An Assessment of Current Resources to Help Adolescents Quit Vaping

Karen Del’Olio
University of Massachusetts Medical School

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**References:**


**E-cigarette use, more commonly known as vaping, has been a growing epidemic for adolescents in the United States.** The U.S. Surgeon General’s recent advisory states we must act now to protect the health of our nation’s youth from a lifetime of nicotine addiction.

**A 2018 Center for Disease Control MMWR reported more than 3 million high school students (grades 9 – 12) and 570,000 middle school students (grades 6 – 8) in the US are currently vaping, defined as using an e-cigarette on at least 1 day in the past 30 days.**

Researchers from the Monitoring the Future Survey (MTS) report current e-cigarette use of a nicotine substance among middle school and high school students increased nationally by 78% from the year 2017 to 2018. This is the largest increase ever recorded for any substance in the 44 years the MTF has tracked adolescent drug use.

**The 2017 Massachusetts Youth Risk Behavior Survey (MYRBS) found 41.1% of high schools ever used an e-cigarette and 20.1% of high schools currently used an e-cigarette in the past 30 days. The prevalence rate for middle schools ever using an e-cigarette was 9.9%.**

**Given this epidemic, we conducted a literature search to identify potential interventions to assist adolescents to quit vaping.**

**Prevalence**

<table>
<thead>
<tr>
<th>Subpopulation</th>
<th>Male</th>
<th>Female</th>
<th>White</th>
<th>Black</th>
<th>Hispanic/Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Past 30 days</td>
<td>9.5%</td>
<td>13.3%</td>
<td>14.9%</td>
<td>10.2%</td>
<td>3.5%</td>
<td>11.7%</td>
</tr>
<tr>
<td>E-cigarette</td>
<td>2.9%</td>
<td>3.7%</td>
<td>3.4%</td>
<td>2.2%</td>
<td>4.0%</td>
<td>3.3%</td>
</tr>
</tbody>
</table>

**The review identified 14 published articles and 13 websites. Among the articles and websites reviewed, only one website was identified as providing a vaping/e-cigarette cessation tool.**

**Future research to provide evidence-based vaping cessation was recommended by 35.7% of the published article authors and 7.7% of the professional website organizations.**

**23.1% of the websites reviewed recommended using current tobacco cessation programs to quit vaping, while in comparison, only 7.7% of the authors of the published articles made a recommendation to use current cessation tools to help adolescents quit vaping.**

**Results**

**References:**

**“The recent surge in e-cigarette use among youth, which has been fueled by new types of e-cigarettes that have recently entered the market, is a cause for great concern. We must take action now to protect the health of our nation’s young people,”**

U.S. Surgeon General, Vice Admiral (VADM) Jerome M. Adams, M.D., M.P.H., December 17, 2018

**E-cigarette use among adolescents who are already dependent on nicotine through smoking is more likely to trigger nicotine craving and addiction.**

**Conclusion**

**Based on the literature and website reviews, only one cessation tool was found that specifically targets vaping among adolescents. No other websites and no peer-reviewed published literature presented cessation tools to support teens in their efforts to quit vaping.**

**This presents a significant gap in resources to assist adolescents who are already dependent on nicotine through vaping. It was interesting that less than 10% of professional organizations and one third of publications recommended research on vaping cessation, given the current dearth in evidence-based cessation tools.**

**And lastly, it is striking that less than a quarter of the professional organizations and only a fraction of the peer-reviewed articles recommended using existing combustible tobacco cessation programs to assist adolescents in quitting smoking. One possible reason is that the professional organizations are focused on supporting individuals in their efforts to quit and recognize that, in the absence of tools specific to vaping, tailoring existing programs is the best available resource while programs specific to vaping are developed and tested.**

**Recommendations for future research on vaping cessation include:**

- Adolescent use and long term health effects
- Vaping cessation using evidence-based methods
- Reduction of multiple tobacco/nicotine product use
- Frequency and intensity of e-cigarette use in association with dependence and cessation-related outcomes
- Routine screening on vaping use for adolescents at both sick and well visits
- Vaping warnings directed towards and targeted to teenagers and their unique concerns
- Enhanced regulations
- Determining if different approaches to cessation are needed for e-cigarette users compared to conventional cigarette smokers

*References*