Perceived benefits and risks of e-cigarettes among vape store owners: A qualitative study

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Introduction

• The rate of electronic nicotine delivery systems (ENDS) use has increased from 4.9% in 2011 to 9.4% in 2013 among adults who are current cigarette smokers.
• Recent studies attest this shift to popular beliefs that ENDS are less harmful than cigarettes and are considered to be an effective cessation tool.
• ENDS can be sold online, at convenience stores, or at specialty stores known as vape shops.
• In the United States today, there are about 8,500 vape stores that sell various types of e-cigarettes, e-juices and accessories.
• In 2014, vape sales accounted for $1.5 billion of the estimated $2.5 billion U.S. ENDS product sales.
• Vape shops are playing an important role in this market.

The present study sought to:
1. Explore vape store operators’ perceptions of the benefits and risks of ENDS.
2. Identify reasons for vaping among their customers and what information the vape store operators provide to the consumers.

Methods

Vape Store Selection
• Vape stores were located in the southeastern region of the U.S., including Florida, Georgia, North Carolina, and South Carolina.
• Cities were randomly selected within each state.
• Five vape stores per state were identified using internet searches and were contacted to participate.
• Upon receiving consent, telephone interviews were conducted by a trained interviewer using a semi-structured interview guide.
• Interviews of approximately 20-30 minutes were conducted with 20 vape store owners.
• Participants were given gift cards worth $50 to compensate them for their time.

Inclusion Criteria:
• Participants were owner or manager of the vape shop ≥ 18 years of age, and spoke English.

Data Analysis
• Recorded interviews were transcribed, and the data were analyzed using NVIVO analytical software.
• All relevant codes were identified independently by the authors using three transcripts. A master list was designed using all the identified codes.
• Transcripts were coded independently by the authors using the master list.
• The master list was refined iteratively when a new theme emerged.
• Inter-rater reliability was assessed to examine coding agreement. Any discrepancies were resolved through consensus among the authors.

Results

Table 1. Themes and excerpts/quotations regarding benefits and risks of ENDS

<table>
<thead>
<tr>
<th>Themes</th>
<th>Example excerpts/quotations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Benefits of using ENDS</strong></td>
<td></td>
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<tr>
<td>Improvement in physical and psychological health, and olfactory organs</td>
<td>The benefits of using an e-cigarette is, before the e-cigarettes came I smoked two packs a day, I couldn’t climb a set of stairs to save my life; I just stayed out of breath. “Since I’ve started vaping I smell that litter box smell! So you know, my food tastes better too.”</td>
</tr>
<tr>
<td>Help quit or reducing number of cigarettes</td>
<td>It provides a good alternative to people who cut back on smoking or quit and still provide them with the same satisfaction they get when they’re smoking” “Just being able to quit without some of the hassle. I mean, a lot of people issue is the mouth to hand coordination that goes along with smoking.”</td>
</tr>
<tr>
<td>Less harmful compared to smoking</td>
<td>But nicotine itself hasn’t really shown harmful products as much as the tar and stuff has inside of the cigarettes itself. “Basically you are cutting out combustion from cigarettes and getting rid of the vast majority of harm that is caused from traditional analog smoking”</td>
</tr>
<tr>
<td>Cosmetic</td>
<td>So you don’t have that smell lingering around. “It doesn’t discolor your teeth like cigarettes do”</td>
</tr>
</tbody>
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**Risk of using ENDS**

| Health related including allergy, addiction, and dry mouth | "And they’ll break out, and the breakout looks like a little rash. And then they find they’re allergic to propylene glycol.” “You know, nicotine is addictive, nicotine is often times compared to caffeine, you are addicted to caffeine, you are addicted to nicotine. “ |
| None | "In my opinion there are none” “I personally haven’t experienced any negative results of electronic cigarettes.” |
| Uncertain | "Unfortunately, that’s not something we entirely know yet. I mean, it’s such a new industry. As of right now, that’s such a hard question for me to answer because personally I don’t see a ton that are – that we know of right now. But we don’t know the long-term use risks of this product yet because it is so new. |

Conclusion

Most vape store owners perceived ENDS to have health benefits and to be less harmful than cigarettes.
Most vape store owners perceived ENDS to have no health risks, and a few reported risks of allergies to propylene glycol.
Vape store operators indicated that most of their customers used ENDS as a cessation tool or to help reduce the number of cigarettes smoked.
Vape store operators indicated they relied on their personal experience, manufacturers, websites and forums, and word of mouth for information.
They used Facebook and their companies’ websites to share information with their customers.

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