Update, 2020

Prevalence of vaping and smoking among adolescents in Canada, England, and the United States: repeat national cross sectional surveys

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BMJ 2019;365:doi:10.1136/bmj.l2219, published 20 June 2019

We are writing to provide an update on estimates of smoking and vaping among adolescents from the ITC Youth and Vaping Surveys conducted in Canada, England, and the US.[1]

The findings published in our paper indicated that smoking among 16 to 19 year olds might have increased in Canada between 2017 and 2018. At the time of publication, no other national estimates were available for 2018 in Canada, and smoking rates among 15 to 19 year olds had not declined between 2015 and 2017, after several decades of steady decline.[1] However, after publication of our paper, Health Canada released data from its national monitoring survey of youths, the Canadian Student Tobacco, Alcohol and Drugs Survey (CSTADS), which did not indicate an increase in smoking between 2016-17[2] and 2018-19.[3]

We recently published new data from the 2019 ITC youth surveys, for which we used survey weights that calibrated our estimates of smoking prevalence to the CSTADS trend in past 30 day smoking prevalence in Canada, and to the National Youth Tobacco Survey (NYTS) in the US.[4] The weights for England did not include calibration to an external trend, given the lack of a suitable benchmark survey for 16 to 19 year-olds.

The effect of this reweighting was to reduce the 2018 estimates of smoking prevalence in Canada and the US to match the national trends observed in benchmark surveys. In the original paper in *The BMJ*, changes in past 30 day smoking prevalence between 2017 and 2018 in Canada were reported as 10.7% to 15.5% (a statistically significant increase), which was revised after reweighting to 10.7% to 10.0% (no significant change). After calibrating the NYTS data, the US estimates were revised from 11.0% to 12.2% (no significant change) to 11.0% to 11.7% (no significant change).

A detailed description of the revised weighting procedure used in the ITC youth surveys and the previously published versus revised estimates is publicly available in the Technical Report for the Wave 2 survey.[5]

References

1 Reid JL, Hammond D, Tariq U, Burkhalter R, Rynard VL, Douglas O. Tobacco Use in Canada: Patterns and Trends, 2019 edition. Waterloo, ON: Propel Centre for Population Health Impact, University of Waterloo. p75

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3 Government of Canada. Detailed tables for the Canadian Student Tobacco, Alcohol and Drugs Survey 2018-2019. 2019, December 31. Table 11. https://www.canada.ca/en/health-canada/services/canadian-student-tobacco-alcohol-drugs-survey/2018-2019-detailed-tables.html (accessed 1 May 2020)

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