misleading Advertising and Product Category with Illicit Health Content (n=430)

Article 4. Bans and restrictions on advertising to alleged health purposes.	Crosstabs results Contingency Coefficient (C)		Product Category					
			Food	Drinks	Beauty and Hygiene	Health	Other Products	Total
1. Those directed at preventing, treating or curing communicable diseases, cancer, or other tumoral diseases, insomnia, diabetes, or other metabolic diseases.	C=.420 p<.001	Deceits % Horizontal % Vertical	2 10.53 13.33	0 0.00 0.00	3 15.79 3.37	14 73.68 5.91	0 0.00 0.00	19 100.00 5.54
2. Those which claim to have specific weight-loss attributes or help fight obesity.	C=.547 p<.001	Deceits % Horizontal % Vertical	0 0.00 0.00	0 0.00 0.00	17 70.83 19.10	7 29.17 2.95	0 0.00 0.00	24 100.00 7.00
3. Those which claim to be of therapeutic use for one or more diseases, and do not comply with the requirements and obligations under the Medicines Act and all other applicable regulations.	C=.442 p<.001	Deceits % Horizontal % Vertical	1 5.26 6.67	0 0.00 0.00	3 15.79 3.37	15 78.95 6.33	0 0.00 0.00	19 100.00 5.54
4. Those which claim to provide relief or certain cures.	C=.656 p<.001	Deceits % Horizontal % Vertical	1 1.67 6.67	0 0.00 0.00	19 31.67 21.35	40 66.67 16.88	0 0.00 0.00	60 100.00 17.49
5. Those which use as a basis for credibility claims of authorisations, approvals, or permits from healthcare authorities in any country.	C=.298 p=.003	Deceits % Horizontal % Vertical	0 0.00 0.00	0 0.00 0.00	3 100.00 3.37	0 0.00 0.00	0 0.00 0.00	3 100.00 0.87
6. Those which refer to its use or distribution in health centres and pharmacies.	C=.664 p<.001	Deceits % Horizontal % Vertical	0 0.00 0.00	0 0.00 0.00	21 37.50 23.60	35 62.50 14.77	0 0.00 0.00	56 100.00 16.33
7. Those which claim to provide professional healthcare testimonials of famous, publically well-known people, real or supposedly real patients, as a means for inducing consumption.	C=.412 p<.001	Deceits % Horizontal % Vertical	4 25.00 26.67	0 0.00 0.00	0 0.00 0.00	12 75.00 5.06	0 0.00 0.00	16 100.00 4.66
8. Those which seek to replace common food or nutrition regimens, especially in the case of maternity, breastfeeding, infancy or the elderly.	C=.305 p=.001	Deceits % Horizontal % Vertical	1 14.29 6.67	0 0.00 0.00	0 0.00 0.00	6 85.71 2.53	0 0.00 0.00	7 100.00 2.04

Table 1. Misleading Advertising and Product Category with Illicit Health Content (n=430)

9. Those which attribute specific or concrete preventive, therapeutic or healing agents to certain forms, presentations or brands of food products for daily consumption.	C=.222 p=.327 no statistic	Deceits % Horizontal % Vertical	2 28.57 13.33	1 14.29 50.00	0 0.00 0.00	4 57.14 1.69	0 0.00 0.00	7 100.00 2.04
10. Those which attribute preventive or healing agents or other traits to food products intended for special or dietary regimens, which are different from those usually found in such products according to special regulation.	-	Deceits % Horizontal % Vertical	0 0.00 0.00	0 0.00 0.00	0 0.00 0.00	0 0.00 0.00	0 0.00 0.00	0 0.00 0.00
11. Those which attribute qualities to cosmetic products that are different from those usually found in such products according to special regulation.	-	Deceits % Horizontal % Vertical	0 0.00 0.00	0 0.00 0.00	0 0.00 0.00	0 0.00 0.00	0 0.00 0.00	0 0.00 0.00
12. Those which suggest or indicate that its use or consumption increases physical, mental, sports or sexual performance.	C=.538 p<.001	Deceits % Horizontal % Vertical	1 4.55 6.67	0 0.00 0.00	0 0.00 0.00	21 95.45 8.86	0 0.00 0.00	22 100.00 6.41
13. Those which use the term «natural» as a characteristic linked to intended preventive or therapeutic effects.	C=.259 p=.055	Deceits % Horizontal % Vertical	0 0.00 0.00	1 20.00 50.00	0 0.00 0.00	4 80.00 1.69	0 0.00 0.00	5 100.00 1.46
14. Those which attribute a superfluous nature or claim to substitute the use of legally well-known medicines or healthcare products.	C=.466 p<.001	Deceits % Horizontal % Vertical	0 0.00 0.00	0 0.00 0.00	3 15.79 3.37	16 84.21 6.75	0 0.00 0.00	19 100.00 5.55
15. Those which attribute a superfluous nature or claim to substitute the need to seek advice or care from healthcare professionals.	C=.536 p<.001	Deceits % Horizontal % Vertical	1 3.23 6.67	0 0.00 0.00	6 19.35 6.74	24 77.42 10.13	0 0.00 0.00	31 100.00 9.04
16. Those which claim to have specific preventive or therapeutic effects that are not backed by sufficient technical or scientific testing accredited and expressly recognised by the State Healthcare Administration.	C=.638 p<.001	Deceits % Horizontal % Vertical	2 3.64 13.33	0 0.00 0.00	14 25.45 15.73	39 70.91 16.46	0 0.00 0.00	55 100.00 16.03
Total number of deceitful health-related messages		Deceits % Horizontal % Vertical	15 4.37 100.00	2 0.58 100.00	89 25.95 100.00	237 69.10 100.00	0 0.00 0.00	343 100.00 100.00
Total sample of radio spots broadcast without repetitions			26	15	29	46	314	430

Source: Own elaboration

referenced, 3 misleading health-related messages can be found.

The distribution of each one of the illicit message types covered by current legislation, among the four product categories with concentrated health-related unlawful messages present very interesting nuances. In healthcare products, the fact that 16.88% of illicit messages are associated with spots that guarantee to provide supposed relief or cures is quite significant, while 16.46% of advertisements are related to products that claim to have preventive or therapeutic effects not backed by sufficient technical or scientific testing accredited and expressly recognised by the State Healthcare Administration. A total of 14.77% of the spots that belong to this category incorporate another very widespread illicit message, and refers to its distribution through pharmacies. In fact, this type of deceit holds the most weight in the beauty and hygiene category with 23.6%. In the case of food advertising, the most extensive misleading messages are those which claim to provide testimonials, mostly of famous or publically well-known people, as a means for encouraging consumption (25%); the illicit messages identified in spots for drinks are distributed equally between sections 9 and 13 of the legislation, which attributes supposed therapeutic, preventive or curing agents to these products and uses the term "natural" with absolute impunity.

4. DISCUSSION AND IMPLICATIONS

Our work has revealed the enormous amount of illicit messages in healthcare that appear on radio advertising in Spain, a reality which contradicts the small number of resolutions settled by the competent regulatory bodies. As we have previously indicated, the resolutions dictated by *Autocontrol* in 2009 were used as a point of reference for our study. This organisation is the self-regulatory body in Spain responsible for controlling the level of unlawfulness in advertising as recognized by governing legislation (Directive 2005/29/EC of the European Parliament and of the Council of 11 May 2005 concerning unfair business-to-consumer commercial practices in the internal market, Chapter 3, Article 10). Additionally, one of its other roles is to facilitate the claim process in comparison to the slower judicial system. Although the latter exists, consumer associations and other public organisations do not have as significant and relevant role as *Autcontrol* when denouncing and channelling abuses as they are related to advertising. Our research, however, has detected important weaknesses in the system. One example that particularly stands out concerns the product *Dememory*, which withdrew its advertising voluntarily in response to two claims placed by the AUC (Association for Users of Communication) [*Asociación de Usuarios de la Comunicación*], promising never to broadcast the advertisement again: one in May, 2008 and another in April, 2009. As no economic sanction was handed down, it was far more profitable for the advertiser to remove the advertisement and broadcast a similar version with the same content, but different characters or situational context. Just as our research demonstrates, the same product with the same illicit content was still broadcast profusely in June 2009.

The empirical approach used for this work could be further developed by studying the perspective of the target audience who receives the advertising messages in order to test how likely they are of being deceived; it would also help us to understand their perceptions and beliefs towards these advertisements (Russo et al, 1981). Furthermore, our research has detected an excessive use of superlatives and exaggerative phrases when extolling the benefits of the product. The immediate results and excessive promises are characteristic traits of advertising with health content. One line of work which should be analysed in depth, already initiated by Rotfeld & Rotzoll (1980), is the semantic and legal definition of the term misleading advertising which, even today, the scientific community is still demanding. As Baudot states, "Courts have yet to define set criteria for distinguishing "puffs" from false or misleading advertising" (1991, p. 27).

As a suggestion for future research, we propose expanding this type of analysis to other media such as television, newspapers or magazines in order to carry out comparative studies. Cross-cultural studies with the same objectives in order to further results with parallel research in other countries from the European Community or among Anglo-Saxon, European and Latin-American advertising is fundamental and would be very interesting to undertake.

The problem with misleading advertising, however, is more widespread that it appears. It would be quite useful, and in fact necessary to carry out this type of study over time in order to create awareness about the degree of misleading information that exists in relation to healthcare products (Kessler, 1992). Publicising this problematic situation should contribute to improving the legal framework, the judicial system and the deontological codes. This will pave the way for advancements in advertising that are perceived as more veracious and believable from a social perspective.

The system for monitoring, tracking, and evaluating the advertising content should be far more efficient. Just as our analysis has demonstrated, advertisements declared illicit are still broadcast with absolute impunity. Fundamentally, *Autocontrol* must act or feel compelled to oversee these types of

practices, without the need to mediate a specific complaint by another competing advertiser or consumer. We suggest that *Autocontrol* implement the Monitoring Compliance, similar to its counterpart in the United Kingdom: "The ASA does not just wait for complaints—we proactively check to see that the Codes as well as our rulings are adhered (...). We also routinely monitor the media to make sure the Codes are being observed to protect consumers and fair competition"[6]. Perhaps this professional approach explains the difference between the settlements reached for illicit advertising cases in each country. Lastly, aside from *Autocontrol*, we recommend that another entity—one that is more operative, neutral and efficient—intervene in order to restore the credibility of advertising as a professional activity.

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