

Marketing activities of vape shops across racial/ethnic communities

Robert García¹, Anupreet Sidhu¹, Jon-Patrick Allem¹, Lourdes Baezconde-Garbanati¹, Jennifer B. Unger¹, Steve Sussman¹

ABSTRACT

INTRODUCTION There has been a surge in the number of vape shops in the USA. Research on the marketing practices of e-cigarette manufacturers is scarce and even less known are the practices of vape shop retailers. Past research on tobacco marketing has shown differences in the amount and content of marketing material, based on a community's demographic profile. This study examined marketing strategies in vape shops and explored differences among vape shops located in communities that differ by ethnic composition.

METHODS Data was gathered in 2014 from a pilot-study on vape shops (n=77) in Los Angeles, which documented the characteristics of shops through employee interviews and in-store observations. Data were collected from shops located in communities that were predominantly, African-American (n=20), Hispanic (n=17), Korean (n=18), or non-Hispanic White (n=22).

RESULTS Sixty-one percent of vape shops had advertisements (print ads and posters) for e-cigarettes and 84% offered discounts. Vape shops in Hispanic communities were more likely to have ethnic specific marketing material compared to shops in other communities. All the shops provided customers with free samples, however those in Korean and non-Hispanic White communities had a significantly higher prevalence of customer accessible free samples.

CONCLUSIONS Vape shop marketing practices differed by ethnic community. A large majority of shops provided free samples to their customers, a practice which is now banned by the FDA. It will be important to monitor how vape shops will adjust their marketing strategy because of this ban. Future research should expand on the findings presented here to provide regulators with further crucial information.

AFFILIATION

Department of Preventive Medicine, Keck School of Medicine of USC, University of Southern California, Los Angeles, USA

CORRESPONDENCE TO

Robert García, Department of Preventive Medicine, Keck School of Medicine of USC, University of Southern California, 2001 N Soto St, 312-17, Los Angeles, CA 90032, USA
Email: garc617@usc.edu

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INTRODUCTION

The popularity of electronic cigarettes (e-cigarettes) has led to the rapid creation of a new retail environment, vape shops¹⁻⁵. Vape shops specialize in selling rechargeable e-cigarettes and related accessories, including electronic liquids (e-liquids)^{1-3,5,6}. Marketing expenditures for e-cigarettes have more than doubled between 2011 and 2012, from \$6.4 million to \$18.3 million⁷. However, estimates of marketing expenditures are likely to be conservative as data are derived from national retailers excluding independently owned vape shops⁷. Research on the marketing practices of e-cigarette manufactures is scarce⁸ and even less known are the practices of vape shop retailers.

Vape shops provide an environment that facilitates interaction between employees and customers, where products

and services are discussed as well as smoking cessation^{9,10}. Research has demonstrated that vape shop owners/retailers discuss the safety of the ingredients used in e-liquids, potentially as a marketing tool⁶. Other marketing methods have included signage, promotional discounts, and the use of social media to attract customers². While many vape shop owners rely on word of mouth, they also have used loyalty programs and free samples to promote their products². Moreover, recent studies have found associations between e-cigarette advertising exposure and subsequent e-cigarette use among adolescents^{11,12}. With the rapid rise in e-cigarette use among youth and young adults, and the limited regulations put on e-cigarette advertisements in general, it is imperative that research be conducted that informs on policies aimed at regulating e-cigarette marketing, especially marketing that

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occurs at point-of-sale venues.

Past research on the marketing efforts of tobacco companies has shown significant differences between the types and content of marketing material and a community's racial/ethnic profile¹³⁻¹⁶. For example, there is consistent evidence showing a higher prevalence of deals/coupon in certain ethnic communities¹⁶⁻²⁰. Recently, Cheney et al.² found that vape shop owners, similar to tobacco companies, reported regular use of discounts to attract and retain customers. The current study attempted to determine if differences exist in vape shop marketing practices across racial/ethnic communities. The findings could aid the tailoring of health promotion and education efforts within these communities in the hope of countering marketing effects and to provide information for policies aimed at regulating e-cigarette marketing in the future.

METHODS

Data were collected in 2014 from vape shops in the Los Angeles area. Data collection methods included interviews with the vape shop employees and in-store observations. A Yelp search was conducted to identify vape shops and we excluded stores considered tobacco shops or other stores (i.e. convenience stores) that sold items unrelated to vaping⁹ (see Sussman et al. 2014 for more details). Among the 104 shops identified and approached to be part of the study, 17 were no longer in business, 4 declined to participate, 4 were tobacco shops, 1 was an e-cigarette distributor, and 1 was hookah/vape lounge, resulting in a total of 77 shops for the final analytical sample.

Vape shops were located in communities with high proportions of African Americans (n=20), Hispanics (n=17), Koreans (n=18), and non-Hispanic Whites (n=22), representing the diversity of the greater Los Angeles area. USA Census data were used to identify the neighborhoods that contained certain concentrations of the populations of interest. Thresholds were created for ethnicities to identify an ethnic community: 8-32% of the neighborhood was Korean, 14-38% of African-Americans, 63-93% of Hispanics, and 70-85% of non-Hispanic Whites. For example, if 8-32% of a neighborhood's population identified as Korean it was considered a Korean neighborhood. The Yelp search was conducted for the neighborhoods until a minimum of 20 shops per community were identified. Only shops with 5 to 20 Yelp reviews were included⁹.

Data Collection

The study methods were deemed to be exempt for review by the University of Southern California Institutional Review Board (IRB #HS-14-00217). Two data collectors visited each

of the 77 vape shops. During their visit, they completed an in-store observation and conducted interviews with the store employees. Data collectors interviewed the shop owners, managers, or clerks based on who was available. All data collection was conducted in English. A \$50 gift card was given to each participant for the interview and for allowing in-store observation data collection. During data collection, one data collector would conduct the employee interview while the other conducted the in-store observation.

Measures

Employee Interview. Employees were asked about their age, gender, ethnicity, spoken languages, shop position, and length of employment. Employees were asked also about which products they sold at their shops and if they allowed free samples. If free samples were allowed, employees were asked about how their customers were notified of this service. Employees were asked about how they were informed of new products and how they decided on which products to keep in the shop.

Shop Observation Form. During the in-store observation, data collectors noted the presence of marketing material on display. These promotional displays included interior/exterior signage (i.e. posters, flyers, brochures, chalkboards), coupons or other promotional discounts, advertisements for e-cigarettes, promotional material at the point of sale, and whether free samples containing nicotine were provided and/or promoted. Data collectors also documented whether any of these promotional displays addressed the safety of e-cigarettes, smoking cessation, and whether they contained ethnic specific messages or images. Data collectors also recorded any deals or coupons available in the shop, and the types of products that were clearly visible.

Analysis

Univariate analysis was conducted to assess the demographic information and other vape shop characteristics. Means were reported for continuous variables and frequencies for categorical variables. Chi-square analysis was conducted to determine if vape shop marketing practices/characteristics differed across ethnic communities. Fisher's exact test was used in cases where the cell total was less than five. STATA 14.1 was used to conduct statistical analysis. Results were considered significant when $p < .05$.

RESULTS

Out of the 77 shops in the sample, 1 shop also sold cigars and 2 shops sold pipe tobacco/pipes. None of the shops sold hookah

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or cigarettes, and 43% of them carried “No Smoking” signs. Most vape shop employees were male (86%) with mean age of 28 (SD=8) years ranging from 18 to 59 years (Table 1). About 26% of employees reported “Other” for ethnicity. The different job positions were represented in our sample, with owners

Table 1. Demographic Information of the Vape Shop Owners/ Employees in 2014*

Total N = 77	N	%
Community		
African-American	20	26
Hispanic	17	22
Korean	18	23
White	22	29
Owner/Employee Demographics		
	Mean	SD
Age	28	8
	N	%
Gender		
Male	66	86
Female	11	14
Ethnicity		
Korean (or other Asian backgrounds)	23	30
White	21	27
Hispanic	7	9
Other	26	34
Job at the Store		
Owner	17	22
Owner/Manager	2	3
Manager	30	39
Clerk	24	31
Clerk/Other	1	1
Other	3	4

*Interviews were conducted with vape shop owners/employees in the greater Los Angeles region in 2014

representing 22%, owner/manager 3%, managers 39%, clerks 31%, clerk/other 1% and others 4% of the participants.

Based on the employee interviews, all of the shops allowed free trial puffs on e-cigarettes in the store and 58% of them used displays informing customers about this service. About half (51%) of the shops permitted customers to have free samples that contained nicotine.

Table 2 displays data collected from the in-store observations. We found that 61% of vape shops had advertisements for e-cigarettes, while 84% of the shops used print information to communicate deals/coupons for e-cigarettes. Shops in Hispanic (94%) communities had the highest prevalence of deals/coupons offered followed by shops in African-American (90%), non-Hispanic White (82%), and Korean (72%) communities. One shop in the African-American community also promoted a 10% discount for healthcare workers. About 18% of the shops displayed information regarding the safety of e-cigarettes, 13% had point-of-sales displays and about 10% had ethnic-specific signage. Vape shops in Hispanic communities (29%) were more likely to have ethnic-specific signs (e.g. messages in another language) than other communities (Fisher's exact=0.002). Signage in Hispanic community stores included a sign portraying e-cigarettes as a healthier alternative written in Spanish on a store window and business cards with information in Spanish. There was no ethnic-specific signage in non-Hispanic White and African-American shops. East Asian language and symbols were displayed on store windows and inside Korean community stores.

About 83% of all shops had clearly visible self-service stations where customers could access free samples with differences observed across communities (Fisher's exact=0.013). All Korean stores and 91% of non-Hispanic White stores had visible self-service stations where customers could access free samples compared to 76% of stores in Hispanic communities and 65% of stores in African American communities.

Table 2. Measures of Marketing/Promotion by Community Type in 2014

	African-American (n=20)	Hispanic (n=17)	Korean (n=18)	Non-Hispanic White (n=22)	Total (n=77)
Point-of-sales displays	2 (10)	0 (0)	4(22)	4 (18)	10 (13)
Safety of e-cigarettes	1 (5)	5 (29)	5 (28)	3 (17)	14 (18)
Quit smoking information or products (e.g. Niko Stop)	7 (35)	4 (24)	1(6)	4 (18)	16 (21)
Deals/Coupons for e-cigarettes	18 (90)	16 (94)	13(72)	18 (82)	65(84)
Advertisements for e-cigarettes	12 (60)	10(59)	12(67)	13 (59)	47(61)
Ethnic specific signage	0 (0)	5 (29)	3(17)	0 (0)	8(10)
Other:	6 (30)	5 (29)	6(33)	10 (46)	27(35)

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DISCUSSION

The present study is the first to examine the marketing practices of vape shops across ethnic communities in the USA. The findings show that vape shops often provide free samples to their customers, with this practice most common in Korean and non-Hispanic White communities. Free samples have been shown to attract new and returning customers to vape shops². In a previous study²¹, it was found that a large majority of vape shops (85%) allowed their customers to have samples containing a moderate level, 6–10 mg/mL, of nicotine. It must be noted however, that the FDA's deeming rule on e-cigarettes and other emerging tobacco products made it illegal for retailers to provide free samples. It is unclear at this point how vape shops will react to this new regulation. Vape shops may continue this practice unless enforcement is strong and penalties are severe. Other shops may charge a nominal fee, like a nickel, to sample products. In comparison, the tobacco industry responded to rules, handed down in the Master Settlement Agreement that changed cigarette marketing, by increasing price promotions once billboard ads, cartoon characters, branded merchandise, and brand sponsorship were banned^{22–25}. Future research should focus on how vape shops will change their marketing practices.

There will also be a need for effective media campaigns that will communicate the risks of using e-cigarettes. The FDA has prohibited the distribution of tobacco products with modified risk claims, and these rules now apply to e-cigarettes. There were shops in our study that displayed marketing material that promoted e-cigarettes as a healthier alternative. These marketing materials could disseminate misinformation regarding the health safety of these products²⁶. The use of e-cigarette marketing has shown to be effective with young adults and smokers reporting positive views of e-cigarettes after exposure to e-cigarette advertisements^{6,27–30}. Furthermore, young adults and youth have regarded e-cigarettes as a healthier modern alternative to combustible cigarettes^{31–34}. Misleading information on marketing material and marketing practices that are targeted towards vulnerable populations (like youth and ethnic minorities) should be documented and regulated³⁵. With regulations being put in place for the vape shop and e-cigarette industries, together with the current findings of the present study on the marketing activities taking place, it will be important for public health professionals to continue and expand research in this area.

Both national and local public health professionals should consider collaborating with community organizations when

developing educational campaigns. This will help to ensure that the messaging on marketing material is appropriate for different ethnic communities.

Limitations

Data were cross-sectional and longitudinal studies are needed to observe how vape shop marketing practices respond to different pressures (i.e. regulatory, consumer, industry) and evolving customer demands. Understanding these responses will help in assessing the effect of regulatory actions on the promotion of e-cigarettes. Another limitation is the lack of an inter-rater reliability assessment for the in-store observations. One data collector conducted all the interviews; therefore, an inter-rater reliability assessment was not conducted. Results described herein may not represent the vape shop marketing practices in other areas of the USA. There is a need to compare the marketing practices of vape shops across the country to understand how marketing practices can differ, based on regulatory environment and the racial/ethnic profile of the region. A paper by Barker et al. in this special issue begins to contribute to this discussion by describing marketing practices in nine cities across the USA and more research should follow.

CONCLUSIONS

Research on the promotion of e-cigarettes in vape shops is beginning to expand^{2,6}. The present study contributes to the associated literature by describing how marketing practices differ according to the community racial/ethnic profile. Further research and action in this area is needed in order to prevent the exacerbation of the burden of nicotine addiction in vulnerable populations. Many lessons can be learned from public health counter marketing campaigns that took place to combat tobacco marketing segmentation. Traditional tobacco companies have historically targeted ethnic minorities²⁰ and the vaping industry could follow suit. Regulation in this area is difficult to accomplish so it will be the challenge of public health professionals to mitigate the resulting disparities.

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CONFLICT OF INTERESTS

The authors have completed and submitted the ICMJE Form for Disclosure of Potential Conflicts of Interest and none was reported.

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PROVENANCE AND PEER REVIEW

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