

Content Analysis of Food and Beverages Advertisements Targeting Children and Adults on Television in Sri Lanka

Asia-Pacific Journal of Public Health
2016, Vol. 28(1S) 865–925
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DOI: 10.1177/1010539515620481
aph.sagepub.com



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Abstract

Introduction. Food marketing is one of the main factors in the increase in childhood obesity. The objective is to compare the strategies used for promotion of food and beverages advertisements on Sri Lankan television for children and adults. **Method.** Among 16 analog television channels in Sri Lanka, 50% of the channels were selected randomly after stratifying according to language. Recording was during weekdays and weekends. In total, 95 different food and beverages advertisements were analyzed irrespective of the channel. **Results.** Among all food and beverages-related advertisements, 78% were child focused, and among these 74% claimed health benefits. A statistically significant difference was found in terms of implications related to nutrition or health ($P < .05$). None of the advertisements contained disclaimers. **Conclusion and recommendations.** The Ministry of Health needs to pursue all food and beverages-focused advertisements for policy formulation and implementation.

Keywords

food and beverages advertisements, strategies, disclaimers

Introduction

Overweight or obesity in children, which is considered to be an epidemic, is attributed to the marketing of energy-dense, nutrient-poor foods to children.¹ Food marketing targets children who are too young to perceive the truth in advertising.² Thus, it strongly influences children's food preference requests, which is known as "pester power."³

The first television advertisement was telecast in the United States in 1941. Since then, there has been a strong influx of advertisements, with various strategies that promote food and beverages specially aimed at children. A few countries and even provinces within countries have decided that the evidence on the influence of advertisements on children is strong enough to take

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policy actions. Sweden is one such country, which has banned advertisements on television and radio programs targeted at children less than 12 years of age, whereas Australia too has banned food and beverages advertisements for preschool children. Belgium has also prohibited advertisements during peak hours and in children's programs. Québec, a province in Canada, also banned fast food advertisements on television.⁴

In 1998, Lewis and Hill⁵ found that 50% of the advertisements were contributed by food products and targeted children through strategies based on fun, happiness, humor, and animation. Similar findings were seen in the study by Sixsmith and Furnham⁶ even after 10 years, in which a fantasy world, leisure settings, cartoon characters, and celebrities were featured in nearly 77% of unhealthy food-related advertisements targeted at children.⁶ Australian children were also targeted with similar strategies by using cartoons, celebrities, and offers.⁷ Hasting et al³ reviewed strategies targeting children in 2003, of which the most common type of advertisement was breakfast cereals. Offers were found in nearly 25% of child-focused advertisements. Almost all studies had themes that were mainly fun, fantasy, humor, and adventure.³ Another strategy was the use of gender in advertisements, and men were found to have dominating, authoritative roles.⁸⁻¹⁰

Although these studies from developed countries have shown the power of advertising among children, studies from Asia and more specifically from the South-East Asian countries are meager. A study in Malaysia shows that noncore food products were the main type of food product advertised, and this trebled during the school holidays.¹¹ This study was preceded by a study in 2008, which showed that nearly 35% of the advertisements were snack based.¹² In the same year, a study in Singapore, which looked at the Asia-Pacific perspective of food advertisements on television, also was of the view that noncore foods were those that were mainly advertised, of which sugar-sweetened drinks were the main type.¹³

This is new territory for public health in Sri Lanka and in South Asia. We need more research to go forth with what other developed countries such as Sweden and Québec have achieved. Because of the paucity of information on food advertisements on television, there is an urgent need to evaluate food and beverages-related advertisements aimed at children in Sri Lanka, which will not only help Sri Lanka but all Asian countries. Thus, the aim of this study was to compare the strategies used in food and beverages advertisements in Sri Lankan television for children and adults.

Methodology

There are 16 analog television channels in Sri Lanka, which can be viewed throughout the island. The time at which transmission on the channels begins and ends varies. However, all channels telecast their programs daily, with no exceptions. Among these 16 channels, 8, 4, and 4 channels telecast in Sinhala, Tamil, and English, respectively. The 16 channels were stratified according to the languages, and 50% of the channels from each category were selected randomly. Therefore, 4, 2, and 2 channels were recorded (n = 8 channels) in the 3 languages. A qualified technical officer was recruited to record all the channels.

The 8 channels were recorded on 2 consecutive days during weekdays and 2 consecutive days during the weekends, which was a total of 4 days per channel, with a total of 32 days for all 8 channels. These days were selected randomly. The recording was performed on the selected days from the time that the telecast opened to the time of closure of the telecast. These telecast programs were edited by the technical officer, and all food and beverages-related advertisements were recorded according to the channels that they were telecast on. The analysis was performed by the principal investigator; the analysis was objective, and any discrepancies were sorted out with a nutritionist.

The advertisements were further categorized into confectionaries, fast foods, savory snacks, dairy products, soft drinks or drinks with high sugar content, and others. Categorization into

healthy or unhealthy foods was based on the fat, sugar, and salt content of the foods compared with the national values in Sri Lanka. A food or beverage was termed unhealthy in terms of sugar if it contained more than 6 teaspoons or 25 g of sugar per serving.^{14,15} If a food or beverage contained more than 230 mg (1/25th of a teaspoon) of salt or sodium per serving, it was deemed unhealthy.^{15,16} With regard to fat, food was categorized as unhealthy only if it had trans-fats in it, such as pastries, fried food, and cakes.¹⁵ Foods that did not have any labels were categorized after consultation with a nutritionist into healthy and unhealthy foods. Determination of whether advertisements were directed primarily at children or adults was based on both visual cues (use of animation and licensed characters, music, tone, and ages of characters portrayed) and textual cues (whether voiceover announcers or characters addressed adults or children specifically within the advertisement). A disclaimer is a disclosure made with the purpose of clarifying potentially misleading or deceptive statements made within an advertisement. A health or nutritional claim refers to a situation when the product advertised spells out a health or nutritional statement in words or in written format.

The statistical analysis was performed using SPSS version 15. All categorical variables were described with numbers and percentages. The χ^2 test or Fisher exact test was used to determine if there was an association between the categorical variables. The significance level was set at .05.

This study obtained ethical approval (706/13) from the Ethics Review Committee of the Faculty of Medical Sciences, University of Sri Jayewardenepura.

Results

There were 292 food and beverages advertisements that were recorded. Among these, 197 (67.5%) advertisements were shown repeatedly in all channels. In total, 95 different food and beverages advertisements were analyzed irrespective of the language they used; 74 advertisements (77.9%) were child-focused advertisements. Confectionaries were one of the most common types of food that were advertised targeting children (Table 1). Other types of food, such as tea, flour, and cooking oil were targeted at adults. A significant association was found between healthy and unhealthy types of advertisements when compared with child-focused advertisements ($P < .05$). Nearly 90% of the advertisements categorized as unhealthy targeted children. Among the child-focused advertisements, 74% did not claim any benefit to health or nutrition associated with their food product either in written format or in words. A statistically significant difference was not seen between those who had claimed any benefit to health or nutrition associated with their food product when compared with child- or adult-focused advertisements. However, 57% of the child-focused advertisements implied that there were scientific, factual, or technical implications related to nutrition or health. This was found to be statistically significant ($P < .05$) when compared with adult-focused advertisements. It was unfortunate to see that none of the advertisements had any disclaimers relating to advice or warning about consumption of the product.

The price was indicated in 84% and was not indicated in 64% of the child advertisements. This difference was found to be statistically significant ($P < .05$). All advertisements that used cartoon or celebrity figures, and all advertisements that used offers were from the child-focused advertisements (Table 2); 81% of the child-focused advertisements used leisure settings. However, the setting was not significantly associated with child- or adult-focused advertisements (Table 2).

Among the child-focused advertisements, unhealthy foods were almost equal (91%) among Sinhala and the Tamil advertisements. A significant association was found between the advertised language and the food being healthy or unhealthy. Although this was found to be statistically different, a statistically significant difference was not found in the time duration of these advertisements. None of the adult-focused advertisements were in English. It was found that

Table 1. Comparison of Child- and Adult-Focused Food Advertising in Sri Lanka.

Contents	Child-Focused Advertisements (n = 74), n (%)	Adult-Focused Advertisements (n = 21), n (%)	P Value
Type of food			
Confectionary	29 (100.0)	0 (0.0)	—
Savory snacks	5 (100.0)	0 (0.0)	
Soft drinks and drinks high in sugar	17 (100.0)	0 (0.0)	
Dairy products	8 (100.0)	0 (0.0)	
Fast foods	11 (100.0)	0 (0.0)	
Others	4 (16.0)	21 (84.0)	
Food type			
Healthy	9 (40.9)	13 (59.1)	.000
Unhealthy	65 (89.0)	8 (11.0)	
Health or nutritional claims associated with the advertised food product			
Claimed	19 (25.7)	5 (23.8)	.86
Not claimed	55 (74.3)	16 (76.2)	
Scientific, factual, or technical implications related to nutrition or health			
Implied	42 (56.7)	6 (28.6)	.023
Not implied	32 (43.2)	15 (71.4)	
Disclaimers relating to advice or warning about consumption of the product			
No disclaimers	74 (77.9)	21 (22.1)	—

80.4% of the advertisements were telecast on weekends, and 65% of the advertisements were telecast from 12 PM to 12 AM on Sinhala channels (Table 3).

Discussion

Food and beverages advertisements and their persuasive marketing techniques were analyzed. It is to be noted that none of the advertisements promoted fruits or vegetables, and none of the advertisements had a disclaimer. Sri Lanka has recently passed a bill in parliament for pictorial warnings on cigarette packets, and disclaimers for smoking and alcohol are telecast on television. Such acts should be implemented with regard to television advertisements, where health messages and disclaimers should be telecast.

There was no statistically significant difference among child- and adult-focused advertisements that claimed nutritional or health benefits. However, there was a significant difference in the scientific, factual, or technical implications related to nutrition, health, academic performance, sports, or family harmony between child- and adult-focused advertisements. This shows that although a health benefit is not focused on, what was implied in the advertisements could change children's mentality and, thus, could increase the pester power of children for that particular food product. However, results in a study by Sixsmith and Furnham⁶ show that children's advertisements had more scientific information than those meant for adults, which they attribute to the openness of the content.³ A study in 2008 in the United States showed that there was an improvement in the advertisements and that 42% of them had a health or nutrition message.¹⁷ Ho and Len¹⁸ also described marketing messages that provided reassurance messages. When compared with all the above studies, Sri Lankan advertisements on television clearly lack health and nutritional messages.

One of the few studies from Asia shows that on an average 10% of children in India and 30% of children in Malaysia watch more than 8 hours of television per day. Furthermore, in that study,

Table 2. Other Strategies Used in Advertised Food Products.

Contents	Child-Focused Advertisements, n (%)	Adult-Focused Advertisements, n (%)	P Value
Price			
Yes	56 (83.6)	11 (16.4)	.038
No	18 (64.3)	10 (35.7)	
Use of cartoons or celebrities			
Yes	14 (100.0)	0 (0.0)	.035 ^a
No	60 (74.1)	21 (25.9)	
Offers			
Yes	14 (100.0)	0 (0.0)	.035 ^a
No	60 (74.1)	21 (25.9)	
Setting			
Home	27 (73.0)	10 (27.0)	0.35
Leisure	47 (81.0)	11 (19.0)	

^aFisher's exact test.**Table 3.** Language Strategies Used in Advertised Food Products.

Contents	Language of the Child-Focused Advertisements (n = 74)			P Value	Language of the Adult-Focused Advertisements (n = 21)			P Value
	Sinhala	Tamil	English		Sinhala	Tamil	English	
Food type, n (%)								
Healthy	4 (8.7)	2 (9.5)	3 (42.9)	.03	8 (57.1)	5 (71.4)	0 (0)	.52
Unhealthy	42 (91.3)	19 (90.5)	4 (57.1)		6 (42.9)	2 (28.6)	0 (0)	
Type of food								
Confectionary	20 (43.5)	8 (38.1)	1 (14.3)	.68	0 (0)	0 (0)	0 (0)	—
Savory snacks	3 (6.5)	1 (4.8)	1 (14.3)		0 (0)	0 (0)	0 (0)	
Soft drinks	10 (21.7)	6 (28.6)	1 (14.3)		0 (0)	0 (0)	0 (0)	
Dairy products	4 (8.7)	2 (9.5)	2 (28.6)		0 (0)	0 (0)	0 (0)	
Fast foods	6 (13.0)	4 (19.0)	1 (14.3)		0 (0)	0 (0)	0 (0)	
Others	3 (6.5)	0 (0)	1 (14.3)		14 (100)	7 (100)	0 (0)	
Time (minutes), mean ± SD	44.9 (6.5)	56.2 (13.8)	67.1 (8.3)	.45	28.2 (8.1)	92.1 (27.8)	0 (0)	.01
Day								
Weekend	37 (80.4)	11 (52.4)	6 (85.7)	.04	7 (50.0)	3 (42.9)	0 (0)	.75
Weekday	9 (19.6)	10 (47.6)	1 (14.3)		7 (50.0)	4 (57.1)	0 (0)	
Time of the day								
12 AM to 12 PM	3 (6.5)	3 (14.3)	3 (42.9)	.06	6 (42.9)	3 (42.9)	0 (0)	.37
12 PM to 12 AM	30 (65.2)	10 (47.6)	2 (28.6)		7 (50.0)	2 (28.6)	0 (0)	
Both times	13 (28.3)	8 (38.1)	2 (28.6)		1 (7.1)	2 (28.6)	0 (0)	

it was shown that there were more than 15 minutes of advertisements in an hour, which were commercials for soft drinks, fast foods, chocolates, and noodles.¹⁹ With the rise in the obesity epidemic and with such long hours of television watching, it is time that the policy planners in Sri Lanka go forward with not only disclaimers for smoking and alcohol but also for food and beverages advertisements.

The use of animation techniques or celebrity figures has been shown in many studies. A study in Sri Lanka in the year 2012 showed that 38% of the children demanded food based on popular

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characters on television, and another 49% believed that providing offers on the advertisements would increase the demand for that particular product. This strongly correlates with our study because we showed that providing offers has been found to be strongly associated with child-focused advertisements. Samaraweera and Samanthi,²⁰ in 2012, further showed that using such strategies increase food expenditure by 59 rupees. This also implies the pester power that Hastings et al³ discuss. It has been found that younger children may not be able to distinguish the persuasive intent when celebrities or cartoon characters are used in advertisements and would link the product to fun or happiness,²¹ which is also clearly seen in our study.

In American television media, Connor²¹ reports that among all child-oriented food advertisements, 55% contained characters who spoke. In 2008, Kelly et al⁷ also studied the cartoon and competition strategy used in television and found that 21.4% of food advertisements contained promotional characters and another 7.3% used premium offers. To supplement this, the noncore foods were also found to be more associated with promotional characters.²² Mexican advertisements had a different point of view, where the promotion not only targeted the children but also targeted adults on children-related foods.²³

Promotion of the big fives has been targeted in many countries. Among a total of 3236 advertisements, 72.4% were advertised during children's programs. Furthermore, within these advertisements, 62.5% targeted the big fives.³ In Mexico, 4 hours of food-related advertisements were shown in a day, of which 2 hours were for children, of which 50% (1 hour) was for the big fives.³ Among the big fives, it was found that breakfast cereals were most commonly advertised.³ However, these findings were not similar to the findings of this study, where the most common big five of all—namely, breakfast cereals—was not promoted. The Sri Lankan advertisements were even more unhealthy because the 2 most common types of advertisements were confectioneries, and soft drinks and drinks with high sugar content, all which were only shown in the child-focused advertisements.

This study did not estimate the advertisements the children viewed on cable or dialogue television. However, those advertisements would be international advertisements, whose products may or may not be sold in Sri Lanka. This study clearly shows that a multisectoral national advertising policy that outlines the promotion of food products needs to be in place in Sri Lanka. This strategy should pay special attention to the interpretation of such advertisements. A Committee at the Ministry of Health needs to be set up to inspect all food and beverages-related advertisements and for the formulation and implementation of an advertising policy.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: The author of this publication is supported by the ASCEND Program (<http://www.med.monash.edu.au/ascend>) funded by the Fogarty International Centre, National Institutes of Health, under Award Number: D43TW008332. The contents of this publication are solely the responsibility of the author and does not necessarily represent the official views of the National Institutes of Health or the ASCEND Program

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