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i) ABSTRACT

Objectives

1. To analyze and describe the current regulatory framework, the main stakeholders involved in the regulation of food advertising and to detect potential obstacles, challenges and enablers in the promotion of regulatory changes in Argentina.
2. To determine the amount and characteristics of food advertising to children in Argentinean television.
3. To determine the nutritional content and quality of the foods advertised to children in Argentinean television
4. To analyze the importance of food advertising to children on parent's dietary behavior and beliefs in different socioeconomic levels

Methods

Objective 1: the legal mapping was completed and 10 in-depth Interviews were conducted. Data were analyzed and results were disseminated among different relevant stakeholders.

Objective 2: We analyzed a total of 21085 TV ads in 6 weeks between November 2014 and January 2015 from 5 free-to-air channels and 3 cable TV channels most popular among children. Inter-rater agreement was tested in 4 pilot studies using 5 different coefficients (Cohen's Kappa, Gwet's AC1, Scott's Pi, Krippendorff's Alpha, and Brenann-Prediger statistics). Two coders were trained and supervised throughout the data entry process. The descriptive analysis was conducted by product category (food and non-food products), type of audience (children's programs and programs targeted to the general audience). We used the z-score test with a significance level of 0.05.

Objective 3: 89 final products were analyzed using three Nutrient Profile Systems: the UK Nutrient Profiling Model, NPS of the WHO Europe office (2015) and the NPS developed by PAHO (2016).

Objective 4: Focus groups with mothers with different education levels were conducted in the Metropolitan Area of Buenos Aires (AMBA). In total, 8 focus groups with 48 mothers were conducted between August 2015 and December 2015. Focus groups with mothers from different education levels were carried out separately to allow homogeneity between members of each group. An interview guide was designed. The information was analyzed using qualitative data analysis software (Atlas.ti). The codification process was discussed among all the research team.

Results:

Objective 1: The Argentinean State, as signatory to several International Human Rights Treaties (such as the Convention on Rights of the Child, among others) has the obligation to enact and implement policies to guarantee the protection of the right to health and the right to food in an effective manner. Argentina has different laws that set forth the protection of consumers from misleading advertising and favor the promotion of policies that may focus on the protection from this type of marketing strategies with the perspective of NCD prevention in general and childhood obesity in particular (Media Law, Commercial Loyalty Act, Consumer Defense Act, ANMAT resolutions (4980/05)/2845/11). All this legislation is not specifically focused on advertising of unhealthy foods targeted to children but can serve as a legal ground to continue working on the design of a policy. The interviews showed actors from different sectors that are aware of the problem implied by the prevalence of obesity in our country and



sensitive to the need to move forward in the design of policies to improve the environments where children grow and live. We also found and analyzed several legislative initiatives (draft bills) that can also be considered for future advocacy work. (See: Legal analysis: http://www.ficargentina.org/images/stories/Documentos/marco_regulatorio_publicidad.pdf. Mapping of actors and Qualitative analysis: http://ficargentina.org/images/stories/Documentos/160425_estudio_cualitativo.pdf.

Objective 2: Food products are the product category most advertised in programs targeted to the general population (22%) and the third category in programs targeted to children (11%). Desserts (23.3%), dairy products (16.2%), non-alcoholic sugary beverages (13.2%), fast-food restaurants (12.5%) and salty snacks (7.9%) are the 5 most advertised Food categories in Argentinean TV. One out of 4 ads use cartoon characters and/or celebrities, and one out of 3 ads us gifts and special offers to promote their products. These techniques are significantly more frequent in ads aired in programs targeted to children vs. programs targeted to the general population. Argentinean audience data showed that 4-to-12-year-old children watch TV about 3 hours per day. According to this information and to our data, we estimated that children are exposure to an average of 60 ads on unhealthy foods per week in Argentina.

See research report: http://www.ficargentina.org/images/stories/Documentos/150814_publicidad_infantil_alimentos.pdf

Objective 3: The three nutrient profile systems showed that most of the food products advertised in the Argentinean television have low nutritional quality. The NPS of the WHO Europe Office and the NPS developed by PAHO showed similar results: 90% (NPS-PAHO) and 85% (NPS-European Office) of foods advertised on television shows intended for children have low quality nutrition and marketing should not be permitted. According to the UK Nutrient Profile Model, 51% of the foods advertised directed to children are less healthy. Differences among the different NPS were analyzed.

Objective 4: All mothers acknowledge children's purchase influence and develop different strategies in order to negotiate purchases ("nag factor"). Gifts, the use of characters on the packaging and other promotional incentives are considered the most "successful" advertising strategies. Food advertising directed to children is not perceived as a problem by mothers and most of them place their purchasing decisions and their food choices primarily on the individual level. However, they recognize different elements of the environment that have modified food decisions over time (greater supply of ultra-processed products, "more demanding" children). The perception of the nutritional quality of ultra-processed foods is different among mothers with different levels of education.

Videos: <https://www.youtube.com/watch?v=jP45fHMw9TM>
<https://www.youtube.com/watch?v=6vDycyv-63I>

Policy brief:

http://www.ficargentina.org/images/stories/Documentos/policy_brief_publicidad.pdf

KEYWORDS

Food advertising, childhood obesity, marketing techniques, nutrient profile system



ii) THE RESEARCH PROBLEM

In developed and developing countries, childhood obesity has alarmingly increased during the last few years. It represents the most common non-communicable chronic disease risk factor, and one of the growing problems in the global public health agenda¹. For instance, in the U.S., England and Japan, there is clear evidence of childhood obesity, both in the group of preschoolers and schoolchildren. About 42 Million children worldwide are overweight and 80% of them live in developing countries. In some Latin American countries, rates of overweight and obesity are similar to those of US.

In Argentina, data from the World Health Organization (WHO) in 2010 shows a prevalence of childhood obesity in children younger than 5 years old of 7.3%. This figure places Argentina as the country with the highest childhood obesity prevalence in the region within this age group. Also, two studies based on school-age population reported a 14.2% overweight and a 21.3% obesity prevalence for children aged 10 and 11 years old⁴ and a 20.8% overweight and a 5.4% obesity prevalence in youngsters aged 10–19⁵. Similarly, the Nutrition and Health National Survey (ENNyS) showed a higher proportion of obesity as compared to malnutrition, 10.4% against 1%, respectively in children from 6 months to 6 years old⁶. In adolescents between 13 and 15 years of age, the Global School-based Student Health Survey (GSHS) conducted in Argentina in 2007 showed a 19% overweight prevalence and a 2.6% obesity prevalence. Childhood obesity is the main risk factor of adult cardiovascular disease, together with hypertension, sedentary lifestyle, smoking and hypercholesterolemia. Also, studies have shown that childhood obesity is likely to persist in adulthood.⁸ Food advertising to children has been acknowledged as one factor contributing to the obesity-promoting environment, and it is considered an important arena for action in the prevention of obesity. Television advertising is the most widely used form of food marketing to children. Children's exposure to TV advertising has been analyzed in several countries. Strong evidence links this television advertising to children's food knowledge, preferences, purchase requests and consumption patterns. These patterns have been shown to occur in the short term following exposure and both at the brand and the category level. As it has already been stated, children are less skeptical than adults when watching TV and thus are particularly vulnerable to TV advertising.¹⁴ Marketing strategies targeted to children take advantage of their inexperience and credulity.¹ Analysis of persuasive marketing techniques, such as the use of promotional characters and premiums in television advertising from individual countries, have found them to be concentrated in advertisements for unhealthy food products and during the broadcast periods most popular with children. Also, advertised foods are typically the antithesis of dietary recommendations, as they are high in fat, salt, calories, sugar and poor in nutrients, being potentially "obesogenic".

Evidence suggests that the amount of time children watch television and the prevalence of childhood obesity are related³. International studies show that children between 2 and 17 years old occupy on average 2.5 hours per day watching television. Within that time they are exposed to an average of one food ad every five minutes, which are mainly of unhealthy foods, issued with advanced marketing techniques and persuasion. Furthermore, evidence also shows that messages used in food advertising portray unhealthy eating behaviors and positive outcomes from consuming nutrient-poor foods, e.g., snacking at non-meal times, product benefits include fun, happiness and being cool. Marketing to children shows the excitement and fun of eating great-tasting high calorie food products with no negative consequences.



iii) OBJECTIVES

GENERAL OBJECTIVE

To develop a multi-component research strategy about TV food advertising targeted to children in Argentina in order to promote policy changes to reduce childhood obesity.

SPECIFIC OBJECTIVES

1. To analyze and describe the current regulatory framework, the main stakeholders involved in the regulation of food advertising and to detect potential obstacles, challenges and enablers in the promotion of regulatory changes in Argentina.
2. To determine the amount and characteristics of food advertising to children in Argentinean television.
3. To determine the nutritional content and quality of the foods advertised to children in Argentinean television
4. To analyze the importance of food advertising to children on parent's dietary behavior and beliefs in different socioeconomic levels

Specific objectives for all the components of the Project have been fulfilled as planned.

iv) METHODOLOGY

Objective 1: To analyze and describe the current regulatory framework, the main stakeholders involved in the regulation of food advertising and to detect potential obstacles, challenges and enablers in the promotion of regulatory changes in Argentina.

Data collection

For the analysis of the regulatory framework, we conducted a search on legal and scientific databases. We also reviewed legislation at the regional and national level including ministerial resolutions and decrees. For the local analysis we included the analysis of national current legislation (including draft bills) regarding any type of advertisement or marketing restrictions including self-regulation codes. The main document included five main sections: Human Rights perspective, International Recommendations, Regional Legislation, the Argentinean regulatory framework, and a Section including General Recommendations to promote a local policy to reduce exposure to marketing of unhealthy foods targeted to children.

We also used a qualitative study design to identify the main stakeholders involved in a potential regulation to restrict the exposure of marketing of unhealthy foods to children. We analyzed their position, interest and knowledge regarding public policies about marketing to children in general and food marketing targeted to children in particular. We also analyzed the barriers and opportunities perceived by the different stakeholders.

Stakeholder analysis is widely recommended as a tool for gathering insights on actors' interests, positions, and power to influence health policy issues [1, 2]. Qualitative methodology is considered a suitable approach for this kind of analysis [2, 3]. This study includes semi-structured interviews. A purposive sample was designed. The revision of the regulatory framework and the snowball strategy was used to complete



the sample. Interviews were conducted between April 2014 and June 2014. Participants included government agencies, policy makers, NGOs, experts from the academy and international experts. In total, 10 informants were interviewed. We designed two different interview guides: one for international experts and one for the rest of the interviewees.

Data analysis

The analysis focused on the identification of themes and stakeholders as well as facilitators and challenges perceived by the stakeholders. Qualitative data analysis was used[4]. Atlas.ti 7.0 software was used to manage the process of coding and categorizing data.

For more information on the methodological aspects of the qualitative study please see:

http://ficargentina.org/images/stories/Documentos/160425_estudio_cualitativo.pdf.

The legal report is available online at:
http://www.ficargentina.org/images/stories/Documentos/marco_regulatorio_publicidad.pdf

Objective 2: To determine the amount and characteristics of food advertising to children in Argentinean television.

Data collection

We conducted a cross-sectional study design. For data collection we selected the 5 broadcast networks that air in the city of Buenos Aires -América TV, Televisión Publica, Canal 9, Telefe and Canal 13- and the 3 cable networks that, according to audience measurement data, are the most popular among children: Disney Channel, Disney XD and Cartoon Network. Although the study was conducted in the city of Buenos Aires, Televisión Publica is a national public broadcast network, and Telefé and Canal 13 have local branches in most provinces. Also, 83% of the country's households have cable TV. Therefore, the study is applicable to most of, if not all, the population of Argentina. Programs were recorded from 7 AM to 10 PM in each selected channel for 6 weeks in November and December 2013 and January 2014. We recorded a total of 1.440 TV hours, including 132.5 hours of advertising.

We designed a data collection tool. Inter-rater reliability (IRR) was measured on a subsample of 240 ads (4 pilot tests of 60 ads each test), using several reliability coefficients such as Cohen's Kappa, Gwet's AC1, Scott's Pi, Krippendorff's Alpha, and Brennan-Prediger statistics. Two coders were in charge of data entry coding the general characteristics of the ads (time and date of airing, name of the program, type of program –i.e. children's vs. general audience, company, brand, ad title and duration, and type of product) and content of ads (advertising techniques). In order to do this we developed a manual for coders (See: <http://bit.ly/1RWtfE>) and had a 1-day training on site. Data collection was conducted over a period of 5 months; the resulting database was consolidated and checked for inconsistencies before moving on to data analysis.

Data analysis



Collected data was analyzed in order to describe the number of ads, types of foods advertised, and the advertising techniques used to attract children as compared to the general audience. The descriptive analysis was conducted by product category (food and non-food products) and type of audience (children's programs and programs targeted to the general audience). We used the z-score test with a significance level of 0.05.

The methodological document can be found here:
http://www.ficargentina.org/images/stories/Documentos/protocolo_final_27_04.pdf

The research report is available at:
http://www.ficargentina.org/images/stories/Documentos/150814_publicidad_infantil_alimentos.pdf

Objective 3: To determine the nutritional content and quality of the foods advertised to children in Argentinean television

Data collection

The second part of our analysis focused on the nutritional content of the advertised foods. We used a food composition database recorded by Fundación Interamericana del Corazón Argentina (IDRC Project: 106881-001 developed by Schoj V, Allemandi L, et al), which includes nutritional information for over 4000 food products available in Argentinean market. For those products advertised on TV that were not included in this database, nutritional information was obtained from the food labels of the products in stores and/or from company websites [5, 6]. For products available in different presentations/flavors, codification of nutritional information was conducted for the variety of products shown in the ad; if the ad was not specific to any variety, all varieties were analyzed to obtain an average nutritional content for that product [6]. In the case of fast-food restaurants ads, the most popular product –i.e. highest percentage of annual sales– was coded into the nutritional content database. The information was obtained directly from company sources. Foods to be prepared at home (e.g. jelly, juice, soup) were coded considering 100 g or 100 ml of the product ready for consumption [7].

As the same product was advertised several times, from the total food ads we obtained a final list of 89 products. In the case of fast foods chains, the product with the highest percentage of annual sales was selected to determine the nutritional quality of its products (Eg: Big Mac in the case of McDonalds). We contacted the company manager to obtain this information.

Data Analysis

Three Nutrient profile Systems (NPS) were used to analyze the nutritional content and quality of the foods advertised. Nutritional Quality is defined as the contribution of each food product to the diet depending on the nutritional profile of such product and considering how its intake can be considered excessive or deficient. They allow the evaluation and categorization of food products according to their quality based on different criteria such as a selection of nutrients. The main differences found among systems are the nutrients selected for the analysis, the maximum levels for each



nutrient or their application of the tool [8].

First, we used two NPS developed in the United Kingdom (UK) by the Food Standards Agency Board in 2004-2005: the Traffic Light System [9] and the Nutrient Profiling Model [10]. During the following years of the project two other regional NPS were designed and published: one developed by the WHO European Regional Office in 2015 [11] and the other developed by the Pan American Health Organization (PAHO) in 2016 [12]. Before using each NPS, a pilot study was conducted in order to verify whether each specific NPS could be applied to our products. The first pilot study was carried out to evaluate both NPS developed by the FSA/UK (Traffic Light System and the Nutrient Profiling Model). The second pilot test was conducted to evaluate the two regional NPS: NPS of the WHO in Europe and the NPS of the PAHO. As a result of the pilot studies, we selected all NPS (FSA UK, WHO Europe and PAHO) except the “Traffic Light System” because it is the only NPS that was developed for Front of Pack Labelling policy and not with the objective of regulating food marketing to children.

The Nutrient Profiling Models developed by UK and by WHO in Europe, were developed specifically to regulate food marketing to children. The NPS developed by PAHO was developed to help in the design and implementation of various strategies related to the prevention and control of obesity/overweight, including the restriction in the marketing of unhealthy food and beverages to children.

As the Argentinean legislation exempts free sugars as a compulsory nutrient to be reported in the nutritional information panel of the products we were not able to include this nutrient in the analysis of most products except for confectionary and sugary non-alcoholic beverages that usually include sugars in the NIP.

Objective 4: To analyze the importance of food advertising to children on parent’s dietary behavior and beliefs in different socioeconomic levels

Data collection

We conducted 8 focus groups (48 participants) with mothers living in Buenos Aires from different education levels (4 groups with mothers who had less than 11 years of formal education and 4 groups with mothers with more than 11 years of formal education). All participants had children between 6-13 years old. Focus groups with mothers from different education levels were carried out separately to allow homogeneity between members of each group and help identify any difference in knowledge and attitude among different levels of education. We developed an interview guide that was first submitted to a pilot test. This guide included open questions to explore the participants’ experiences and attitudes associated with food marketing to children. The recruiting strategy included the snowball strategy and contacts with schools. The focus groups lasted around one hour and took place in a sufficiently comfortable and neutral room. At the onset, parents had to fill out a demographic questionnaire and a written informed consent – in which they gave permission to audio-tape the focus groups. Written consents were obtained from all participating mothers, and anonymity and confidentiality were assured. The study protocol was approved by the Research Ethics Committee of the Hospital Italiano of



Buenos Aires. Groups were conducted by two member of the research team with expertise in this technique (moderator team).

Data analysis

Constant comparative data analysis enabled a clear understanding of the perceptions and attitudes of the mother's regarding food marketing to children and the influence of the obesogenic environment. All audio-recorded interviews were transcribed verbatim and uploaded into Atlas.ti 7.0 software that facilitated data arrangement and coding and allowed for searching of the interviews, re-sorting of material and consistent redefining of codes in order to support the analysis process. The main researcher analyzed and summarized the available information. This information was discussed with another member of the team who was also part of the moderator team. After reaching consensus, all findings were summarized into a scientific paper which included quotes and transcripts. This report was reviewed and validated by all the members of the research team.

For more information on the methodological aspects of this objective see: Appendix 1_ QUALITATIVE STUDY.

v) PROJECT ACTIVITIES

Activities were carried out as planned, fulfilling all the objectives.

Objective 1: The activities planned for this objective included the search of the information and the elaboration of the legal report; the design of the semi-structure questionnaire, mapping of stakeholders, sample design, and conduction of in-depth interviews, data collection, data analysis, final report and scientific publication.

September 2013- September 2014:

- Data sources for the legal component were consulted.
- The legal report was initiated.
- A preliminary list of stakeholders was developed to conduct the qualitative analysis (in-depth interviews).
- Interview guidelines were developed.
- A methodological document for the in-depth interviews was developed.
- Stakeholders were mapped and contacted-

September 2014 September 2015

- Stakeholders were contacted and interviewed.
- Data Analysis and elaboration of two final reports (one for the legal component and other for the qualitative analysis) were completed.

September 2015-April 2016

- Results of both components were disseminated among different audiences.

Objective 2: The activities planned for this objective included: adaptation of the data collection tool, recording of TV programs, training and supervision of



coders, codification of ads, data entry, data analysis, elaboration of final reports and scientific publications.

September 2013 – September 2014:

- Literature review of studies that have analyzed exposure of children to TV ads of unhealthy foods.
- Elaboration of the methodological document (See http://www.ficargentina.org/images/stories/Documentos/protocolo_final_27_04.pdf)
- Elaboration of a manual for coders (See: <http://bit.ly/1IRWtfE>).
- Elaboration of the methodological document (See: http://ficargentina.org/images/stories/Documentos/160425_estudio_cualitativo.pdf)
- Pilot studies: conduction of four pilot studies with 240 ads to test inter-rater reliability (IRR) using several reliability coefficients (Cohen's Kappa, Gwet's AC1, Scott's Pi, Krippendorff's Alpha, and Brennan-Prediger statistics).
- Training of coders (1-day training)
- Supervision of coders (1-hour every week for 10 weeks)

September 2014 – September 2015

- Data entry was completed.
- Data analysis was initiated for 21085 TV ads.
- The first preliminary results were discussed among research team members and presented to the rest of FIC Argentina's team.
- The final research report was elaborated and disseminated (See: http://www.ficargentina.org/images/stories/Documentos/150814_publicidad_infantil_alimentos.pdf)
- A press release was disseminated: <http://bit.ly/1rxNWIL>

September 2015 to April 2016:

- Results were shared with the INFORMAS groups in order to be included in their database.
- The manuscript "Advertising of unhealthy foods targeted to children in Argentinean television" is under elaboration to be sent to the journal *Public Health Nutrition*. The authors of the publication are: Allemandi L, Castronuovo L, Tiscornia V, Ponce M, and Schoj V.
- The manuscript "How to assess inter-rater reliability in TV advertisement content analysis" is under elaboration. The authors of this publication are: Ponce M, Castronuovo L, Allemandi L, Tiscornia V, Schoj V.
- Media activity also continued during this final period (See: Appendix 6_ Media report Sept 2015 April 2016)
- A policy brief including all the study results was elaborated, edited and designed (See http://www.ficargentina.org/images/stories/Documentos/policy_brief_publicidad.pdf)
- The final event that included the presentation of results and the policy dialogue was organized and conducted: <http://bit.ly/24hEXcs>



Objective 3: The activities planned for this objective included the selection of the nutrient profile systems to be included in the analysis of the nutritional quality of the foods advertised to children in Argentinean television

September 2014 – September 2015

- The four nutrient profile systems (the FSA/UK Traffic Light System and the Nutrient Profiling Model, and the NPS developed by the WHO European Regional Office) were piloted.
- 89 products were analyzed using the EU NPS and the UK/Nutrient Profile Model.
- Results were disseminated in a press release and among relevant stakeholders.

September 2015 to April 2016:

- After analyzing the Nutrient Profile System (NPS) presented by PAHO in March 2016 [12], we decided to include this tool in the analysis of the food products.
- We made contact with Dr. Carlos Monteiro and Dr. Enrique Jacoby who had worked in the development of the PAHO NPS to share our experience.
- We finished this analysis and disseminated the final results.
- We submitted an abstract entitled “Television Food advertising in Argentina”, to the CDPAC (Reducing Chronic Disease in Canada), Toronto. <http://www.cdpac.ca/content.php?doc=280>. The abstract was accepted for presentation but we were not able to participate in the conference.
- We submitted and presented an oral communication entitled “Television Food advertisement in Argentina”, XX National Congress of Nutrition, Mar del Plata, November 2015. <http://www.congresosan2015.com>

Objective 4: The activities planned for this objective included the development of 8 focus groups with mothers with different levels of education and the writing of a scientific paper based on the results of the research

September 2014 – September 2015

- Designed and validation of the research protocol by qualitative research experts
- Pre-test of data collection tool
- Design of recruiting strategy
- Conduction of five focus groups
- Focus groups recordings were transcribed verbatim
- Data analysis

September 2015 to April 2016:

- Conduction of three focus groups
- Use of the Atlas.ti software to analyze data collected during focus groups (constant comparative analysis).
- Discussion and validation of preliminary results
- During this period the manuscript: *Mothers and food advertising directed to children: perceptions and experiences*. Authors: Castronuovo L, Gutkowski, Allemandi L, Tiscornia V, Schoj V. Submitted to the journal: *Revista de Salud Pública* (Universidad Nacional de Lanús). Manuscript sent on April 6, 2015. The manuscript has been approved at the internal review and is now under peer



review (external review) as we were informed by the Journal's editor (See Appendix 1_ QUALITATIVE STUDY)

- Elaboration of two videos for an awareness campaign:
<https://www.youtube.com/watch?v=jP45fHMw9TM>
<https://www.youtube.com/watch?v=6vDycyv-63I>

• **What was learned about the implementation and management of the project's activities?**

- Capacity-building within the research team has been a very important asset of this project. This included not only the methodological aspects such as the inclusion of an inter-agreement analysis among 5 different coefficients, or the selection and definition of the variables to be included in the analysis (marketing techniques, nutritional analysis, etc), but also the political aspects at both national and international level. For several months and parallel to the conduction of the research project, our research team focused on the analysis and the discussion of the current situation regarding food marketing restrictions in other countries. This included several discussions on how Argentina could move forward in the promotion of a national policy to reduce exposure of Argentinean children to marketing of unhealthy foods.

We learned about certain theoretical and technical aspects involved in and necessary to the design of a policy to restrict unhealthy food advertising targeted to children such as: what should be the criteria to select different products (nutrient profile systems, consumption data, etc), how should an effective policy define a restriction for advertisements “targeted to children”, which marketing techniques should be included and how (e.g. use of famous character: which characters should be considered to be targeted to children and which characters should not? Should a policy include all famous characters?, which communications channels and public places could be included in a national restriction law? This knowledge and these controversial issues allowed us to have a more critical opinion on the steps to be followed in order to work in the design of a national policy.

- The initial legal analysis and the mapping of relevant stakeholders including the in-depth interviews conducted in Objective 1 resulted in a valuable input to initiate contact, better understand the perceptions of these stakeholders about childhood obesity in general and marketing restriction in particular, and discuss the future design of a national policy. All these stakeholders were also invited to the final event and most of them were able to participate and showed interest in the promotion of a restriction policy in Argentina.
- From our participation in this project we were able to join the INFORMAS initiative where we will be sharing our data to be able to participate in international comparisons being conducted in many countries regarding TV advertising of unhealthy foods.
- Finally, the conduction of objective 4 that consisted of focus groups with mothers from different socio-economic sectors was crucial in order to better understand how this group perceives the influence of food marketing in their children's preferences, demands and diets. The information gathered in this qualitative study will also serve



as a relevant input to better design campaigns to raise awareness in the general population not only about the effect of food marketing on children's diets and weight but also about the need to advance in the promotion of a public policy designed to protect children's right to health.

- This resulted in the elaboration and dissemination of two videos that include the testimony of mothers: <https://www.youtube.com/watch?v=jP45fHMw9TM> <https://www.youtube.com/watch?v=6vDycyv-63I>. These videos will be disseminated shortly as part of a campaign that will include, among other things, a communication on our website and ad words with the link to the videos, dissemination among actors from our database (including decision-makers, academics, local and international NGOs and networks, and reporters), sponsored ads on Facebook, use of the following hash tags on Twitter #ChicosEnRiesgo and #ObesidadInfantil for dissemination purposes.

vi) PROJECT OUTPUTS

Research reports:

We elaborated the following reports:

- Report on the legal framework of policies to restrict exposure to food marketing targeted to children both at the international and national level (objective 1): http://www.ficargentina.org/images/stories/Documentos/marco_regulatorio_publicidad.pdf
- Mapping of relevant stakeholders and qualitative analysis (objective 1): http://ficargentina.org/images/stories/Documentos/160425_estudio_cualitativo.pdf.
- Methodological document (Objective 2 and 3): http://ficargentina.org/images/stories/Documentos/160425_estudio_cualitativo.pdf
- Manual including instructions for coders: <http://bit.ly/1IRWtfE>
- Research report on the quantitative analysis of TV advertising of unhealthy foods (objective 2 and 3): http://www.ficargentina.org/images/stories/Documentos/150814_publicidad_infantil_alimentos.pdf
- Manuscript on the qualitative analysis of (objective 4 – Submitted for publication): (See Appendix 1_QUALITATIVE STUDY)
- Policy brief including the main findings of this study and the policy recommendations to restrict exposure of children to advertising of unhealthy foods: http://www.ficargentina.org/images/stories/Documentos/policy_brief_publicidad.pdf

Scientific Publications

We have elaborated and submitted one scientific publication:

1. *Mothers and food advertising directed to children: perceptions and experiences.*
Authors: Castronuovo L, Gutkoswski, Allemandi L, Tiscornia V, Schoj V.



Submitted to the journal: *Revista de Salud Pública* (Universidad Nacional de Lanús). Manuscript sent on April 6, 2015. We have already been notified by the Journal stating that the manuscript has passed the internal evaluation and is now in the peer-review process (external evaluation). This process is expected to last approximately 45 days. (See: APPENDIX 1_QUALITATIVE ANALYSIS) (Objective 4 of the research project)

We are currently working on the elaboration of two more publications:

1. *Advertising of unhealthy foods targeted to children in Argentinean television* (to be submitted to the journal *Public Health Nutrition*). Authors: Allemandi L, Castronuovo L, Tiscornia V, Ponce M, and Schoj V.
2. *How to assess inter-rater reliability in TV advertisement content analysis* (To be submitted to the *Journal of Global Health Promotion*. The authors of this publication are: Ponce M, Castronuovo L, Allemandi L, Tiscornia V, Schoj V.

Videos

Two videos have been designed and will be disseminated as part of a campaign to raise awareness about of marketing of unhealthy foods and beverages targeted to children in the general population:

- <https://www.youtube.com/watch?v=jP45fHMw9TM>
- <https://www.youtube.com/watch?v=6vDycyv-63I>

Milestones achieved in knowledge-building and networking

Throughout the project we had the opportunity of participating in several meetings and workshops where we were able to share our experience in the conduction of the projects and the most important findings:

In January 2015, we participated in a Seminar on “**The promotion of healthy diets: A Key Strategy for the Prevention of Non-communicable Disease**” organized by the Instituto de Estudios Peruanos in Lima, Peru (<http://livestream.com/iep>). In that occasion, we were also invited by Dr. Miguel Malo, representative of PAHO in Peru, to share the work conducted at FIC Argentina to promote public policies in the prevention of NCDs at the Peruvian Ministry of Health.

In June 2015, we participated in the “**Regional meeting for the prevention of NCDs**” in the city of Panama organized by the Latin America Health Coalition (CLAS), the Ministry of Health of Panama, the Panamerican Health Organization (PAHO), the InterAmerican Heart Foundation, and the NCD Alliance. The meeting included discussions on the promotion of policies to reduce NCDs in the región with special focus on how to guarantee healthy diets due to the increased prevalence of overweight and obesity in the region. We presented the preliminary results of this study and discuss on how to work on the promotion of a policy to reduce exposure of children to marketing of unhealthy foods (For further information see: <http://bit.ly/1EFRhdX>).

In November 2015, we participated in the Argentinean Congress of Nutrition, in Mar del Plata, Buenos Aires with the oral presentation entitled “**Advertisement of food and beverages targeted to children in Argentinean television**”. Authors: Tiscornia V, Allemandi L, Castronuovo L, Ponce M, Schoj V. (See: Appendix 2_Argentinean Congress of Nutrition)



We submitted an abstract entitled **“Television Food advertising in Argentina”**, October 2016 CDPAC (Reducing Chronic Disease in Canada), Toronto. <http://www.cdpac.ca/content.php?doc=280>. The abstract was accepted as poster presentation. Unfortunately we were not able to participate in this event.

On November, 2015, we were invited to share the work at FIC Argentina including the results of this study in the School of Nutrition at CEMIC University. On April 7, 2016. We were invited to present the results of our study in the III Conference on Nutrition, Health and Food Sovereignty at the University of Buenos Aires School of Medicine (See: Appendix 3_Invitation Conference on Food Sovereignty).

On April 8, 2016, we participated in a Conference organized by the Society of Pediatrics of Argentina (SAP) on Health indicators in adolescence. We presented the results of this study in a presentation entitled "Information and Communication Strategies affecting non-communicable diseases in adolescence".

Finally, on April 18, 2016, we organized the final event where we presented the final results of all the components of the study. We also discussed the progress made in some countries and the recommendations from WHO and PAHO regarding the promotion of a public policy (See: Appendix 4_Final Event Presentations). Among the 50 participants there were representatives from the public sector including the Sub-secretary of Risk Control and Prevention from the Ministry of Health (MOH), Program of Health Promotion and NCD Control (MOH), Program of Adolescent Health (MOH), Office of Mother and Infant Health (MOH), Department of Protection of Citizens' Rights, National Body of Communications (ENACOM in Spanish), Advisory Council of Audiovisual Communication and Childhood (CONACAI in Spanish), Nutritional Program of the City of Buenos Aires, and Congressional advisors. We also had the participation of academics such as the Health Department of the School of Nutrition at the University of Buenos Aires, the Chair of Food Sovereignty at the University of Buenos Aires, the Institute of Clinical Effectiveness (IECS), the Center of State and Social Studies (CEDES), the Argentinean Federation of Nutrition Graduates (FAGRAN), academics from University ISALUD, University of Lanus, and Catholic University of Santa Fe. Finally, there were also participants from civil society organizations such as the Association for Civil Rights (ADC), Foundation for the Development of Sustainable Policies (FUNDEPS), Directorio Legislativo (Legislative Directory) and Consumidores Argentinos (Argentinean Consumers). The meeting also included a final debate about how Argentina should move forward in the promotion of a public policy to reduce exposure of unhealthy food and beverage advertising targeted to children. All participants agreed on the need to adopt a national legislation effective in reducing the alarming prevalence of overweight and obesity in Argentinean children and also agreed on continuing working on a common agenda to work on a political proposal on this matter during this current year. We are now in the process of sending the most important topics discussed during the debate and agree on a future date to meet again and continuing discussion the design of a policy. For more information see: <http://bit.ly/24hEXcs>.



Another important milestone of the project is the **award** granted to the research team by the Argentinean Committee of Health Education (CAESPO), November, 2015 (See: Appendix 5_Award).

From our participation in this Project, FIC-Argentina has also been recognized as one of the organizations working on advertising of unhealthy foods and beverages targeted to children in Argentina. This has favored the exchange of ideas and the debate that initiated from the very beginning of the project and continued at the final event. In fact, we have been invited to share the results of this project in two important Children's Hospital in the city of Buenos Aires to raise awareness among pediatricians about the influence of the obesogenic environment in general but food marketing in particular in overweight and obesity.

At the international level and due to the different communications carried out during the Project we have been invited to participate in the INFORMAS initiative led by the World Obesity Federation and in the Policy and Prevention Scientific & Technical Advisory Network (STAN), also led by the World Obesity Federation.

Policy and practice: Policy analysis, recommendations, and documents

We elaborated a policy brief including the main findings of our study and the policy recommendations to restrict exposure to advertisement of unhealthy foods and beverages targeted to children. Available at: http://www.ficargentina.org/images/stories/Documentos/policy_brief_publicidad.pdf

Media advocacy: During the study period we disseminated two press releases, one informing the findings of the study (<http://bit.ly/1rxNWIL>) and another one about the award received by the research team for this study (<http://bit.ly/1rhRn5K>). We have obtained a total of about **200 interviews** in national (an international: <http://bit.ly/1Uh5G6f>) radio stations, tv programs, newspapers and websites since the beginning of this project. This included the front page of one of the most important newspapers in Argentina, La Nacion.

Other milestones in terms of policy/practice stakeholders and processes

During the conduction of this project we were contacted by a Congressional advisor who had submitted a bill to promote a marketing restriction. Although this draft bill has already been withdrawn from the parliamentary discussions after two years of being submitted, the advisor participated in our final event and is still interested in continuing working on this topic in the parliamentary agenda.

Since November 2015, we have been invited to participate in monthly meetings organized by a local civil society organization, Directorio Legislativo. The meetings include the participation of several nutrition experts, congressional advisors, decision-makers from the Ministry of Health (at the national level and from the city of Buenos Aires), legal experts on the right to health, and representatives from the food industry. At this stage, the meetings have been organized to start working on four different policy



options: school settings, fiscal policies, labeling, and restrictions on marketing of unhealthy foods and beverages targeted to children. FIC Argentina will have participation in the four different groups. The evidence obtained in this study will be valuable input for the group discussion a marketing restriction policy.

FIC Argentina with the collaboration of UNICEF Argentina developed a research study that analyzed the Global school-based student health survey showing, among other findings, that adolescents from 11 to 17 years from lower socio-economic sectors have a 31% higher chance of being overweight (http://ficargentina.org/images/stories/Documentos/160419_resumen_ejecutivo_brechas_sociales_de_obesidad_final.pdf). In the same collaboration, our research team elaborated a document describing local epidemiological data on overweight and obesity of children and adolescents in Argentina, and the national public policies implemented in our country. As part of the same document we identified the problems associated with overweight and obesity in children and adolescents and developed a prioritization matrix to select the most relevant problems. We prioritized 7 health problems: 1. Excess sugar consumption, 2. Low consumption of healthy foods, 3. Unhealthy (obesogenic) school environments, 4. High exposure to marketing of unhealthy foods, 5. Low amount and quality of physical activity at schools, 6. Lack of urban settings to exercise, 7. Television watching and “sit time”. A panel of experts was invited to validate the document and the problems prioritized and to identify potential obstacles and solutions to these problems using a tool developed by UNICEF (MORES). All this work has initiated a process of policy dialogue to work on the design of public policies with the focus of obesity prevention among youth. The local evidence collected in this research project will be essential in the policy discussions regarding marketing of unhealthy foods and beverages in our country.

vii) PROJECT OUTCOMES

The expected outcomes of this project were all achieved, namely:

- 1) To have a set of local evidence in order to promote a comprehensive policy that will include the restriction of unhealthy food advertising to children from Argentinean television
- 2) To develop a dissemination strategy to address the local media
- 3) To develop printed material and a video in order to raise awareness and inform the general population.
- 4) To hold meetings and debates with key decision-makers to present the evidence found in this study and discuss different potential policy scenarios.
- 5) To exchange information and instruments with other countries of the region (Perú).

We have fully fulfilled and exceeded these expected outcomes as we:

1. Have a database of over 21.000 ads analyzed of which over 3500 are food advertisements. The majority of these products have a low nutritional quality. Exposure in Argentinean children was estimated in 61 unhealthy food ads per week. This is relevant local evidence to promote a policy change in Argentina.



2. We have been successful in obtaining a lot of media interest when we disseminated our results with over 200 interviews including newspapers, radio stations, tv programs and websites. This also included an international interview with a Canadian radio (<http://www.rcinet.ca/es/2015/09/07/publicidad-en-television-que-engorda-a-chicos-argentinos/>), the cover page of one of the most important Argentinean newspapers, La Nacion, with a circulation of over 150,000 copies.
3. We have developed printed material and two videos that will be disseminated in the coming months: <https://www.youtube.com/watch?v=jP45fHMw9TM>
<https://www.youtube.com/watch?v=6vDycyv-63I>
4. We have initiated policy dialogue with many key actors who showed interest in the promotion of such a policy. In fact, for the final event where we presented the results of our analysis actors not only from the Ministry of Health but also from other government bodies involved in advertising and communication participated in the discussion and want to continue working in the design of a policy to reduce exposure of children to marketing of unhealthy foods.
5. Besides exchanging and presenting our results to other research teams in the region such as the team led by Peter Busse in Peru and Camila Corvalan in Chile we were also invited to participate in the INFORMAS initiative and to share the results of our study. Also, as members of the Latin America Healthy Coalition we have also presented our results and discussed about the way Latin American countries should work together in generating local evidence on food marketing in order to promote food marketing restrictions and monitor existing ones (such as Chile, Mexico and Peru).

Regarding the research objectives we were able to:

- Analyze the legal framework of food advertising in Argentina and in other countries in the region (ob 1)
- Analyze the State obligations with regards to the protection of the rights to food and to health as signatory of several International Human Right Treaties (ob 1).
- Identify the most relevant stakeholders that would be potentially involved in the design and implementation of a national policy (ob 1).
- Analyze the main stakeholders' position, interest and knowledge regarding public policies about food marketing to children in general and food marketing (obj 1).
- Learn about obstacles and challenges identified by different stakeholders (obj 1).
- Identify the critical aspects to be considered when designing such policy (food products, channels and places to be included in a potential restriction, marketing techniques "targeted to children" to be restricted, among others) (obj 1).
- Quantify the proportion of food and beverage TV advertisements directed to children (obj 2)
- Analyze the food marketing techniques targeted to children used in Argentinean television (obj 2)
- Quantify the exposure of children to unhealthy food advertising per week (obj 2)
- Compare the nutritional quality of the foods advertised during children's programs and during programs targeted to the general population using different nutrient profile systems (Obj 3).



- Identify different perceptions of mothers with different levels of education (obj 4)
- Analyze the most successful advertising techniques according to mothers (obj 4)
- Analyze mother's strategies for dealing with the "nag" factor (obj 4).
- **Changes in the state of economic, social, health, political, or environmental conditions.**

During the conduction of this project and as it has been mentioned above, we were consulted to provide technical advice on a bill draft submitted by a congresswoman. Although this bill is not longer under discussion in the Congress, the initial contact with this congresswoman and her team of advisors was useful to start policy dialogue.

The topic of marketing of unhealthy foods and beverages targeted to children in Argentina resulted in a lot of interest from different stakeholders. Some of them were contacted at the beginning of the project, others contacted our team in response to the media impact of our research findings. All of them were invited to participated in our final event and were all eager to set a common agenda to work on the design of a marketing restriction in Argentina to protect the right to health of all children in our country.

- **What was learned about approaches or broad design elements for conducting research, building capacity or influencing policy or practice in the field and circumstances of the project? What problems arose, and what changes in orientation occurred? Were certain aspects of project design particularly important to the degree of success of the project. What contributed to these outcomes and what lessons did you draw from the experience?**

One of the aspects of project design that was of special importance to the degree of success of this study was the importance of generating local evidence in order to raise awareness among the general population and decision makers in particular.

No problems arouse during the conduction of the project and the research team had no need to change orientation of the original objectives. The development of the present project represented the generation of high-quality and comprehensive scientific knowledge that was of great value to inform decision-makers and was also very helpful in building capacity in our own organizations and others. The design and use of a rigorous methodology is also a key aspect of this study which has been crucial in providing reliable data. This has been favored by the timeline of the project that allowed the research team to devote enough time to the testing of the tools and discussion of the results.

This project also facilitated networking among different researchers worldwide and the development of joint activities in national and regional coalitions and networks.



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