

# Implementation of a Tobacco and Cannabis Vaping Prevention Program in a School-Based Health Center

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## Background

- The American Academy of Pediatrics (AAP) has issued a statement stressing the urgency of reducing tobacco and cannabis use in adolescents due to the serious health effects and high addiction potential<sup>1</sup>.
- 7.8% (1.21 million) high school students report vaping within the last 30 days<sup>2</sup>.
- 3.5% (410,000) middle school students reported vaping within the last 30 days<sup>2</sup>.
- More than 1 in 4 youth (26.3%) that use a vape device use it daily<sup>2</sup>.
- Timely prevention and treatment services remains challenging<sup>1</sup>.
- New programs and policies require a comprehensive, multi-pronged approach and need to be implemented at individual, school, and community levels<sup>3</sup>.
- AAP & The United States Preventative Services Task Force (USPSTF): clinicians should provide vaping screening and guidance starting by age 11y<sup>3,4</sup>.
- School-based health centers (SBHCs) are poised to provide a multifaceted approach and meet current recommendations<sup>5,6</sup>.
- Framework: Pender's Health Promotion Model<sup>7</sup> & Adolescent Health Literacy<sup>8,9</sup>

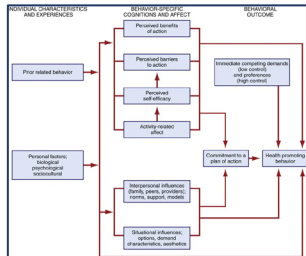
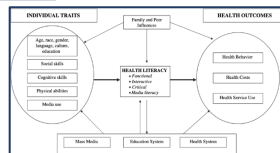


Figure 1. Pender's Health Promotion Model<sup>7</sup>

Figure 2. Adolescent Health Literacy Framework<sup>8</sup>



## Purpose

- Increase students' knowledge of the dangers of vaping.
- Increase students' positive perceptions of a vape-free lifestyle.
- Increase referrals to the SBHC's addiction medicine services.
- Provide an evidence-based vaping prevention education program to students in 6-8th grade.
- Bring awareness to school staff of the national concerns for vaping, and the role of the SBHC in prevention and support services.

## Method

- Setting- SBHC located in a middle school in an underserved city in CT.
- Participants- 6<sup>th</sup>, 7<sup>th</sup> and 8<sup>th</sup> grade students; 78% Hispanic/Latino; 12% AA/Black
- Repeated cross-sectional, pre-post study design.
- Program implementation: CATCH My Breath (CMB), an evidence-based vaping prevention program recommended by USPSTF<sup>3,10</sup>.

## Procedure



## Results

- Among 168 eligible individuals, 15 (9%) completed the program and 14 (8%) completed the pre- and post-surveys.
- Knowledge gained:
  - Results: Survey scores increased from pre- (M=6.07, SD=2.056) to post-program (M=8.50, SD=1.990, t(13) = 3.222, p = .007).
- Positive Perception of being vape-free:
  - Results: Survey scores increased from pre- (M=15.64, SD=3.054) to post-program (M=18.07, SD=3.054 t(13) = 3.465, p = .004).
- Confidence in remaining vape-free:
  - Results: Survey scores increased from pre- (M=6.79, SD=2.992) to post-program (M=9.43, SD=2.377, t(13) = 2.959, p = .011).
- Increase in SBHC referrals:
  - 2-months post program: 12 new students referred to the SBHC by the principal for vaping on school grounds.

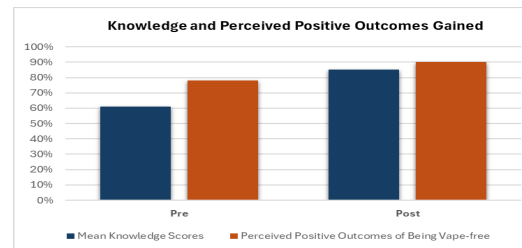


Figure 3. Mean knowledge and mean perceived positive outcomes as percentages

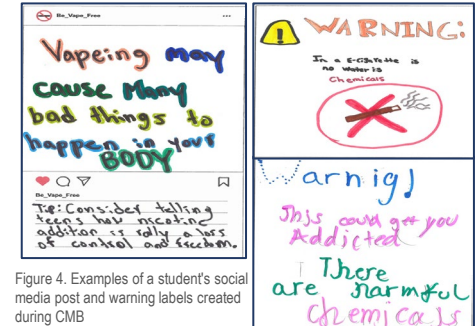


Figure 4. Examples of a student's social media post and warning labels created during CMB

## Conclusion

- CMB delivered by the SBHC had a significant positive impact on students' vaping knowledge and on perceptions of remaining vape-free.
- Students gained confidence in applying that knowledge when saying "no" to a peer.
- Increased school staff awareness and referrals to the SBHC.
- Supports Pender's theory that perceived benefits of action, self-efficacy, and interpersonal influences lead to health promoting behavior.
- Supports the Adolescent Health Literacy Framework that an increase in health literacy among adolescents is correlated with lower e-cigarette use, lower susceptibility, and higher risk perception.
- Limitations: convenience sample, self-report surveys, longitudinal effects

## Significance

- CMB is a useful program that SBHCs can implement to:
  - Reduce gaps in knowledge.
  - Promote a vape-free lifestyle.
  - Provide tools to navigate challenging peer situations.
- SBHCs play a key role in ensuring that our diverse, at-risk youth receive essential vaping prevention services, equitable healthcare access, and improved long-term health outcomes.

## Acknowledgements

Thank you to my major advisor, Dr. McNeil, my associate advisor, Dr. Elwell, and my mentor, Dr. Oldfield, for all your support and guidance.

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References  
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