

Title: Ever smoking, using e-cigarette, and drinking alcohol among French adolescents before and during the COVID-19 lockdown: Evidence from a cross-sectional school-based study

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Background and objectives: The COVID-19 lockdown might have reduced adolescents’ ever use of substance (i.e., tobacco, e-cigarette, and alcohol) by modifying the social and physical contexts in which they lived. This study aimed to identify and characterize profiles of adolescents’ lockdown contexts during the COVID-19 pandemic and to assess their associations with adolescents’ timing of ever using substance.

Material and methods: We used cross-sectional data of adolescents who participated in the French school-based EXIST pilot study. We assessed ever use of substance and lockdown context characteristics using a self-administered questionnaire. We used a latent class analysis to derive lockdown context profiles from social (i.e., family life, social activities, socioeconomic status, substance users at home) and physical (i.e., housing and residential area) characteristics. We adjusted multinomial logistic regression models for age, gender, and parents’ marital status to assess associations between profiles and ever use of substance.

Results and conclusion: We identified four profiles among the 356 adolescents in this study (12-15 years old): “rural”, “semiurban disadvantaged”, “urban advantaged and smoke free” (further used as the reference profile), and “urban disadvantaged and alcohol free”. Adolescents in the “rural” profile were more likely to have ever smoked before (OR=3.32, 95% CI [1.04;

10.62]) or during/after the lockdown (OR=3.35, 95% CI [1.10; 10.19]) than adolescents in the reference profile. We observed a similar association only during/after the lockdown for e-cigarettes. The odds of ever drinking alcohol was lower among adolescents from the “urban disadvantaged and alcohol-free” profile than among those in the reference profile. These results support the implementation of prevention programs that account for social and cultural norms that might shape ever use of substance among adolescents.

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