Mass Media Awareness and Vaping Among College Students

Maria Robles, Arturo Quinonez

Family Medicine and Public Health, UC San Diego

UC San Diego Health

Background

- Vaping among college students has increased from 11.3% in 2017 to 21.2% in 2018 [3]

- The Centers for Disease Control and Prevention reported 2,807 hospitalized e-cigarette, or vaping, product use-associated lung injury (EVALI) cases and 68 confirmed deaths throughout the U.S and its territories [1]

- Prior studies have found a .3-percentage-point reduction in smoking prevalence by either exposing the population to televised antismoking ads [4]

- There has been limited research on the effect of mass media campaigns on the prevalence of vape use [2]

Objectives

- To fill in the gaps and find clarity on whether the increase in images online through Instagram posts and media campaigns have decreased the prevalence of vape use among college students

- To analyze the relationship between the awareness of mass media campaigns on vaping related illnesses and the perceived use of vaping products among college students.

Methods

- We conducted a descriptive study by sending an anonymous survey to college students aged 17 to 28 years.

- The survey consisted of 12 questions measuring exposure to three mass media campaigns on vape-related illnesses and their perception of vape-use trends.

- The data was collected mid-April to mid-May in 2020. Data was collected from 69 participants to determine the association between the outcome and exposure.

- The data was analyzed to examine the trends in exposure to the three mass media campaigns, perceived trends among those exposed, and the relationship between exposure and perceived trends.

Mass Media Campaigns

Real Cost Campaign YouTube Video

Instagram @simahherman
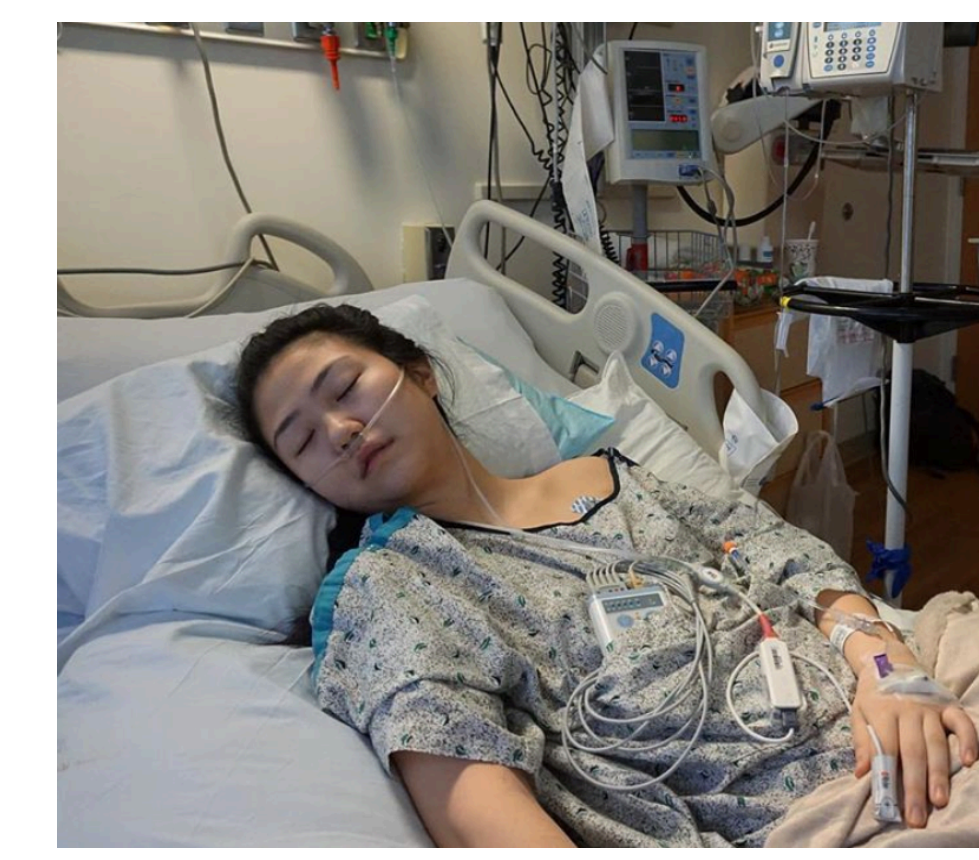
Instagram @clairechunggg

TABLE 1. Particpant Characteristics N=69	
Age	
18-20	23 (33.3%)
21-23	33 (47.8%)
24-26	9 (13%)
≥ 27	4 (5.8%)
Gender	
Female	46 (66.7%)
Male	22 (31.9%)
Non-Binary	1 (1.4%)
Major	
Arts and Humanities	6 (8.7%)
Biological Sciences	11 (15.9%)
Health Sciences	27 (39.1%)
Physical Sciences	1 (1.4%)
Other	24 (34.9%)
Exposure to Mass Media Campaigns	
Yes (Real Cost Video)	18 (26.1%)
Yes (@simahherman)	25 (36.2%)
Yes (@clairechunggg)	35 (50.7%)

There was no significant association between exposure to mass media campaigns and perceived vaping trends (p>.05).

Results

Figure 1. Which Mass Media Campaign do you perceive as the most effective at Increasing awareness of vape-related illnesses?
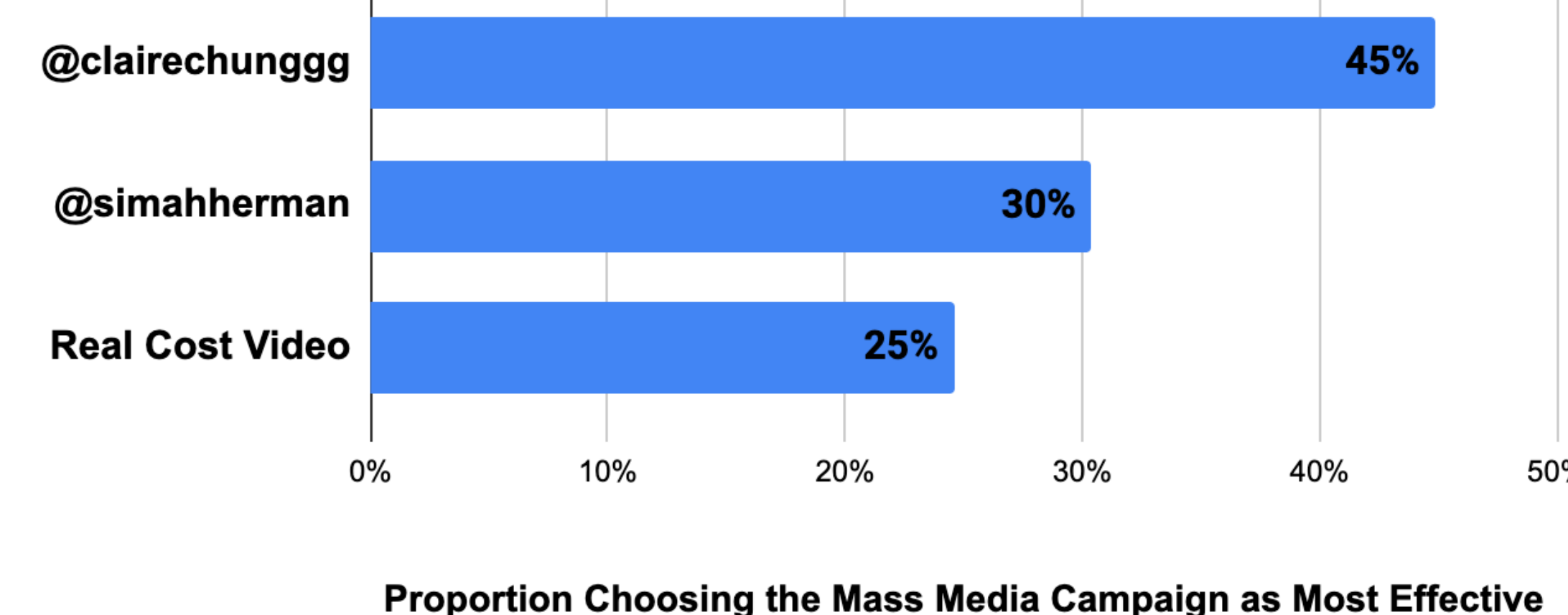

- @clairechunggg: 45%
- @simahherman: 30%
- Real Cost Video: 25%

Proportion Choosing the Mass Media Campaign as Most Effective

Figure 2. Perceived trend in THC-based vape use among those exposed the mass media campaigns

Increased. / Stayed the same. / Decreased.

- Real Cost Video: 78%, 22%, 0%
- @simahherman: 64%, 36%, 0%
- @clairechunggg: 66%, 31%, 3%
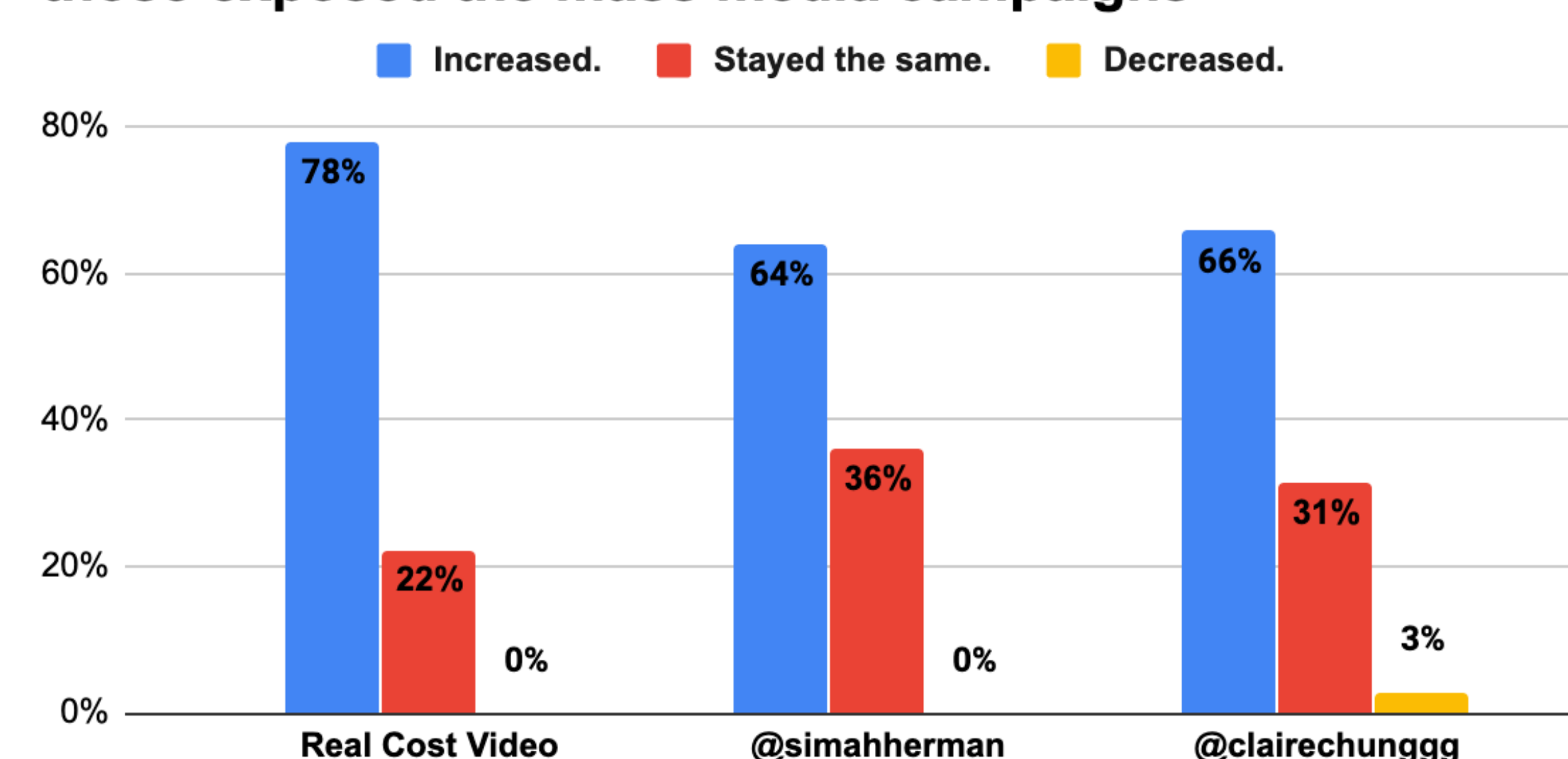
Figure 3. Perceived trend in nicotine-based vape use among those exposed the mass media campaigns

Increased. / Stayed the same. / Decreased.

- Real Cost Video: 72%, 22%, 6%
- @simahherman: 60%, 24%, 16%
- @clairechunggg: 66%, 34%, 0%
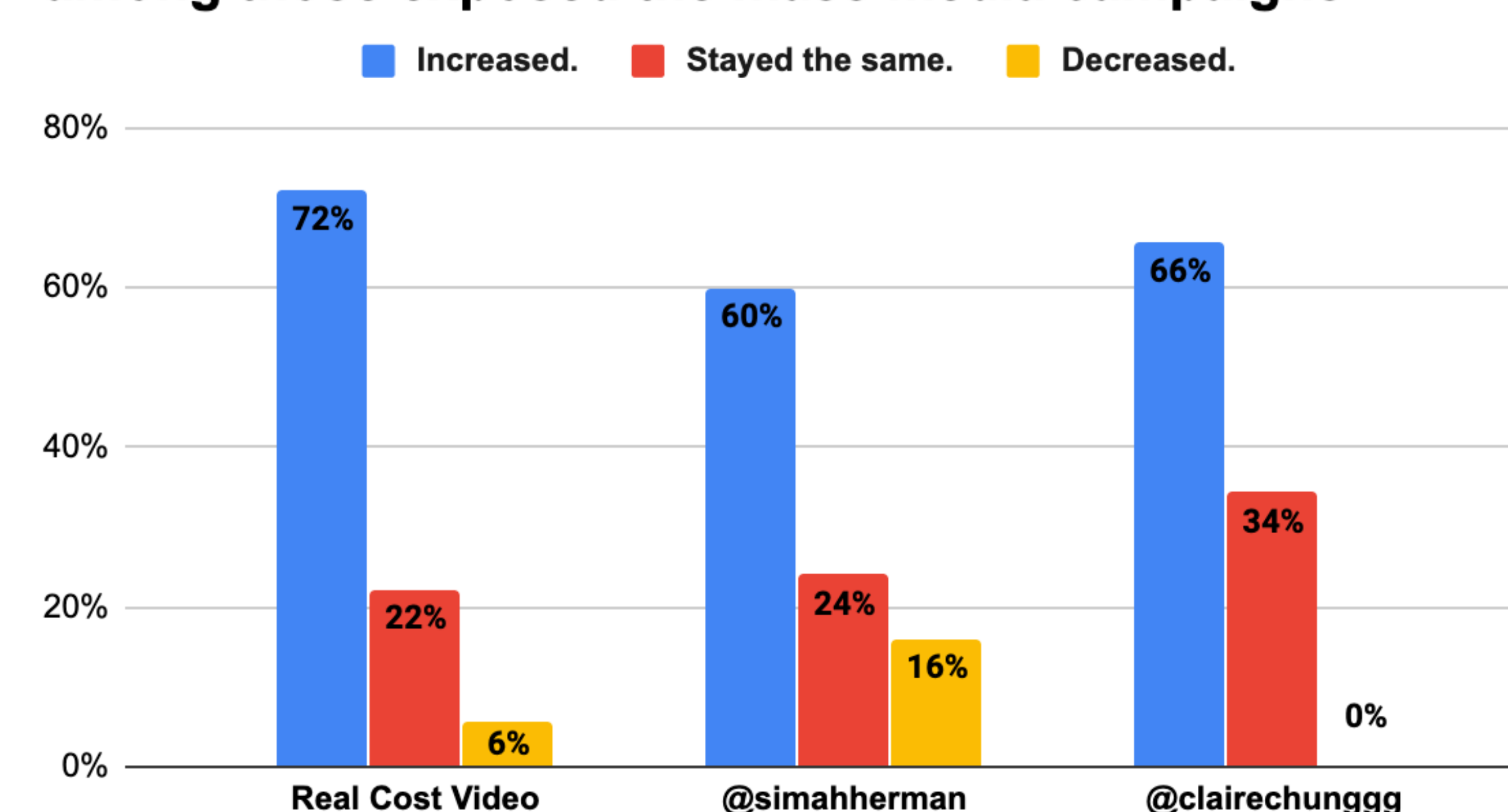
Conclusions

- College students exposed to media campaigns on vape related illnesses perceive an increase in vape use among peers.

- There is not enough evidence to show that these campaigns are effecting vaping trends.

- Instagram images have higher exposure.

- Images showing real EVALI cases are the most effective at increasing awareness.

Policy Implications

- Organizations releasing mass media campaigns should consider depicting real EVALI cases in order to increase awareness among college students.

- Alternative interventions to mass media campaigns should be considered in order to effectively lower the vape use prevalence among young adults and college students.

Acknowledgements

References

1. Centers for Disease Control and Prevention. (2020, February 25). Retrieved from https://www.cdc.gov/tobacco/basic_information/e-cigarettes/severe-lung-disease.html

2. Cornacchione Ross, J., Noar, S. M., & Sutfin, E. L. (2019). Systematic Review of Health Communication for Non-Cigarette Tobacco Products. Health communication, 34(3), 361–369. https://doi.org/10.1080/10410236.2017.1407274

3. Patrick, M. (2019). Monitoring the Future national survey results on drug use, 1975-2018: Volume II, college students and adults ages 19-60. doi: 10.3998/2027.42/150623

4. Wakefield, M. A., Durkin, S., Spittal, M. J., Siahpush, M., Scollo, M., Simpson, J. A., ... Hill, D. (2008). Impact of Tobacco Control Policies and Mass Media Campaigns on Monthly Adult Smoking Prevalence. *American Journal of Public Health*, 98(8), 1443–1450. doi: 10.2105/ajph.2007.128991