Family, peer and school influence on substance use and initiation patterns in adolescents

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Introduction

The present study aims to define patterns of substance use and initiation and identify its associated factors in adolescents. Adolescence is a critical period of social and cognitive development, as well as of vulnerability to substance use and other health risk behaviors. The interaction between family, peer and school factors influence adolescence substance use and initiation patterns.

Methods

A one-step latent class regression analysis was performed to identify patterns of substance use and assess the influence of sociodemographic, family, school and peer factors. Data from the Portuguese ‘Health Behavior in School-aged Children (HBSC)’ 2010 study were analyzed, including 1337 students (mean age=15.46; SD=0.34; 56.3% female). Substance use measures included lifetime use and age of initiation for alcohol, tobacco and drunkenness, lifetime cannabis use, and current use of alcohol, smoking and drunkenness. Covariates comprised age, gender, family affluence, family structure and communication with parents, early sexual initiation, time after school with peers, victimization and bullying, fighting, and academic achievement, school satisfaction and burnout.

Results

Five latent classes were identified (Figure 1), namely *non-users* (32.9%), *alcohol experimenters* (33.2%), *alcohol and tobacco experimenters* (19.2%), *alcohol and tobacco frequent users* (11.2%), and *very early substance/poly-substance users* (3.5%). *Very early substance/poly-substance users* class membership was associated with poor communication with mother (OR 5.38; 2.13-13.55), pre-teen sexual initiation (OR 1.37; 5.51-33.98) and spending evenings with friends (OR 2.26; 1.70-3.03), compared to the *non-users* class membership (Figure 2). *Alcohol and tobacco frequent users* class membership was associated with higher socioeconomic status (OR 1.87; 1.42-2.45), not living with both parents (OR 2.34; 1.17-4.67), bullying (OR 3.92; 2.15-7.11), fighting (OR 6.90; 3.78-12.61), pre-teen sexual initiation (OR 6.57; 3.52-12.25), spending evenings with friends (OR 1.94; 1.51-2.51) compared to the *non-users* class membership.

Conclusions

Compared to the *non-users* latent class, *very early substance users* and *frequent substance users* latent classes were associated with different family and peer factors. These results may inform prevention strategies in adolescent substance use.

Figure 1

Figure 2