# Journal of Studies on Alcohol and Drugs

# Alcohol Advertising Regulation for the Adult Population. An Analysis of Distilled Spirits Endorsements on Spanish Radio --Manuscript Draft--

| Manuscript Number:           |   |  |  |  |  |  |
|------------------------------|---|--|--|--|--|--|
| Full Title:                  | Alcohol Advertising Regulation for the Adult Population. An Analysis of Distilled Spirits Endorsements on Spanish Radio   |  |  |  |  |  |
| Article Type:                | Original Study  |  |  |  |  |  |
| Keywords:                    | adults; advertising; alcohol; law; policy; regulation   |  |  |  |  |  |
| Manuscript Classifications:  | Adults; Advertising/Television, Social Media; Alcohol; Alcohol policy; Ethics; Prevention; Public Health Policy   |  |  |  |  |  |
| Corresponding Author:        | Clara Muela Molina, Ph.D. Universidad Rey Juan Carlos Fuenlabrada, Madrid SPAIN   |  |  |  |  |  |
| Corresponding Author E-Mail: | clara.muela@urjc.es   |  |  |  |  |  |
| Order of Authors:            | Clara Muela Molina, Ph.D.   |  |  |  |  |  |
|                              | Salvador Perelló-Oliver, Ph.D.  |  |  |  |  |  |
|                              | Ana García-Arranz, Ph.D.  |  |  |  |  |  |
| Author Comments:             |   |  |  |  |  |  |
| Abstract:                    | Objective: Restrictions on high alcohol beverages advertising aim to prevent consumption in young people, and alcohol misuse in adults. The main objective of this research is to analyze the presence of distilled spirits mentions and its compliance with the legislation in relation to the minor protection time slot, factors associated to drinking and encouraging excessive consumption.  Method: This empirical work conducts a content analysis of all spirits mentions broadcast throughout 2017 on news/talk radio stations targeted an adult audience. The final corpus is composed of 355 radio mentions.  Results: Results show that special protection time slot for minors is disregarded in 91.8% of cases. Therefore, radio personalities encourage immoderate consumption in 76.6% of the analyzed mentions, and associate alcohol consumption with improved physical performance, social success, or health in 42.3% of cases.  Conclusions: This work reveals the shortcomings of the public administration in the control and monitoring of spirits mentions in the radio medium, in a context where the adult population is unprotected against messages which, frequently, encourage excessive consumption and associate it with positive and gratifying values. On the other hand, violation-related fines are not corrective against repeated advertisers' irresponsible behaviors. |  |  |  |  |  |
| Suggested Reviewers:         |   |  |  |  |  |  |

Professor Thomas F. Babor Editor Journal of Studies on Alcohol and Drugs November 17, 2020

#### Dear Professor Babor:

Please find enclosed our manuscript "Alcohol Advertising Regulation for the Adult Population. An Analysis of Distilled Spirits Endorsements on Spanish Radio" by Clara Muela Molina, Salvador Perelló Oliver and Ana García Arranz which we would like to submit for publication in Journal of Studies on Alcohol and Drugs. This article is the result of an original research developed by some members of our research group (methaodos.org) under the project funded by the Ministry of Economy and Competitiveness of the Government of Spain, State Program R&D Oriented to Society Challenges (CSO2017-82267-R).

Our investigation provides novel empirical evidence on the presence of distilled spirits endorsements on news/talk radio stations with an adult audience and its compliance with current legislation. We highlight the weaknesses of public administrations in the control and monitoring of alcohol advertising for the protection of adults against messages which, frequently, encourage excessive consumption and associate it with positive and gratifying values. We also stress that administrative sanctions and financial penalties have no any corrective impact on the behavior of advertisers.

As far as we are concerned, this manuscript may be considered appropriate for publication in *Journal of Studies on Alcohol and Drugs*, and may be of interest to a wide range of readers, including those interested in law and policy research relating to alcohol regulation impact, commercial communication of licit drugs and alcohol advertising. Moreover, we confirm that this work has not been published elsewhere and is not under consideration by any other journal; we declare that there is no conflict of interest and all authors have approved the text and we agree to its submission to *Journal of Studies on Alcohol and Drugs*.

We hope you find our manuscript suitable for publication and look forward to hearing from you.

Sincerely,

Clara Muela Molina

Salvador Perelló Oliver

Ana García Arranz

1

Tables: 2.

# Alcohol Advertising Regulation for the Adult Population. An Analysis of Distilled Spirits Endorsements on Spanish Radio

Clara Muela-Molina, Ph.D.<sup>a,\*</sup> Salvador Perelló-Oliver, Ph.D.<sup>b</sup> & Ana García-Arranz, Ph.D.<sup>c,</sup>

<sup>a</sup> Department of Communication Sciences and Sociology Camino del Molino s/n, Fuenlabrada (Madrid), Spain 28943 *Universidad Rey Juan Carlos* Email: clara.muela@urjc.es

Phone: +34914888202; Fax: 914888220

<sup>b</sup> Department of Communication Sciences and Sociology Camino del Molino s/n, Fuenlabrada (Madrid), Spain 28943 Universidad Rey Juan Carlos

Email: salvador.perello@urjc.es

Phone: +34914888404; Fax: 914887522

<sup>c</sup> Department of Communication and Marketing C/Joaquín Costa, n° 41(Madrid), Spain 28002 EAE Business School

Email: amgarcia@eae.es

Phone: +34914564108; Fax: 914564101

This work was supported by the Ministry of Economy and Competitiveness of de Government of Spain, State Program R&D Oriented Society Challenges, under Grant (CSO2017-82267-R).

\_

<sup>\*</sup> Correspondence may be sent to: Clara Muela-Molina. Department of Communication Sciences and Sociology. Camino del Molino s/n, Fuenlabrada (Madrid), Spain 28943. Universidad Rey Juan Carlos. clara.muela@uric.es

2

Alcohol Advertising Regulation for the Adult Population. An Analysis of Distilled Spirits

**Endorsements on Spanish Radio** 

**Abstract** 

Objective: Restrictions on high alcohol beverages advertising aim to prevent consumption in

young people, and alcohol misuse in adults. The main objective of this research is to analyze

the presence of distilled spirits mentions and its compliance with the legislation in relation to

the minor protection time slot, factors associated to drinking and encouraging excessive

consumption.

Method: This empirical work conducts a content analysis of all spirits mentions broadcast

throughout 2017 on news/talk radio stations targeted an adult audience. The final corpus is

composed of 355 radio mentions.

Results: Results show that special protection time slot for minors is disregarded in 91.8% of

cases. Therefore, radio personalities encourage immoderate consumption in 76.6% of the

analyzed mentions, and associate alcohol consumption with improved physical performance,

social success, or health in 42.3% of cases.

Conclusions: This work reveals the shortcomings of the public administration in the control

and monitoring of spirits mentions in the radio medium, in a context where the adult

population is unprotected against messages which, frequently, encourage excessive

consumption and associate it with positive and gratifying values. On the other hand, violation-

related fines are not corrective against repeated advertisers' irresponsible behaviors.

**Keywords**: Adults; advertising; alcohol; law; policy; regulation

# Introduction

The starting point of this investigation is the violation-related fine imposed on a news/talk radio station for broadcasting several mentions of distilled spirits. The National Commission on Markets and Competition (in Spanish CNMC) verified during routine inspection and monitoring activities that Cadena Cope, a news/talk radio station, had aired 7 mentions—6 of Arehucas rum and one of the liqueur Ruavieja—in January and February 2016, during the live broadcast of sporting events. On April 21 of the same year, the CNMC sent the radio station a formal request to stop alcohol advertising activities, in contravention of the General Audiovisual Communications Act 7/2010 of March 31. The letter warned that non-compliance would lead to the initiation of sanctioning proceedings (CNMC, 2016).

On June 9, 2016, the Communications Users Association (in Spanish AUC) filed a complaint with the CNMC against Cadena Cope for broadcasting an advertisement of Arehucas rum on May 22. Upon verification, and following the recent warning, the CNMC began sanctioning proceedings. Thus, on December 22, 2016, it found the radio station liable for three serious administrative offences related to the broadcast of three commercial communications of alcoholic drinks, which carried fines of 50,001 euros each (CNMC, 2017). The following year, in January 2017, the Audiovisual Council of Andalusia (in Spanish CAA) received a complaint regarding an advertisement of an herbal liqueur aired during the broadcast of a soccer match on a national radio station (CAA, 2017). The claimant, a former alcoholic, expressed alarm and concern over the commercial which, he claimed, encouraged the consumption of spirits. The CAA conducted an analysis in January of that same year, which verified the broadcast of seven commercial communications, including the previously mentioned brands—Arehucas rum and the liqueur Ruavieja—and in breach of the same legal principles. The analysis emphasized the following points: the advertising had taken place

during the live broadcast of sporting events and associated alcohol consumption with entertainment and positive values, and it was aired during the special protection time slot (CAA, 2017). Hence, this investigation stems from an interest to discover the real impact of this administrative sanction, and to what extent it has conditioned the subsequent behavior of the radio station in question, and its main competitors.

Restrictions on alcohol advertising aim to prevent consumption in young people, and heavy and binge drinking in adults, with special emphasis on distilled spirits. We use 'binge drinking' as "a pattern of drinking alcohol that brings blood alcohol concentration (BAC) to 0.08 gram percent or above" (NIAAA, 2004).

In the area of public health and safety, point 3c of Article 18 of the General Audiovisual Communications Act 7/2010 of March 31 bans television advertising of drinks over 20 percent alcohol by volume (ABV). However, Point 3 of this same article outlaws commercial communications encouraging behavior prejudicial to people's health in all types of media; and Section (e) prohibits all advertising of drinks below 20 percent ABV if it targets minors, encourages immoderate drinking, or links its consumption to improved physical performance, social success, or health. Nevertheless, and as indicated by the CNMC (2016) in their formal request, general restrictions apply to all alcohol advertising, regardless of the alcohol content. Finally, Article 7 establishes a special protection time slot, from 6 a.m. to 10 p.m., when the broadcast of contents that might impair the physical, mental, or moral development of minors is not allowed. In this regard, and although spirits mentions target adults, legislation aims to protect minors from listening to advertisements which might pose a health risk and promote false perceptions of the reality of alcohol consumption.

Many studies on alcohol advertising have shown the lack of effectiveness of self-regulatory systems and of practical application of the sector's codes of conduct (Adams et al., 2014; Noel et al., 2017). Nevertheless, the adult population has received little attention from

the scientific community, although there are many reasons that would motivate its study (Donatelli & Somes, 2014). Many adult drinkers—whether occasional, habitual, or social—remain unaware or consciously downplay the potential risks and addiction of alcohol consumption.

To our knowledge, only two studies have investigated alcohol-related issues in the radio medium, in both cases analyzing the references made to alcoholic drinks on music radio stations in the UK. Daykin et al. (2009) analyzed a total of 244 comments made by presenters on six music radio stations with a young audience, to conclude that most of them encouraged drinking, and even excessive drinking in 13% of cases. More recently, Haighton et al. (2017) analyzed alcohol references made on four popular music radio stations with a high proportion of listeners aged 55-64, concluding that 73% of comments made by presenters promoted drinking, in many cases linking alcohol consumption with partying and socializing. In this context, the general objective of this investigation is to analyze the presence and compliance with current legislation of distilled spirits mentions on news/talk radio stations with an adult audience.

### Method

Although the radio medium has received little attention from the scientific community, in Spain it has the second largest audience after television with more than 26,878,000 daily listeners (AIMC, 2017). Furthermore, it is considered the most trustworthy source of news in traditional media by 82% of Spanish people (Toharia, 2017) and 70% of European citizens (European Commission, 2018). These facts, as well as the research context provided, motivate our choice of the radio medium to develop this work.

This empirical study follows a quantitative approach based on the content analysis of all radio mentions broadcast throughout 2017 on news/talk radio stations in Spain. Radio

mentions are live read advertisements voiced by the presenters, team members or coworkers of radio programs (Infoadex, 2019). The three national private radio stations with the highest audiences were selected, totaling 9,000,000 daily listeners. The stations are Cadena Ser, Cadena Cope and Onda Cero, and the average age of their listeners is 52.8, 53.6 and 52 years old, respectively (AIMC, 2017).

The data were obtained from Arce Media's database (joined since 2007 to Nielsen's database), a company dedicated to the collection and analysis of advertising activity in conventional media. Following these selection criteria provides the opportunity to work with the complete universe of radio mentions, which involves a final corpus of 355. Two trained coders carried out the analysis and coding process considering the following variables and attributes.

- News/Talk Radio Stations. (1) Cadena Ser; (2) Cadena Cope; (3) Onda Cero.
- Product. (1) Brandy; (2) Gin; (3) Rum; (4) Vodka; (5) Whisky; (6) Other spirits.
- Special Protection Time Slot. (1) Protected Time Slot (from 6:00 a.m. to 9:59 p.m.); (2) Non-protected Time Slot (from 10:00 p.m. to 5:59 a.m.).
- Encouraging Excessive Consumption. (1) Absence; (2) Presence.
- Factors Related to Drinking. Associating alcohol consumption with improved physical performance, social success, or health. (1) Absence; (2) Presence.

The inter-codifier reliability was measured using Cohen's Kappa, which raises a variation between 0.906 and 1, calculated with SPSS (version 17). The variables News/Talk Radio Stations, Product, and Special Protection Time Slot obtained a value of k=1. In the variable Encouraging Immoderate Consumption, k=0.969. Finally, k=0.965 in the case of the

variable Factors Related to Drinking. To solve the few divergences detected, a third work session was conducted. After evaluating the situations, the final coding of doubtful cases was decided by the two coders. The results shown below are based on a value k=1 for all variables. Furthermore, any crossed data of the coded variables have been submitted to relevant statistical significance tests using nonparametric  $\chi^2$  analysis.

# **Results**

The results show that Cadena Cope is the news/talk radio station with the highest volume of alcohol advertising (91.8%), followed by Onda Cero (7.3%), and Cadena Ser, which only broadcast 3 (0.8%) of the 355 radio mentions included in the corpus. In addition, they were all aired during the broadcast of sports matches.

The type of product more prevalent is rum, present in more than half of the analyzed mentions (55,7%), followed by other spirits—in all cases herbal liqueurs—in more than a third of cases (36,6%). The presence of brandy and gin is much lower, with the latter present in only 4 of the 355 mentions. Vodka and whisky have no presence at all.

On the other hand, Cadena Cope is also the radio station which least respects the special protection time slot, since the totality of its mentions (91.8%) were broadcast between 6:00 a.m. and 9:59 p.m. However, both Cadena Ser and Onda Cero broadcast all their mentions of distilled spirits (8.2%) in the appropriate time slot, i.e. between 10:00 p.m. and 5:59 a.m.

# [Table 1 near here]

Immoderate consumption of alcohol is encouraged in 76.6% of the radio mentions. Table 1 shows a prevalence of this type of illicitness in two products. In the case of rum, its promotion of consumption behavior is contrary to legislation in nearly three quarters of the

198 mentions. The following example is descriptive of this type of illicitness: "...and the color of that rum and coke, that golden color, is telling you: drink me, drink me, drink me, drink". On the other hand, in the category of other spirits, the vast majority of the 130 mentions of herbal liqueurs encourage the audience to consume immoderately: "...last night we mellowed out with Ruavieja"; "....this evening, Ruavieja, every day, Ruavieja."

# [Table 2 near here]

Table 2 shows that 42.3% of mentions associate spirits consumption with factors such as improved physical performance, social success, or health, in breach of the relevant law. In this respect, although gin and brandy have the lowest number of mentions, accumulate the highest relative weight in terms of percentage, with all 4 mentions of gin and more than three quarters of brandy breaching the law. However, it is again the advertising of rum and other spirits that most frequently commits this type of illicitness. The association of spirits consumption with physical performance has the lowest presence in radio mentions, but the following would be an example: "I drink coffee liqueur if I need a little boost."

Otherwise, the association of the four types of products with social success is widely employed, as in the following excerpts: "...Arehucas is part of all our great moments... is enjoying, ... loving, ... dreaming, kissing, singing, drinking, dancing. (...). Enjoy your life and people, enjoy the afternoon, the evening, the day, the night...". The association with health, especially mental health, is also frequent: "...it brightens up our day, (...) the bottle appears to make people feel sunny and bright"; "many people want to be happy (...) Arehucas for everybody"; "Ah, what would we do without Arehucas? We'd be crying, sad, bored, depressed"; "...a rum and coke brightens up your life"; and "...you'll have no hangover, nothing, at all."

# **Discussion**

This investigation analyzes mentions as a format of spirits advertising in the radio medium. These mentions are endorsed by radio personalities and integrated in news/talk programs with a predominantly adult audience. The paradigmatic example of an administrative sanction imposed by the CNMC on a high-audience Spanish radio station for the broadcast of three distilled spirits mentions provides the foundation of our research, which aims to establish to what extent this breach of the law and subsequent fines have conditioned radio advertising activity. The objective is to analyze the presence and compliance with current legislation of this type of advertising.

Previous studies have shown that alcohol advertising does not usually respect the special protection time slot established for television (Jones et al., 2010; Pettigrew et al., 2012). This broadcasting restriction is included in the codes of conduct of the sector as a voluntary form of self-regulation. However, our work analyzes the legal framework, which is of compulsory compliance. In this regard, and although adults, and not minors, are the target audience of spirits mentions, the law aims to prevent this type of advertising from reaching children and young people for two reasons. Firstly, to avoid the possible damage caused by the promotion of these products—legal drugs—on the physical, mental, and moral development of minors. Secondly, to prevent an increase of negative drinking attitudes and the likelihood to drink (Grube, 1993) often linked to the banalization of alcohol consumption involved in this type of advertising. Thus, the need to analyze this variable included in the legislation seems fully justified.

In our case, it is worth noting that all the mentions broadcast on Cadena Cope were aired during the special protection time slot. The others, broadcast on Cadena Ser and Onda Cero, were all broadcast between 10:00 p.m. and 5:59 a.m., outside the special protection time slot. These results reinforce the previously mentioned hypothesis regarding the possible

existence of a self-regulatory system which is implemented differently in terms of social responsibility and respect for the audience.

The main objective of restrictions on alcohol advertising aimed at adults is to prevent excessive consumption habits that often lead to addiction. Young people's drinking habits have a strong social component, but consumption behavior in adults is more individual, with high percentages of people over the age of 45 drinking alcohol on a daily basis (Ministerio de Sanidad, Consumo y Bienestar Social, 2019). News/talk radio stations predominantly advertise rum and herbal liqueurs, and the absence of whisky and vodka mentions may suggests that these drinks are consumed by younger people, who mainly listen to music radio. This hypothesis deserves further attention and future research to establish the variables related to alcohol consumption, advertising investment in the radio medium, and audience profiling.

In line with previous studies (Daykin et al., 2009; Graham & Adams, 2014; Haighton et al., 2017; Noel et al., 2017), this investigation shows that spirits mentions encourage excessive intake. Some sportscasters insistently claim that the brand in question is consumed by everybody, at all times, and everywhere in the world. They even mention the number of bottles drunk (12) and downplay hangovers as a side effect of consumption. At this point, it is worth remembering that the code of conduct of journalists disallows their participation in advertising (Perelló-Oliver & Muela-Molina, 2017). However, this work provides evidence to the contrary, and shows their active role in the promotion of alcohol, considered by many a legal drug. In this respect, although radio owners are solely responsible for the contents they broadcast, information professionals—especially journalists—should not remain unpunished when they participate in alcohol advertising.

The significant presence of alcohol advertising on television sports programs has been the subject of previous investigations (Adams et al., 2014; Graham & Adams, 2014; Jones et

al., 2010; Noel et al., 2017; Pettigrew et al., 2012). In a similar vein, our research shows that all spirits mentions analyzed were aired during the broadcast of soccer matches.

Regarding the association of alcohol consumption with improved physical performance, social success, or health, and in line with previous research (Daykin et al., 2009; Donovan et al., 2007; Haighton et al., 2017; Jones et al., 2010; Jones & Donovan, 2001; Noel et al., 2017; Pettigrew et al., 2012), this investigation has detected a predominant use of appeals connected with social success and winning. Graham & Adams (2014) describe the case of a television commentator, an ex-professional footballer, who suggested that alcohol consumption could be linked to the winning team, taking for granted the subsequent hangover. The present work has confirmed that sports broadcasting takes advantage of the best moments, such as goals, to mention spirits brands used in their celebration. It is difficult for listeners to turn off their attention filters during these instances of collective euphoria. Sports commentators even encourage listeners to drink in order to forget the bad results of their team. By extension, this involves a worrying association between drinking and the need to counterbalance stress and everyday problems, i.e. the use of alcohol as an avoidance strategy. These factors may be, to some extent, at the root of alcohol addiction, especially when considering that one of the main functions of advertising—what makes it effective—is the portrayal of the everyday reality of the audience. Again, this hypothesis could be the subject of future research.

Moreover, the health benefits of alcohol seem to be more psychological than physical. Advertising describes alcohol consumption as a means to avoid one's troubles, sadness, boredom or depression, which are potential factors of addiction in adults. At the same time, it is associated with positive experiences: parties, celebrations, friendship, entertainment, happiness, family (including children), and generally enjoying life.

One of the main objectives of the National Strategy on Addictions 2017-2024 (Ministerio de Sanidad, Servicios Sociales e Igualdad, 2019) is to reinforce and monitor compliance with current regulation. This work has shown the deficiencies of the public administrations in public health issues concerning alcohol misuse—such as the excessive consumption of spirits—in adults. Thus, radio, as a means of communication and social agent, must be required to respect the law and act with responsibility toward society. The sanctioned radio station should not have remained unpunished for breaching the law repeatedly the year after being fined. If we apply the 2016 fine of 50,001 euros for each illicit mention to our result of 326, the amount payable would be much higher, corrective, and dissuasive.

Furthermore, the General Audiovisual Communications Act 7/2010 of March 31 contemplates the license withdrawal of service providers in the case of repeat offenders. It therefore seems necessary for government health agencies to establish more and better monitoring and control mechanisms, and apply stronger punitive sanctions (Casswell & Maxwell, 2005).

In addition, the legal analysis conducted in this investigation has detected a few inconsistencies. The General Audiovisual Communications Act 7/2010 of March 31 regulates the contents of radio and television, but explicitly applies certain principles to television, without including the radio medium. If the advertising of drinks over 20 percent ABV is banned on television, it should also be prohibited in other media (Esser & Jernigan, 2018). As a result, Article 5 of the General Advertising Act 34/1988 of November 11 bans the advertising of any products which may pose health risks; since this is the case of distilled spirits, their advertising should be completely prohibited. Promotion of these products should only be allowed in retail stores or establishments licensed for consumption, as in the case of tobacco.

Most studies analyzing self-regulatory systems have evidenced their limitations, especially because complaint processes begin after the audience has been impacted. Researchers argue the need for stricter policies (Noel et al., 2017), and even for the complete restriction of alcohol promotion (Heipel-Fortin et al., 2007). What is more, an international industry operating in a globally connected world, where the media have no borders, requires a unified response to approximate regulations and reach a consensus on the total ban of alcohol advertising (Anderson, 2009; Casswell & Maxwell) because the consequences derived from excessive consumption are the same everywhere in the world.

#### Limitations

The main limitation of this research is that its methodology does not incorporate an experimental technique that would allow the evaluation of listeners' reaction to the analyzed radio advertisements. This could and should be the subject of future research. On the other hand, this work has focused on news/talk radio stations due to their adult audience profile. It would be interesting to conduct a parallel research on music radio stations—with younger listeners—considering the same variables, in order to compare results. On a different level, there are certain variables that could be incorporated into the analysis, and which would provide relevant information on the target audience of spirits mentions; for example, whether the mentions were broadcast during the week or at the weekend; or the average age of the listeners of programs which broadcast spirits mentions.

# **Conclusions**

The findings of this work reveal significant shortcomings in the control mechanisms employed by the Spanish public administration to monitor spirits mentions and ensure its compliance with current legislation. This hinders the efforts made by public health authorities

to prevent the excessive consumption of distilled spirits and subsequent addiction problems in the adult population. Repeated breaches of the legal principles regulating the presence and content of this type of advertising evidence the need for regulatory reform, perhaps taking tobacco advertising laws as an example. Stronger and more effective sanctions need to be imposed on the media responsible for this type of illicit advertising, and this should be extended to include advertisers and individuals who collaborate in the promotion of alcohol consumption.

# Acknowledgements

This work was supported by the Ministry of Economy and Competitiveness of de Government of Spain, State Program R&D Oriented Society Challenges.

# **Authors' Contributions:**

**CMM:** Conceptualization, Data curation, Formal analysis, Funding acquisition, Investigation, Project administration, Resources, Software, Supervision, Validation, Visualization, Writing – original draft, Writing – review & editing. **SPO:** Formal analysis, Funding acquisition, Investigation, Data curation, Methodology, Project administration, Resources, Software, Supervision, Validation, Writing – original draft, Writing – review & editing. **AGA:** Investigation, Visualization, Writing – review & editing.

# References

- Adams, J., Coleman, J., & White, M. (2014). Alcohol marketing in televised international football: frequency analysis. *BMC Public Health*, *14*(1), 473. https://doi.org/10.1186/1471-2458-14-473
- Anderson, P. (2009). Is it time to ban alcohol advertising? *Clinical Medicine Journal*, 9(2), 121. https://doi.org/10.7861/clinmedicine.9-2-121
- Asociación para la Investigación de Medios de Comunicación (AIMC). Resumen General del EGM (Estudio General de Medios) [EGM (Media General Study) General Report]

  February 2017 to November 2017; 2017. Retrieved October 10, 2018, from https://www.aimc.es/a1mc-c0nt3nt/uploads/2017/05/resumegm317.pdf
- CAA (Consejo Audiovisual de Andalucía). Decisión 27/2017 del Consejo Audiovisual de Andalucía sobre publicidad de bebidas alcohólicas en programas deportivos de radio.

  [Decision 27/2017 of the Audiovisual Council of Andalusia on advertising of alcoholic beverages in radio sports programs]; 2017. Retrieved November 4, 2019, from https://www.consejoaudiovisualdeandalucia.es/sites/default/files/decision/pdf/1704/decisio n\_27publicidad\_bebidas\_alcoholicas\_radio\_170419.pdf
- Casswell, S., & Maxwell, A. (2005).Regulation of alcohol marketing: a global view. *J Public Health Policy*, 26(3), 343-358. https://doi.org/10.1057/palgrave.jphp.3200040
- CNMC (Comisión Nacional de los Mercados y la Competencia) [National Commission on Markets and Competition]. (2016). Resolución por la que se requiere a Radio Popular, S.A.- Cope para que cese la emisión de comunicaciones comerciales de bebidas alcohólicas que no respetan las condiciones establecidas en la Ley 7/2010, de 31 de marzo, General de la Comunicación Audiovisual. [Resolution by which Radio Popular, S.A. Cope is required to cease the emission of Commercial communications of alcoholic

- beverages that do not respect the conditions established in the General Audiovisual Communications Act 7/2010 of March 31]; Retrieved June 4, 2019, from https://www.cnmc.es/sites/default/files/965670\_7.pdf
- CNMC (Comisión Nacional de los Mercados y la Competencia). [National Commission on Markets and Competition]. (2017). Resolución del procedimiento sancionador incoado a Radio Popular, S.A.-Cope, por el presunto incumplimiento de lo dispuesto en el Artículo 18.3. e) de la Ley 7/2010, de 31 de marzo, General de la Comunicación Audiovisual. [Resolution of the sanctioning procedure initiated to Radio Popular, S.A.-Cope, for the alleged breach of the provisions of Article 18.3. e) of the General Audiovisual Communications Act 7/2010 of March 31]; Retrieved December 6, 2019, from https://www.cnmc.es/sites/default/files/1490299\_25.pdf
- Daykin, N., Irwin, R., Kimberlee, R., Orme, J., Plant, M., McCarron, L., & Rahbari, M.
  (2009). Alcohol, young people and the media: a study of radio output in six radio stations in England. *Journal of Public Health*, 31(1), 105-112.
  https://doi.org/10.1093/pubmed/fdn114
- Donatelli, N. S., & Somes, J. (2014). Alcohol and aging: the invisible epidemic. *Journal of Emergency Nursing*, 40(2), 177-180. https://doi.org/10.1016/j.jen.2013.12.004
- Donovan, K., Donovan, R., Howat, P., & Weller, N. (2007). Magazine alcohol advertising compliance with the Australian alcoholic beverages advertising code. *Drug and Alcohol Review*, 26(1), 73-81. https://doi.org/10.1080/09595230601037026
- Esser, M. B., & Jernigan, D. H. (2018). Policy approaches for regulating alcohol marketing in a global context: a public health perspective. *Annual Review of Public Health*, *39*, 385-401. https://doi.org/10.1146/annurev-publhealth-040617-014711
- European Commission. Flash Eurobarometer 464 Report. Fake news and disinformation online; 2018. Retrieved 22 June 22 2019 from

- https://ec.europa.eu/commfrontoffice/publicopinion/index.cfm/ResultDoc/download/DocumentKy/82797
- Graham, A., & Adams, J. (2014). Alcohol marketing in televised English professional football: a frequency analysis. *Alcohol and Alcoholism*, 49(3), 343-348. https://doi.org/10.1093/alcalc/agt140
- Grube, J. W. (1993). Alcohol portrayals and alcohol advertising on television. *Alcohol Research*, 17(1), 61.
- Haighton, C., Halligan, J., & Scott, S. (2017). Is popular radio a source of exposure to *alcohol* references in mid to later life? A content analysis. Journal of Public Health, 40(2): e82-e90. https://doi.org/10.1093/pubmed/fdx046
- Heipel-Fortin, R.B., Rempel, B., & Hons, B. P. H. E. (2007). Effectiveness of alcohol advertising control policies and implications for public health practice. *Public Health*, *4*(1), 20-25.
- InfoAdex. Estudio InfoAdex de la Inversión Publicitaria en España 2019 (2019). InfoAdex. [InfoAdex Study of Advertising Investment in Spain 2019]. InfoAdex.
- Jones, S. C., & Donovan, R. J. (2001). Messages in alcohol advertising targeted to youth. *Australian and New Zealand Journal of Public Health*, 25(2), 126-131. https://doi.org/10.1111/j.1753-6405.2001.tb01833.x
- Jones, S. C., & Donovan, R. J. (2002). Self-regulation of alcohol advertising: is it working for Australia? *Journal of Public Affairs*, 2(3), 153-165. https://doi.org/10.1002/pa.105
- Jones, S. C., Phillipson, L., & Barrie, L. (2010). 'Most men drink... especially like when they play sports'—alcohol advertising during sporting broadcasts and the potential impact on child audiences. *Journal of Public Affairs*, *10*(1-2), 59-73. https://doi.org/10.1002/pa.340

- Ley 7/2010, de 31 de marzo, General de la Comunicación Audiovisual. [Act 7/2010 of March 31, General Audiovisual Communications]. Boletín Oficial del Estado (BOE), núm. 79, de 1 de abril de 2010. Retrieved December 22, 2018, from https://www.boe.es/buscar/act.php?id=BOE-A-2010-5292
- Ministerio de Sanidad, Consumo y Bienestar Social. Observatorio Español de Drogas y Adicciones (OEDA) (2019). Encuesta sobre alcohol y drogas en España. Alcohol, tabaco y drogas ilegales en España. [Spanish Observatory on Drugs and Addictions. Survey on alcohol and drugs in Spain. Alcohol, tobacco and illegal drugs in Spain]. Retrieved March 18, 2020, from

http://www.pnsd.mscbs.gob.es/profesionales/sistemasInformacion/informesEstadisticas/pd f/2019OEDA-INFORME.pdf

- Ministerio de Sanidad, Servicios Sociales e Igualdad. (2019). Estrategia nacional sobre adicciones 2017-2024. Delegación del Gobierno para el Plan Nacional sobre Drogas.

  [National strategy on addictions 2017-2024. Government Delegation for the National Plan on Drugs]. Retrieved March 18, 2020, from http://www.pnsd.mscbs.gob.es/pnsd/estrategiaNacional/docs/180209\_ESTRATEGIA\_N.A DICCIONES\_2017-2024\_\_aprobada\_CM.pdf
- National Institute on Alcohol Abuse and Alcoholism (NIAAA). (2004). Council Approves

  Definition of Binge Drinking. NIAAA Newsl. Retrieved October, 28, 2020

  from http://pubs.niaaa.nih.gov/publications/Newsletter/winter2004/Newsletter\_Number3.p

  df.
- Noel, J. K., Babor, T. F., Robaina, K., Feulner, M., Vendrame, A., & Monteiro, M. (2017).

  Alcohol marketing in the Americas and Spain during the 2014 FIFA World Cup

  Tournament. *Addiction*, 112(S1), 64-73. https://doi.org/10.1111/add.13487

- Perelló-Oliver, S., & Muela-Molina, C. (2017). Radio Mentions: An Analysis of Radio

  Personalities and Ethical Behaviour (Spain). *International Journal of Communication*, 11,

  21.
- Pettigrew, S., Roberts, M., Pescud, M., Chapman, K., Quester, P., & Miller, C. (2012). The extent and nature of alcohol advertising on Australian television. *Drug and Alcohol Rev* 2012; 31: 797-802. https://doi.org/10.1111/j.1465-3362.2012.00439.x
- Toharia J.J. Pulso de España 2016. Un informe sociológico [The pulse of Spain 2016. A sociological report] (2017). Retrieved October 10, 2018, from http://metroscopia.org/confianza-en-las-instituciones-espana-en-perspectiva-comparada/

 Table 1. Type of Product by Encouraging Immoderate Consumption

|               | Encou   | raging Immo | — Total |      |          |       |
|---------------|---------|-------------|---------|------|----------|-------|
|               | Absence |             |         |      | Presence |       |
|               | n       | %           | n       | %    | n        | %     |
| Gin           | 2       | 50.0        | 2       | 50.0 | 4        | 100.0 |
| Brandy        | 17      | 73.9        | 6       | 26.1 | 23       | 100.0 |
| Rum           | 55      | 27.8        | 143     | 72.2 | 198      | 100.0 |
| Other liquors | 9       | 6.9         | 121     | 93.1 | 130      | 100.0 |
| Total         | 83      | 23.4        | 272     | 76.6 | 355      | 100.0 |

Note: Type of Product by Encouraging Immoderate Consumption;  $\chi^2$ : 56,160; Significance: .001

 Table 2. Type of Product by Factors Related to Drinking.

|               | Facto   | rs Relate | Total    |       |        |       |
|---------------|---------|-----------|----------|-------|--------|-------|
|               | Absence |           | Presence |       | —Total |       |
|               | n       | %         | n        | %     | n      | %     |
| Gin           | 0       | .0        | 4        | 100.0 | 4      | 100.0 |
| Brandy        | 5       | 21.7      | 18       | 78.3  | 23     | 100.0 |
| Rum           | 101     | 51.0      | 97       | 49.0  | 198    | 100.0 |
| Other liquors | 99      | 76.2      | 31       | 23.8  | 130    | 100.0 |
| Total         | 205     | 57.7      | 150      | 42.3  | 355    | 100.0 |

Note: Type of Product by Factors Related to Drinking;  $\chi^2$ : 39,423; Significance: .001