



Research Article

Prevalence Study on the Influence of Tobacco Industry Tactics on Electronic Cigarette Use Among Students and Staff at Madenat Alelem University College

Prof. Thamer Al Hilfi, MBChB, FICMS, FFPH, MHPE ^{1,*},

¹ Madenat Alelem University College, Iraq

ARTICLE INFO

Article History

Received 5 Oct 2024
Revised 20 Oct 2024
Accepted 1 Nov 2024
Published 22 Feb 2025

Keywords

E-cigarette
Tobacco industry
Environment



ABSTRACT

This study examines the influence of tobacco industry (TI) tactics on the prevalence of electronic cigarette (e-cigarette) use among students and staff at Madenat Alelem University College (MAUC). Data were collected from 360 participants between October 2024 and January 2025. Results indicate that the normalization of smoking in campus outdoor areas, inadequate enforcement of smoke-free policies, and widespread misinformation about secondhand smoke (SHS) risks significantly contribute to the uptake of e-cigarettes. The findings emphasize the critical need for stricter policy implementation, targeted educational initiatives, and advocacy to counter these tactics and promote a healthier campus environment.

1. INTRODUCTION

The tobacco industry employs sophisticated and often covert strategies to increase the acceptability and prevalence of e-cigarette use, particularly among young adults. These tactics include delaying and undermining smoke-free policy enforcement, normalizing smoking behaviors in public spaces, and perpetuating misinformation about the risks of SHS. Despite the adoption of the WHO Framework Convention on Tobacco Control (FCTC) Article 8, many university campuses remain vulnerable to TI tactics. This study addresses critical gaps in understanding and mitigating the impact of these strategies by exploring the prevalence and determinants of e-cigarette use among the MAUC community.[1-3]

2. OBJECTIVES

- 1-To determine the prevalence of e-cigarette, use among MAUC students and staff.
- 2-To identify the influence of tobacco industry tactics on e-cigarette usage.
- 3-To evaluate gaps in smoke-free policy enforcement and public awareness.
- 4-To recommend actionable strategies for creating a healthier campus environment.

3. METHODS

Study Design: Cross-sectional prevalence study.

Population and Sample: The study involved 360 participants (students and staff) selected via stratified random sampling.

Data Collection: A structured questionnaire was administered to capture demographic data, e-cigarette usage patterns, awareness of tobacco industry tactics, and perceptions of SHS risks.

Analysis: Data was analyzed using descriptive statistics and visualized using bar charts to illustrate key findings. Statistical significance was set at $p < 0.05$.

Timeline: Data collection and analysis occurred from October 2024 to January 2025.

4. RESULTS

1. Prevalence of E-Cigarette Use

- 45% of participants reported current e-cigarette use.
- Usage rates were higher among students (60%) compared to staff (20%).

2. Awareness of Tobacco Industry Tactics

- 70% of participants were unaware of industry tactics promoting e-cigarette use.
- Only 35% recognized the link between designated smoking areas and SHS normalization.

3. Influence of Campus Policies

- 80% of participants noted the weak enforcement of smoke-free policies.
- 65% agreed that outdoor smoking areas contributed to the normalization of e-cigarette use.

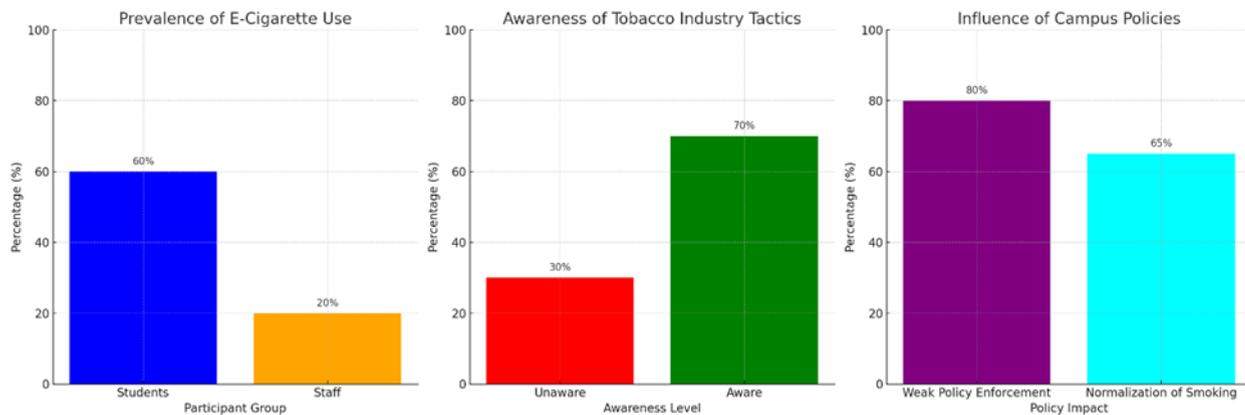


Fig.1. Results

5. CONCLUSIONS

This study highlights the profound impact of tobacco industry tactics on the prevalence of e-cigarette use at MAUC. Key contributors include inadequate policy enforcement, limited awareness of SHS risks, and the normalization of smoking behaviors in public spaces. These findings underscore the urgent need for comprehensive interventions to mitigate these influences and establish a smoke-free campus.[1-7]

Immediate actions, such as strengthening policies, raising awareness, and fostering advocacy, are essential to counter the pervasive influence of the TI. Without such measures, the campus community faces the continued entrenchment of smoking behaviors, jeopardizing the health and well-being of its members. Combating TI tactics requires a collective, institution-wide effort to reshape social norms and create a supportive, tobacco-free environment.[8-10]

6. RECOMMENDATIONS

- a. 1. Policy Development: Strengthen and expand smoke-free policies to explicitly prohibit all forms of tobacco use, including e-cigarettes, across all campus areas. Conduct regular reviews to address emerging TI strategies.
- b. Education Programs: Launch educational campaigns to increase awareness of the health risks associated with e-cigarette use and SHS. Highlight TI tactics targeting vulnerable populations to foster critical resistance.
- c. Advocacy: Support the establishment of student-led advocacy groups to promote tobacco-free initiatives. Provide resources for engaging with decision-makers and organizing health promotion events.
- d. Data Monitoring: Develop systems for monitoring tobacco use trends and policy compliance. Regularly collect and analyze data to identify gaps and improve interventions.
- e. Collaboration: Partner with local and national public health organizations to align campus policies with broader tobacco control efforts, leveraging resources and expertise.
- f. Cessation Support Services: Offer accessible cessation programs, including counseling, nicotine replacement therapies, and peer support, to assist those who wish to quit.
- g. Community Engagement: Extend tobacco control initiatives to involve families and local businesses, promoting healthier behaviors beyond campus boundaries.
- h. Training for Staff: Conduct regular training sessions for faculty and administrative staff to identify and address tobacco-related behaviors effectively.
- i. Incentives for Compliance: Introduce recognition and reward programs for students and staff who actively participate in and comply with smoke-free initiatives.
- j. Research and Innovation: Encourage academic research on innovative tobacco control measures, using findings to refine campus policies and contribute to the global body of knowledge.

Conflicts Of Interest

None

Funding

None

Acknowledgment

None

References

- [1] S. Soneji, J. L. Barrington-Trimis, T. A. Wills, A. M. Leventhal, J. B. Unger, L. A. Gibson, J. Yang, B. A. Primack, J. A. Andrews, R. A. Miech, T. R. Spindle, D. M. Dick, T. Eissenberg, R. C. Hornik, R. Dang, and J. D. Sargent, "Association between initial use of e-cigarettes and subsequent cigarette smoking among adolescents and young adults: A systematic review and meta-analysis," *JAMA Pediatr.*, vol. 171, no. 8, pp. 788-797, Aug. 2017, doi: 10.1001/jamapediatrics.2017.1488.
- [2] T. A. Wills, R. Knight, R. J. Williams, I. Pagano, and J. D. Sargent, "Risk factors for exclusive e-cigarette use and dual e-cigarette use and tobacco use in adolescents," *Pediatrics*, vol. 135, no. 1, p. e43, 2015, PMID: 25511118.
- [3] J. L. Barrington-Trimis, K. Berhane, J. B. Unger, et al., "Psychosocial factors associated with adolescent electronic cigarette and cigarette use," *Pediatrics*, vol. 136, no. 2, pp. 308-317, 2015, PMID: 26216326.
- [4] L. M. Dutra and S. A. Glantz, "E-cigarettes and national adolescent cigarette use: 2004-2014."
- [5] S. Kalkhoran and S. A. Glantz, "E-cigarettes and smoking cessation in real-world and clinical settings: A systematic review and meta-analysis," *Lancet Respir. Med.*, vol. 4, no. 2, pp. 116-128, Feb. 2016, doi: 10.1016/S2213-2600(15)00521-4.
- [6] "E-cigarettes: Public Health England's evidence-based confusion," *Lancet*, vol. 386, no. 9996, p. 829, Aug. 29, 2015, doi: 10.1016/S0140-6736(15)00042-2.
- [7] L. Chun, F. Moazed, C. S. Calfee, M. A. Matthay, and J. E. Gotts, "Pulmonary toxicity of e-cigarettes," *Am. J. Physiol. Lung Cell. Mol. Physiol.*, vol. 313, no. 2, pp. L193-L206, Aug. 1, 2017, doi: 10.1152/ajplung.00071.2017.

- [8] R. S. Moheimani, M. Bhetraratana, F. Yin, et al., "Increased cardiac sympathetic activity and oxidative stress in habitual electronic cigarette users: Implications for cardiovascular risk," *JAMA Cardiol.*, vol. 2, no. 3, pp. 278-284, 2017, doi: 10.1001/jamacardio.2016.5303.
- [9] A. Bhatnagar, "Cardiovascular perspective of the promises and perils of e-cigarettes," *Circ. Res.*, vol. 118, no. 12, pp. 1872-1875, Jun. 10, 2016, doi: 10.1161/CIRCRESAHA.116.308723.
- [10] A. Tverdal and K. Bjartveit, "Health consequences of reduced daily cigarette consumption," *Tob. Control*, vol. 15, no. 6, pp. 472-480, Dec. 2006.

Annex

Data Collection Questionnaire

Introduction:

Thank you for participating in this survey. Your responses will help us understand e-cigarette usage patterns, awareness of tobacco industry tactics, and perceptions of second-hand smoke risks. Your answers will remain confidential.

Section 1: Demographics

1. Age:
 - <18 years
 - 18–24 years
 - 25–34 years
 - 35–44 years
 - 45–54 years
 - 55+ years
2. Gender:
 - Male
 - Female
 - Prefer not to say
3. Education Level:
 - Less than high school
 - High school graduate
 - Some college
 - Bachelor's degree
 - Postgraduate degree
4. Employment Status:
 - Employed full-time
 - Employed part-time
 - Unemployed
 - Student
 - Retired
5. Residence Type:
 - Urban
 - Suburban
 - Rural

Section 2: E-Cigarette Usage Patterns

6. Have you ever used an e-cigarette?
 - Yes
 - No (If no, skip to Section 3)
7. How often do you currently use e-cigarettes?
 - Daily
 - Weekly
 - Occasionally
 - Never
8. What is your primary reason for using e-cigarettes? (Select all that apply)
 - To quit smoking traditional cigarettes
 - Recreational use

- Stress relief
- Social reasons
- Other (please specify):
- 9. What type of e-cigarette product do you use?
 - Disposable e-cigarettes
 - Rechargeable/refillable e-cigarettes
 - Pod-based systems
 - Other (please specify):
- 10. How long have you been using e-cigarettes?
 - Less than 6 months
 - 6 months–1 year
 - 1–3 years
 - Over 3 years

Section 3: Awareness of Tobacco Industry Tactics

- 11. Are you aware of any tactics used by the tobacco industry to promote e-cigarettes?
 - Yes
 - No
- 12. If yes, which tactics are you aware of? (Select all that apply)
 - Targeted advertising to youth
 - Sponsorship of events/activities
 - Misleading health claims
 - Use of social media influences
 - Product placement in the media
 - Other (please specify):
- 13. Do you believe the tobacco industry prioritizes public health?
 - Yes
 - No
 - Not sure

Section 4: Perceptions of Second-Hand Smoke Risks

- 14. Do you believe exposure to second-hand smoke (SHS) from traditional cigarettes poses health risks?
 - Yes
 - No
 - Not sure
- 15. Do you believe exposure to SHS from e-cigarettes poses health risks?
 - Yes
 - No
 - Not sure
- 16. Which health risks do you associate with SHS? (Select all that apply)
 - Respiratory problems
 - Cardiovascular diseases
 - Cancer
 - Other (please specify):
- 17. In your opinion, should policies regulate SHS exposure from e-cigarettes in public places?
 - Yes
 - No
 - Not sure

Section 5: Additional Comments

- 18. Do you have any additional comments or concerns about e-cigarettes or second-hand smoke?

Thank you for your participation.