YouTube: a promotional vehicle for little cigars and cigarillos?

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ABSTRACT

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Received 11 April 2012 Accepted 7 September 2012 **Objective** As the third most popular website in the world, messages embedded in the video-sharing site, YouTube, have the potential to influence tobacco-related attitudes, beliefs and behaviours. Despite the growing number of videos depicting little cigars/cigarillos (LCCs), there has been no examination of the portrayal of these products on YouTube.

Methods Researchers identified up to the top 20 search results on YouTube by relevance and view count for the following search terms: 'little cigars', 'cigarillos', 'Black and Mild', 'Swisher Sweets', 'White owl', 'Garcia y Vega', and 'Winchester'. Reviewers rated whether videos were 'pro', 'anti' or 'neutral' to the use of LCCs, and documented statistics on the reach and viewer demographics. Several main themes around LCCs were noted, as was video quality (amateur vs professional) and demographics of video participants.

Results Of the 196 videos retrieved, only 56 were unique, eligible videos. The majority of these (n=43)were 'pro' LCCs, 11 were 'neutral', and only two were 'anti' LCCs. Videos were primarily viewed by males in the USA and Canada and most were amateur. Common themes included where to purchase LCCs, their candy flavours, and that they are cheap or cheaper than cigarettes, and 'smooth'.

Conclusions The vast majority of information on YouTube about LCCs promotes their use. It is critical to monitor content on LCCs posted on YouTube, and develop appropriate health messages to counter pro-LCC content, and appropriately inform potential consumers of the harms associated with their use.

INTRODUCTION

The sale of little cigars which weigh <3 lbs per thousand and most resemble cigarettes, and cigarillos which weigh between 3 and 10 lbs per thousand, and are intermediate in size between a cigarette and a large cigar, are increasing in many countries throughout the world.^{1–8} Swedish Match, one of the largest producers of cigars, cites that mass market cigar sales were up 22% in 2010,9 and profits continued to rise in 2011.¹⁰ Dramatic increases have been noted specifically in Germany,¹¹ China,¹² and the largest market for little cigars/ cigarillos (LCCs), the USA. For instance, data from the Maxwell Report, a trade publication that documents sales data of cigars in the USA, found that from 1995 through 2008, sales increased by 316% for little cigars, and by 255% for cigarillos.8 Surveillance of the global prevalence of LCC use has been poor, but studies in the USA show that approximately 5.2% of the US population smokes cigars,¹³ and 26% of young adults, 18-34 years of age, report ever smoking LCCs.¹⁴ Those individuals most likely to use LCCs-the young, AfricanAmerican and lower income,¹⁵ ¹⁶—tend to be the same populations at-risk for lifelong tobacco use and increased tobacco-related morbidity and mortality.¹⁷ ¹⁸ Despite this, there is a notable lack of public education dedicated to informing consumers about the harms associated with LCCs. False or misleading information about LCCs, therefore, has the potentially to greatly influence how consumers perceive and use these products.

Although increasingly recognised as a source of health information,^{19–21} the internet remains largely without a global governing body for content control. With over 2 billion internet users worldwide and 10-year growth in some world regions exceeding 2000%,²² it is becoming increasingly critical to monitor health-related information being delivered online. Posts are often anonymous, without a legitimate source, opinion masked as fact, misleading or incorrect.^{23 24}

One common repository for unregulated health medical-related information is and the video-sharing site. YouTube. Created in 2005. YouTube is the third most popular website in the world.²⁵ Currently available in 39 countries and in over 50 languages,²⁶ messages appearing in YouTube have the potential to reach billions of people across the globe. Over 800 million unique users, or approximately 30% of those using the internet, visit YouTube each month, and over 4 billion videos are viewed each day.²⁷ Its reach and the influence will likely increase given its continued expansion across the globe and the growing number of platforms on which YouTube can be accessed.²⁸⁻³⁴ Videos regularly receive thousands of views and beyond, with the most popular video in 2012, for example, receiving over 400 million views. $^{35\ 36}$

Anyone can upload a video to YouTube and, as a result, there are many publicly available videos that purposely promote risky or otherwise harmful behaviours. One harmful behaviour that may be getting promoted through YouTube, despite its well-known adverse consequences, is tobacco use. Previous studies have analysed YouTube as a source for information on 'smoking',³⁷ top cigarette brands,³⁸ smoking cessation,³⁹ smokeless brands,³⁸ smoking cessation,³⁹ smokeless tobacco,⁴⁰ ⁴¹ smoking imagery associated with cigarettes,⁴² smoking fetishes,⁴³ usage of electronic nicotine delivery systems (ENDS)⁴⁴ and hookah.⁴⁵ Results have shown that YouTube videos are often protobacco,^{37 38 42 43} and may promote the use of new products, such as smokeless tobacco,⁴⁰ ⁴¹ ENDS,⁴⁴ or hookah.⁴⁵ Additionally, a study by Elkin et al³⁸ noted that, despite the tobacco industry vehemently denying advertising on the internet, 20 out of 163 videos analysed appeared to be professionally made.⁴⁶ Covert advertising by

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tobacco industry executives is also a possibility, as a recent study found that some employees of British American Tobacco (BAT) were energetically promoting BAT and BAT brands on Facebook.⁴⁷

The Social Learning Theory posits that behaviour is learnt from the environment through observation.⁴⁸ This suggests that imagery or content in a medium, such as YouTube, has the potential to influence the uptake and use of tobacco products. While the effects of tobacco-related imagery in YouTube have yet to be causally linked to changes in tobacco use behaviour, the National Cancer Institute has concluded that 'media communications play a key role in shaping tobacco-related knowledge, opinions, attitudes and behaviours among individuals and within communities'.⁴⁹ Understanding how consumers interact with, and are influenced by, smoking imagery on YouTube will help tobacco control partners develop and deliver maximally effective public educational messages.

Despite the growing literature on the portrayal of tobacco on YouTube, there has yet to be an examination of videos specific to (LCCs). This study was conducted for two main purposes: (1) to conduct a surveillance of YouTube in order to assess the quantity, reach and audience of LCC videos and (2) to assess the portrayal of LCCs, including the production quality of the video and demographics of the video participants. Given the extensive reach of YouTube, any positive imagery or messages associated with an emerging product, such as LCCs, could influence uptake and patterns of use, and contribute to the global tobacco epidemic.

METHODS

Sampling method

The sampling methodology conducted is in accordance with Bromberg *et al.*⁴⁰ First, the most common search terms for LCCs were identified based on what is known about the leading LCC brands,⁸ as well as insight gained on web traffic searching for LCCs through Google Insights for Search. The search terms were chosen because they best represented the LCC products and search patterns associated with these products. The terms used to search YouTube were: 'Black and Mild', 'Cigarillo', 'Swisher Sweets', 'White Owl', 'Little cigar', 'Garcia y Vega' and 'Winchester'. The first five terms were searched on 13 February 2012 and the second two on 19 and 20 March 2012. To refine results, brand names were also searched by 'little cigars', which proved to yield videos specific to both cigarillos and little cigars. Two searches were conducted for each term: (1) 'by relevance' and (2) 'by view count'. The top 20 results for each search were downloaded; if fewer than 20 results, all videos were downloaded. Choosing only the top 20 results is in line with previous methodology, and based on research indicating the majority of people only click on the first page of search results.⁵⁰ This study did not require institutional review board approval given that it used freely accessible media.

Exclusion criteria

Videos were excluded if they were not in English, duplicates, not relevant (ie, did not contain LCCs as a feature of the video) or focused on large cigars or other tobacco products rather than LCCs.

Coding

The videos were rated independently by two separate reviewers. They were first rated based on whether they had imagery or messages that were 'pro', 'anti' or 'neutral' to LCCs. 'Pro' was defined as promoting the use of LCCs, or making them look enjoyable or socially acceptable. Videos about quitting, negative consequences of LCCs, or those that contained any other negativity or warnings specific to LCCs were considered 'anti' LCCs. Instructional videos showing how to use LCCs to make 'blunts', defined as a cigar hollowed out and filled with marijuana, were considered 'not applicable' since the primary focus of those videos were on marijuana. Any videos that were not easily classified as either 'pro' or 'anti', but included imagery or text about LCCs, were coded as 'neutral'. Reviewer agreement on the ratings was near-perfect at 98%.

Video statistics were documented for all videos, including the number of views the video had received, the number of 'likes' or 'dislikes', and the number of comments. YouTube also currently has a number of video statistics available, including the countries in which the video was most frequently viewed, and age (13-17, 18-24, 25-34, 35+) and gender of those most likely to view the video. This demographic information is based on the gender and birth date information that users share when they create YouTube accounts. Videos that were 'pro' LCCs were also analysed on the following parameters: (1) whether they were specific to little cigars or cigarillos or both, (2) whether the video was instructional and, if so, how and (3) whether the ad was a historical advertisement for LCCs and, if so, whether it appeared amateur or professional. Professional was defined as promotion of a specific brand, including text of the brand written across the screen, higher production values, and/or if the video explicitly indicated it was created by a professional organisation. Production values were determined by the judgment of two separate reviewers, a third if they disagreed, and was judged based on the quality in the lighting, editing, scripting and 'acting' of the video. Additionally, the content of 'pro' videos was analysed to document whether there was any mention of the following: (1) where/how to purchase LCCs, (2) how to use LCCs, (3) use of LCCs as an alternative to cigarettes or 'like' cigarettes, (4) candy flavouring, (5) mention of US Food and Drug Administration (FDA) regulation of tobacco, (6) LCCs as less harmful than cigarettes and (7) LCCs as cheap or cheaper than cigarettes. This list was developed based on information obtained through internal discussions, focus groups and surveys examining reasons why consumers use tobacco products other than cigarettes. Finally, the demographic characteristics of the most prominent people in the ad, such as race/ethnicity, age group (13-17, 18-24, 25-34, 35+) and gender, were estimated by the reviewers.

RESULTS

Searching YouTube by relevance and view count for seven key terms yielded a total of 196 videos. Of these, 95 were deemed ineligible, and 37 were duplicates. Eight additional videos portrayed the use of LCCs only for the purposes of making a blunt, and were removed from analysis. The remaining 56 unique LCC videos consisted primarily of those that were 'pro' LCC (n=43, 77%), followed by videos 'neutral' to LCCs (n=11, 19%). Only a very small minority of videos (n=2, 3%) were 'anti' LCC.

Table 1 presents the video statistics associated with the 'pro', 'anti' and 'neutral' videos. One of the two 'anti' LCC videos was contained in a playlist and had no associated video statistics, so the statistics listed refer to the remaining 'anti' video. In total, the 'pro' videos received almost 6 million views versus the 567 478 views and 137 583 views by the 'anti' and 'neutral' videos, respectively. The majority of the views for the 'pro' videos came from one single music video, 'Smokin good', that garnered 5 555 582 views as of this study, with 7606 likes and

Table 1	Video Statistics associated with YouTube videos that are	
'pro', 'ant	ti' or 'neutral' to little cigars/cigarillos (LCCs)	

	'Pro' LCCs (n=43)	'Anti' LCCs* (n=2)	'Neutral' LCCs (n=11)	
	n	n	n	
Number of views				
Total	5969749	576478	137583	
Average	138831	N/A	15287	
Range	101-5555582	N/A	424-102186	
Number of 'likes'				
Total	9324	1984	187	
Average	217	N/A	21	
Range	0-7606	N/A	0–99	
Number of 'dislikes'				
Total	343	46	103	
Average	8	N/A	11	
Range	0–225	N/A	0–42	
Number of comments				
Total	5869	1242	733	
Average	136	N/A	81	
Range	0-4258	N/A	0–395	

Note. Some videos did not have all statistics available on characteristics of viewers. Information on age missing for seven 'pro', one 'anti' and two 'neutral' videos. Information on gender missing for eight 'pro', one 'anti' and two 'neutral'. Information on country missing for six 'pro', one 'anti' and two 'neutral'.

*Only one video 'anti' to LCCs had any available video statistics.

225 dislikes. While the video was more focused on smoking marijuana, it repeated the lyrics 'I'm a cigarillo fan' multiple times throughout the song. The second most popular video was also a music video with 127 372 views, 960 likes and 5 dislikes. It was called 'cigarillo freestyle' and featured a young African–American man rapping about the benefits of smoking cigarillos with lyrics such as 'I need my cigarillo'. Consistent with the overall increased number of views, the 'pro' videos also had an increased number of 'likes', 'dislikes' and 'comments', as opposed to 'anti' and 'neutral' videos.

According to statistics supplied by YouTube, all videos were overwhelmingly most popular among males (table 2). There was only one video that was viewed more often by females. The age range of the viewers varied, with the 'anti' video being most often viewed by individuals 35 years and older. The 'pro'

Table 2 Characteristics of viewers according to YouTube statistics*

	'Pro' LCCs (n=36 of 43 total)		'Anti' LCCs (n=1 of 2 total)		'Neutral' LCCs (n=9 of 11 total)	
	# of videos†	# of views	# of videos	# of views	# of videos	# of views
Age group ((years)					
13–17	3	130176	0	0	0	0
18–24	11	104332	0	0	4	115097
25–34	3	14847	0	0	1	6182
35+	19	108119	1	576478	4	16304
Gender						
Male	35	219468	1	576478	9	137583
Female	1	127372	0	0	0	0
Top two countries	USA, Canada		USA, Canada		USA, Canada	

*Numbers refer to the total number of videos within the 'pro', 'anti' or 'neutral' subgroup that had information on both number of views and viewer statistics. Of the 43 total 'pro' videos, information was only available for 36 videos; of the two total 'anti' videos, information was only available for one video; of the 11 total 'neutral' videos, information was only available for nine videos.

†The most popular 'pro' video did not have viewer statistics available.

LCCs, little cigars/cigarillos.

and 'neutral' videos were spread somewhat evenly among those 18 years and older. The only videos most popular in the 13–17-year age group, however, were 'pro' videos. Notably, there was a higher cumulative number of views ($n=130\ 176$) for the videos most popular among the 13–17-year-olds, as compared with the videos in each of the other three age segments (18–24, 25–34 and 35+years). Although the viewership is global, all the videos were most popular in the USA, and most were also equally popular in Canada.

The quality and content of the 'pro' videos are displayed in table 3. The majority were amateur videos (n=34), but four contained historical advertisements from the 1970s for White Owl, Winchester and Hamlet Brand. An additional five videos were deemed as professional, four of which were sponsored advertisements, and one appeared professional due to the video quality. Although the content varied, some common topics included were, where to purchase LCCs (n=10), LCCs as an alternative to cigarettes (n=8), the candy flavours of LCCs (n=17), LCCs as being cheap or cheaper than cigarettes (n=7), and LCCs being smooth or not as harsh as cigarettes (n=7). Four videos supplied links to manufacturers, so that viewers could purchase LCCs.

Of the two 'anti' videos, only one was purely antitobacco. This was a public service announcement sponsored by the US Department of Health and Human Services, which has a Star Wars theme and was more of a general antismoking message. Although not necessarily specific to LCCs, it was deemed eligible because it could be applicable to LCCs. The second 'anti' video contained content as part of a playlist that promoted large cigars. It was judged as 'anti' because it blamed flavoured LCCs for the mounting pressure on the FDA to regulate cigars. So, while it was 'anti' LCCs, it was still protobacco overall. The 'neutral' videos included a wide array of videos that did not endorse either a positive or negative sentiment towards LCCs, but may have included a passing mention or background image of an LCC. For example, one included the word 'cigarillo' in the video title but made no further mention of the product.

Finally, in order to get a sense of the target audience, the demographic characteristics of the main character in the 'pro' videos were noted. Four 'pro' videos did not feature any characters. Of those that did, the overwhelming majority of characters

Table 3	Video quality	and topics	covered in	YouTube videos	s 'pro' LCCs
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	Number	Total view count*
Video quality		
Amateur	34	5902425
Historical ads	4	53009
Not historical, but look professional	5	14315
Topics covered		
Where to purchase LCCs	10	36544
How to purchase LCCs	1	186
As an alternative to cigarettes	8	47158
The candy flavouring	17	112931
Cheap or cheaper than cigarettes	7	60074
Less harmful than cigarettes	2	1525
Smooth or not as harsh as cigarettes	7	63888
Links to manufacturers to buy LCCs	4	12960
Received a free LCC product to review	1	13113
Songs/music video about LCCs	6	5705103
LCCs in relation to marijuana*	6	5580330

The number refers to the number of videos that fulfil each of the conditions, and the total view count is the total number of views for all videos within that row at the time the video was downloaded.

*These videos did not include content about using LCCs to make blunts.

LCCs, little cigars/cigarillos.

were Caucasian (n=33). The remaining were African–American (n=4), Hispanic (n=1) or 'other' ethnicity (n=1). Almost all videos also featured males (n=31) rather than females (n=7). Finally, the age of the characters was estimated to mainly fall within the range of 18–24 years (n=25), followed by 25–35 years (n=10), and 35 years or older (n=3). Only one video featured a main character less than 18 years of age.

DISCUSSION

To our knowledge, this is the first study to document the quantity, reach and portrayal of videos depicting LCCs on YouTube. While many of the videos retrieved through the search terms were not actually relevant to LCCs, the vast majority of those that were relevant promoted the use of these products. This is in agreement with prior studies of tobacco-related videos on YouTube.^{37–45} Together, the 'pro' videos had been viewed almost six million times at the time at this study, and were most often viewed by males and those living in the USA and Canada. However, the two top videos which together garnered the majority of views, were music videos featuring young African-American males. Only two videos retrieved were categorised as 'anti' LCC, one of which was actually protobacco, as it promoted the use of large cigars, and was 'anti' LCC only because it equated LCC use as impacting pressure for federal regulation of large cigars. The second 'anti' video was more of a generic antismoking message. There appeared, therefore, to be a wealth of messaging on YouTube that promoted the use of LCCs, but no messages directly addressing the harms associated with LCCs specifically.

While there was not yet a staggering amount of YouTube videos addressing LCCs, the preponderance of positive messaging around these new and emerging products has implications. Themes of several videos focused on LCCs as an alternative to cigarettes, including suggestions that they are cheaper, smoother, less harmful or come in candy flavours. Given the lack of public education on LCCs, messaging promoting their use as an alternative to cigarettes could support misperceptions of their risk, and encourage initiation or continued use of the product. This has particular implications for those most vulnerable to tobacco use and related morbidity and mortality, notably the young, minority and lower socioeconomic status subgroups, especially since this study showed that the most popular 'pro' videos featured the at-risk demographic of young African-American males. Furthermore, YouTube's viewer statistics showed that several 'pro' videos were most often viewed by the 13–17-year-olds. Youth are not only an audience, therefore, but a prime audience of certain YouTube videos promoting LCCs.

In global regions where cigarettes are more tightly regulated, or more expensive than LCCs, content on YouTube promoting its use may encourage dual use of LCCs, or even product switching. For example, the rapid rise in recent sales in LCCs in the USA is in part attributed to new regulations on the marketing, promotion and sales of cigarettes that are not applicable to LCCs, such as bans on the sale of candy and fruit-flavoured cigarettes, distribution of free samples of cigarettes, and the sale of packages of fewer than 20 cigarettes.⁵¹ LCCs are continuing to earn more shelf space in convenience stores, and gaining in popularity as the industry aggressively markets the products.⁵² Promotional activities of the tobacco industry are evident, as a number of video participants claimed that they had received free products and were using YouTube to discuss their experience with these products. YouTube videos promoting use of LCCs, supplying positive reviews of the product and/or supplying links to manufacturers, in turn, help the industry in their promotional efforts. The net result of these activities will likely influence uptake of LCCs by youth and young adults, and provide easy access to adults looking for alternate products. Future research will need to consider who seeks out, and is most susceptible to, messages in YouTube, since the effects of media do not necessarily influence all members of the population equally,^{53–56} as well as which messages resonate and have the greatest influence on the consumer.

In 2011, YouTube had more than one trillion views. or almost 140 views for every person on Earth.²⁷ As the third most popular website in the world, content on YouTube has the potential to reach and influence a broad audience. The global reach and penetration of YouTube is not going unnoticed, as the 2011 Social Media Marketing Industry Report stated that 77% of marketers plan on increasing their YouTube and/or video marketing, making it the top area in which marketers plan to invest.⁵⁷ While tobacco companies claim not to advertise on YouTube, promotion of their products could occur either covertly or through users. Apart from the few videos sponsored by online vendors (eg, Gotham Cigars), videos appeared primarily to be uploaded by users. However, especially with the four historical advertisements identified, it is possible that the user uploading the video is connected to the tobacco industry. The issue of covert advertising posing as entertainment or consumer-generated media is not new and not unique to tobacco.⁵⁸ As stated by Catherine Taylor,⁵⁹ of the marketing trade journal Brandweek, it is possible to 'make any ad into one that has all of the attributes of any YouTube video: it can be shared, embedded in other sites and commented upon, with the user firmly at the controls. In short, except for the fact that money changes hands and gives advertisers privileged placements, the content is treated much like user-generated video.'

There are several limitations to this study that must be considered. First, the video marketplace of YouTube changes daily. Therefore, the videos retrieved for this study using the indicated LCC search terms may differ from those retrieved at any subsequent date. Second, despite attempting to be as inclusive as possible with the search terms, it is possible that certain popular and relevant LCC videos were not obtained in the searches indicated. Third, demographic statistics on YouTube are based on information that users share when they create YouTube accounts, so are not necessarily accurate nor representative of the whole YouTube audience. Fourth, although this study noted 'likes', 'dislikes' and 'number of comments' associated with each video, the content of comments were not analysed, and data were not available to measure forwarding or otherwise sharing of the video-both of which may be more indicative of consumer response. Finally, the coding of videos as 'pro', 'anti', 'neutral' or ineligible, as well as the determination of several video characteristics (eg, production quality), were determined by coders using guidelines and their best judgment. Although two coders were used for reliability purposes, and a third if they disagreed, it is possible that some videos or characteristics within the videos were not accurately coded.

Despite these limitations, this study represents the first surveillance study of the depiction of LCCs on YouTube. The majority of videos retrieved on LCCs promoted their use and even suggested them as an alternative to cigarettes. Given the impending regulation of cigarettes in certain countries, the increased marketing of these products, and the lack of public education efforts directed specifically at LCCs, consumers may be especially susceptible to initiation and continued use. For this reason, it is critical to monitor messages on LCCs transmitted through YouTube videos, and develop appropriate health messages to counter mistruths, and appropriately inform potential consumers of the harms associated with their use.

What this study adds

- This study provides the first surveillance data of LCC-related videos on YouTube, and suggests that consumers are primarily being exposed to messages promoting the use of these emerging tobacco products.
- Statistics gathered in this study show that messages embedded in YouTube videos have the potential to reach a wide audience across the globe, and highlight the need for public health organisations to develop and disseminate messages to counter the unregulated promotional activity being propagated through this medium.

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Contributors AR conceived the idea, designed the study, interpreted the data and wrote the manuscript; DV provided critical feedback on the manuscript.

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YouTube: a promotional vehicle for little cigars and cigarillos?

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