Purpose – How to Help Adolescents Quit Tobacco

The U.S. Surgeon General’s December 2018 advisory declared e-cigarette use among youth an epidemic in the United States. His call to parents, teachers, health professionals, states, communities, tribes and territories to address this epidemic focuses important attention on e-cigarettes. However, evidence-based cessation approaches for adolescents – whether they use e-cigarettes or combustible cigarettes— is limited. In addition, the prospect of youth converting to conventional cigarettes is significant. Thus, solving the problem of helping adolescents quit using tobacco in any form is critical. This summary of evidence for youth cessation approaches addresses both conventional cigarettes and e-cigarettes.

Scope – Where Did We Look?

In June 2019, the United States Preventive Services Task Force (USPSTF) released a Draft Recommendations Statement on Prevention and Cessation of Tobacco Use in Children and Adolescents: Primary Care Interventions which was the starting point for this resource. In total, this fact sheet includes review of 63 articles that were:

1. Cited in the USPSTF review
2. Not included by USPSTF because of its focus on primary care-based interventions
3. More recent than those reviewed by USPSTF (published from September 2018 to June 2019)
4. Not included in the USPSTF review because they were from gray literature

Findings – Common Barriers and No Easy Answers

Many of the studies identified common barriers for youth cessation strategies including recruitment, retention, and compliance with interventions.

- Four studies assessed the impact of counseling on youth cessation or reduction in smoking levels. Generally, there was a short-term reduction in tobacco use but no long-term impacts.
- Five studies assessed texting as a counseling intervention for youth cessation. Three studies showed reduced use but no impact on cessation. Two studies showed a positive impact on cessation with tailored messages but not general text messages.
- Four nicotine replacement therapy (NRT) studies demonstrated significant impact on abstinence in the short terms but did not maintain an impact over a longer period of time.
- Four studies of bupropion showed a short-term impact on cessation but no long-term impact.
- Two varenicline studies indicated it did not perform better than a placebo among adolescents.
- Four studies of prevention and cessation demonstrated a positive prevention impact but no long-term cessation impact.
- One study on a social branding and media campaign found tobacco use dropped after one year.

Conclusion – Keep Pursuing Promising Practices and Analyzing Outcomes

The USPSTF was unable to identify behavioral counseling or pharmacotherapy interventions that had a statistically significant impact on youth cessation rates. Broadening the scope of studies beyond primary care found several promising approaches, but no consistent statistically significant reduction in tobacco use.

Public health professionals and the stakeholders called on by the Surgeon General can continue to pursue strategies that integrate innovative delivery methods such as telephone, text messaging and computer/web-based methods with the strong foundational counseling and motivational interviewing-focused interventions that are effective with other populations. Cessation strategies should emphasize retaining youth while translating short-term gains into longer-term benefits.

For more information, please see the full Literature Review here. September 2019