

Perception of students about alcohol consumption and illicit drugs

Percepção de estudantes sobre consumo de bebidas alcoólicas e drogas ilícitas

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Keywords

Students; Perception; Alcoholic beverages; Street drugs; Alcohol drinking

Descritores

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Abstract

Objective: To understand the perception of high school students regarding the consumption of alcohol and illicit drugs.

Methods: We developed an observational cross-sectional study, using a descriptive and qualitative approach, through the adoption of a focus group technique. The participants were 24 high school students from four schools, selected by chance, divided into four groups. The statements of students were recorded and transcribed; lexical analysis was performed.

Results: We classified 74 units of elementary context that were divided into four lexical classes and named according to their meaning, which revealed the following themes: existence of consumption; motivation for consumption; family influence; and, control/consequences.

Conclusion: The perception of students regarding the consumption of psychoactive substances shows that in the current scenario, alcohol markedly permeates the juvenile universe.

Resumo

Objetivo: Compreender a percepção de estudantes do ensino médio sobre o consumo de bebidas alcoólicas e drogas ilícitas.

Métodos: Foi desenvolvido estudo observacional, descritivo, transversal e de abordagem qualitativa por meio da técnica de grupo focal. Participaram da pesquisa 24 estudantes de ensino médio de quatro escolas selecionadas por sorteio, divididos em 4 grupos. As falas dos estudantes foram gravadas, transcritas e realizada análise léxica.

Resultados: Foram classificadas 74 unidades de contextos elementares que foram divididos em quatro classes lexicais e nomeadas segundo o sentido que revelam em: existência do consumo; motivação para o consumo; influência familiar e controle e consequências.

Conclusão: A percepção dos estudantes sobre o consumo de substâncias psicoativas demonstra que no cenário atual o consumo de álcool permeia o universo juvenil de forma marcante.

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Introduction

The use of psychoactive substances remains a challenge for researchers that study the motivation of young people with regard to drug abuse, and the meanings that permeate this practice. In this attempt, several data collection instruments that were validated and/or adapted to local cultures are used to broaden the understanding of this phenomenon. For some researchers the act of alcohol consumption is linked to the cultural context of each person, and the meaning that individual assigns to this habit.

Teenagers, as a population group, incorporate cultural patterns that are valued in the context in which they are integrated. Alcohol consumption by adolescents is related to the specific group behavior of this age and may be influenced by friends, and characterized as a facilitator and a precondition of interaction and permanence within a group. The risk of adolescents beginning to consume alcohol rises because of their position in the social network of friends, and friends of friends.^(1,2) This consumption is positively and significantly correlated when family members are also consumers. Parenting styles and parental attitudes and behaviors are significant factors (OR 2.1) associated with heavy drinking.^(3,4) However, there is a lack of studies in relationship to the perception of teenagers on the aspects involved to the initiation and persistence of this habit. Thus, this study aims to understand the perception of high school students about alcohol and other illicit drug use, aiming to support the planning of preventive measures through the partnership between the health and education areas, as suggested by the school health program (PSE - *Programa de Saúde Escolar*), and also to evaluate the use of the Alceste Software for textual analysis of the focus group technique.

Methods

This is qualitative research, conducted with 24 high school students from public and private institutions, in a city of the state of Minas Gerais (Brazil), which

has 604,013 inhabitants. The high school students were divided into four groups comprised of six students from three public schools - randomly selected from the 27 existing schools in the city (central and peripheral regions) - and from a private school that agreed to participate in the study.

With regard to the composition of the focus group, we selected a first-year, second-year, and third -year high school class from each school, and at least two students from every room were randomly selected for invitation. Data collection was conducted through focus groups. A meeting of the groups was held for the performance of data collection. The dynamics of the focus group included the introduction of the participants, and the explanations of the study theme and objectives to be discussed, which followed a guiding script with the following sub-themes: what do you think about consumption of alcohol and other drugs by young people? What motivates young people to consume alcohol and other drugs? What are the possible consequences of the consumption of alcohol and other drugs by young people? What could young people do to control or reduce this consumption? The meetings with the participants took place in private rooms, provided by the participating schools, and had a maximum duration of 50 minutes. The conduct of the focus group followed the steps recommended for this technique: a mediator responsible for the initiation, motivation, development and conclusion of the discussion, a reporter and an observer. The dialogue was recorded by digital recording and transcribed in full. We used the Alceste (Analyse d'lexicale pair Contexte one Segments of Ensemble Texte) software, version 4.5, for the analysis of the material, which allows qualitative and quantitative analysis of textual data on the basis of the patterns assumed by the vocabulary distribution (cluster analysis), through different stages of segmentation of the discursive material, in order to distinguish classes of words that represent different forms of discourse on the topic of research interest.

The software graphically interprets the results, using a technical frame description of the vocabulary across classes, called factor analysis of correspondences (FAC). In this analysis, we obtain a

graphical representation, with axes that allow one to observe the contrasts between the forms and the classes. The FAC is presented in the form of a table and a figure that shows the two axes of a biplot type graph, as well as a set of points corresponding to the vocabulary of the analyzed text. The distribution of the points in relation to each other provided the textual analysis.⁽⁵⁾ The biplot graph allowed the evaluation of the correlation between words.⁽⁶⁾ Vectors in the same direction indicated a positive correlation, and vectors in opposite directions indicated a negative correlation. The correlation is close to zero when the featured vector's angle was 90 degrees. The development of the study met national and international standards of ethics in research involving human subjects.

Results

Initially, we designed a text from the transcript of the dialogues from the four focus groups that contained four components of the initial contextual units (ICU) called the "corpus". The software's statistics

showed a split in the corpus into 157 elementary contextual units (ECU), which were considered the smallest units of analysis, consisting of three or four lines of text. The ECU summarized the idea of the phrase in respect to its length (measured in number of analyzed words) and score (in priority order). We classified a total of 74 ECU with 96.07% of the vocabulary richness, an average word number per ECU pairs of 9.71, and a word count of 2943. The 74 ECU were grouped into four lexical classes, containing the essence of this in the text "corpus" analyzed. In this study, the software distributed the corpus into four classes, and as observed in figure 1, in the distribution analysis the third and fourth classes are overlapped, the vectors that form those classes are in the same direction, showing a positive correlation between them. Most vectors between classes 1 and 2 formed close angles of 90°, showing that classes 1 and 2 are uncorrelated. While the classes 3, 1 and 4 have opposite vectors, indicating a negative correlation. The words contained in class 3 denote positive behavior in relationship to the focus of the research - the words "school" followed by "family" and "no drinking" appeared in the most

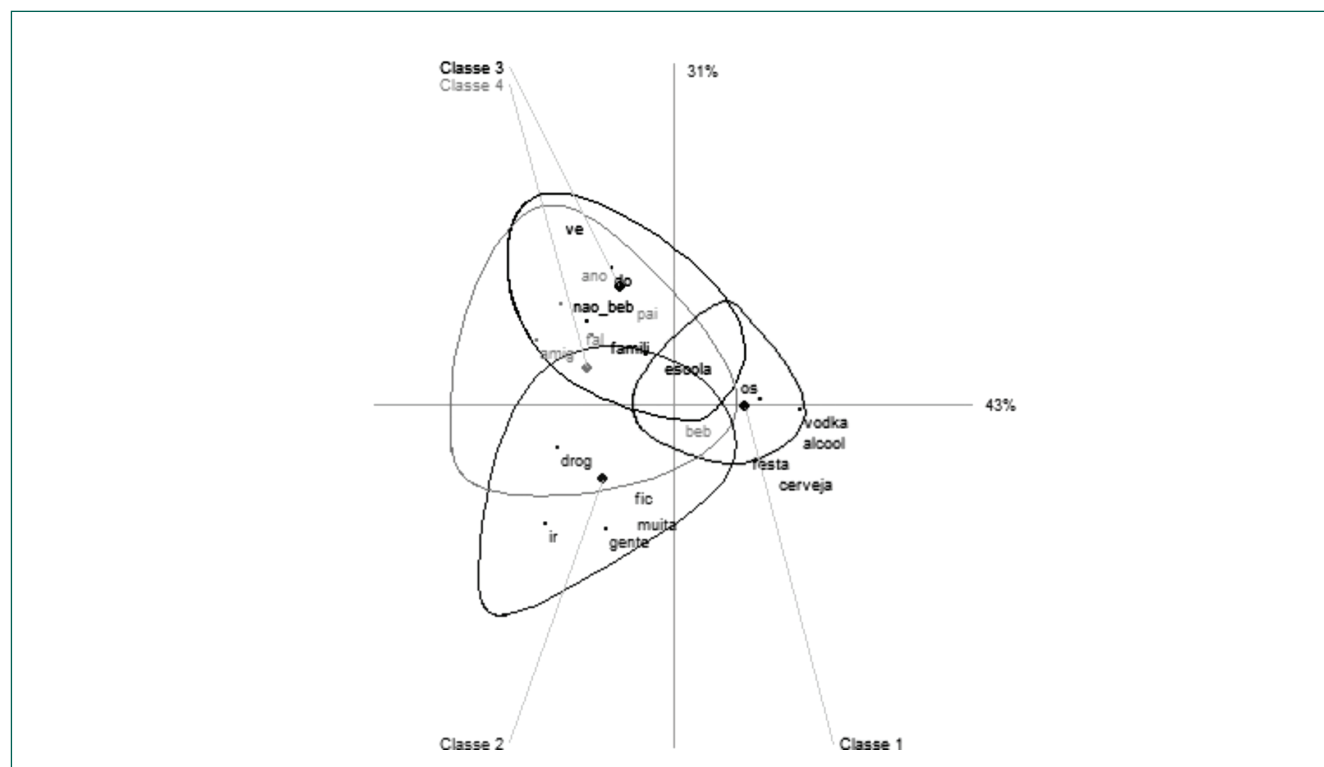


Figura 1. Factor analysis of coordinated matches (FAC) presented by Alceste 4.5

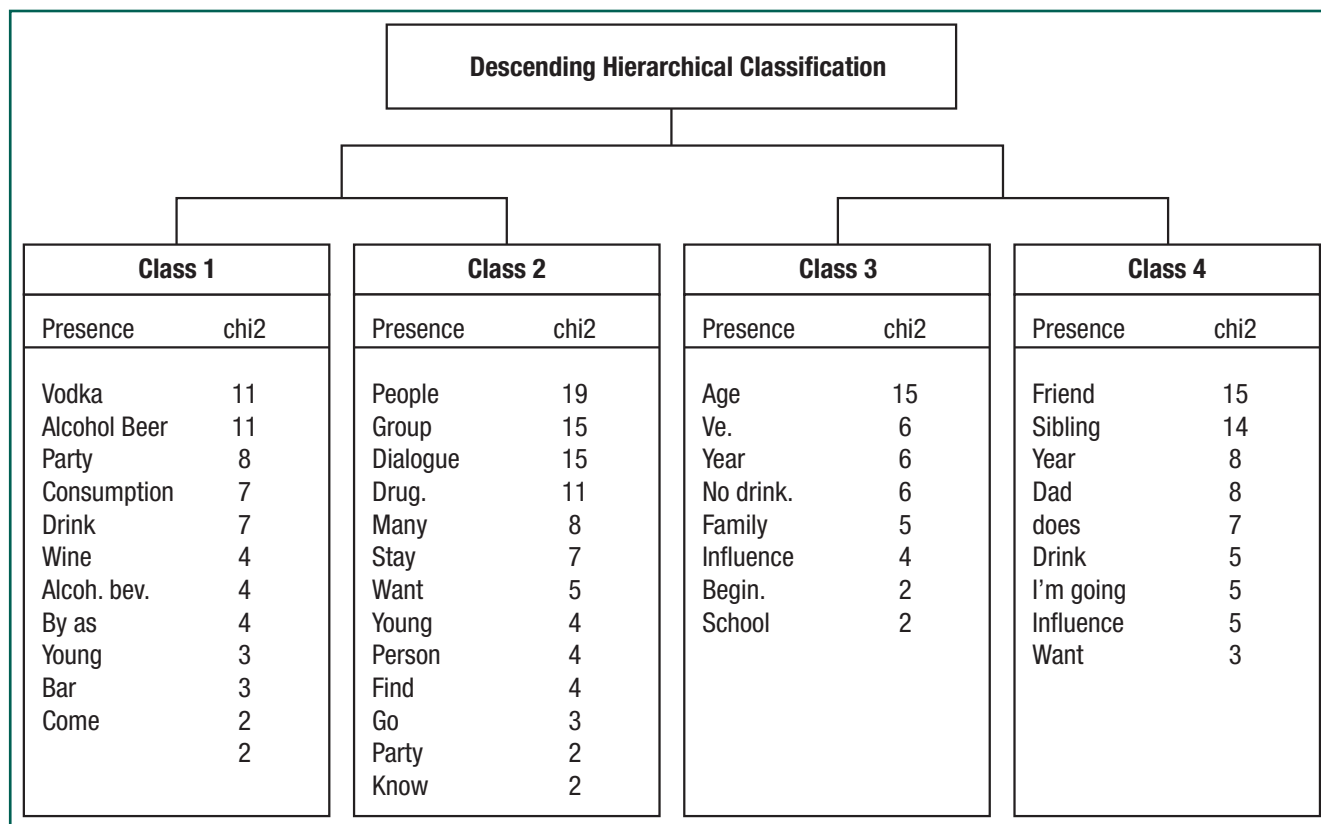


Figure 2. Descending hierarchical classification (dendrogram)

central part of this class. In class 4, we found the words “father”, “friend”; at the right posterior axis we observed the words: “Vodka”, “alcohol”, “party” and “beer”, and at the left side of the picture, the words “people” and “drug” are located.

The 74 ECU were grouped into four lexical classes (Figure 2) corresponding to the descending hierarchical classification (dendrogram) of words and to the word reduction from the roots (reduced forms) that composed them, originated from the textual analysis performed by the software, with their respective values of significance from the chi-square test applied to the crossing between the words and ECUs.

The four classes were named based on their meanings:

Class one

was named, “Existence of consumption.” This class was composed of 36 ECUs (49%), confirming the consumption of alcohol and other psychoactive substances as reported by young students, who also

cited the influence of the media and the national law on the control of purchase and sale of alcoholic beverages by/to minors.

Class two

was named, “Motivation for consumption.” Comprising 16 ECUs (22%), this class presented the motivation, identified by young people, for the consumption of psychoactive substances. The acceptance for inclusion within a group is highlighted as a motivation for drinking. Leisure and rest time was displayed as an invitation for alcohol use, and the lack of dialogue in the family and the influence at home was an incentive.

Discussion

The limits of the study findings are related to the qualitative method, and the fact that it was developed in one city and at a specific school environment, excluding those students who dropped out of

school, including when this was motivated by the consumption of psychoactive substances. Only one private school agreed to participate.

Relevant findings were revealed when considering the use of the Alceste software for data analysis of studies with a qualitative approach. The graph generated from the textual analysis exposed opposing meanings of words distributed in each class, pointing to the words, school and family, with a positive connotation for prevention/protection for consumption, in contrast to the words, party, vodka, beer, that were directly related to the stimulus and consumption, which is strongly supported in the literature.⁽²⁻⁴⁾ These findings are important contributions to nursing interventions, and shall support the development of health measures and actions, in partnership with the educational network.

Another important factor is the dendrogram analysis, in which the hierarchical relationship among classes revealed the proximity between words of classes 1 and 2, and a less strong proximity of the words of class 4 with those with class 1, showing an opposition between the content existing in each class. It is observed that the words contained in the class (re)affirm the scenario of alcohol consumption, as well as the main types of beverages consumed by young people. The content of this class presents a less stronger proximity to the content revealed in classes 3 and 4 that make reference to family, father, brother and school, figures that are possibly related to the prevention/protection of the alcohol consumption habit and other psychoactive substance use, thus confirming the opposition between classes presented by the dendrogram.

Considering the classes identified by the Alceste analysis of the student reports, it is evident that the consumption of alcohol markedly permeates the juvenile universe, despite the Brazilian law prohibition of the purchase/sale of this substance to underage individuals. Paradoxically it is perceived, in their reports, that students are aware of this illegality and also criticized the ease of purchase and sale of alcoholic beverages by/to minors, however, despite this, they admitted their role related to the consumption and purchase of alcoholic beverages in

several places, revealing the fragility of the applicability of that law. Other studies confirm the ease of buying alcohol in shops, and also reveal that greater availability of convenience stores near a school is associated ($p = 0.04$) with an increased risk of alcohol use among adolescents.^(7,8) Therefore the ease of access to alcohol by minors should permeate the agenda of discussions on the development of public policies, and should be a theme for further research focused on raising awareness about the importance of age limits and establishing greater punishment for violations of legal regulations.⁽⁸⁾

The group also highlighted the power of the media that is seen to influence and encourage the consumption of alcohol by young people, with its constant appeal, through advertisements involving happy environments and beautiful people, conveying a message of power and achievement linked to alcohol consumption. This perception of students is important, considering that several studies have pointed out the time of youth exposure to advertisements and the strong influence of the media on their behavior. Younger adolescents appear to be susceptible to persuasive messages in alcohol commercials broadcast on TV, which sometimes results in a positive affective reaction to the ads, raising the chances of consumption by adolescents (OR = 1.28, 95% CI 1.01 to 1.61).⁽⁹⁻¹¹⁾

When it comes to the most consumed beverages, spirits mixed with soda, juices and energy drinks were the most cited, which is worrying considering the high alcohol content of spirits, especially vodka, cited as one of the main drinks currently consumed by youth groups and adolescents. Studies show that this consumption of mixed drinks (alcohol and energy drinks) is increasing among young people, and it is associated with excessive alcohol consumption, a risky behavior in general, changes in subjective states and greater dependence (AOR = 2.40, 95% CI = 1.27 to 4.56; $p = 0.007$).⁽¹²⁻¹⁴⁾

The motivations for the use of alcoholic beverages involving the teenager's universe appear to be linked to the approach to peers, to the opposite sex, and the need for integration into groups. These findings were corroborated by other studies, which indicate that the greater the use of psychoactive

substances during adolescence, the higher the consumption by friends and contacts maintained within the consumer environment.⁽⁷⁾ Friends directly influence individuals by offering alcohol, and indirectly by expecting the effects of social acceptance that come with its use. Adolescents with a lower number of friends who use alcohol and other drugs are more likely to be abstinent ($p = 0.0002$).^(2,3,15-17)

Regarding the influencing factors, there was a cultural pattern of contemporary society to encourage and sustain consumption. The family structure has an influence, both as a protective and control agent, and as a stimulus to the consumption of psychoactive substances. It is clear that the adolescent has the perception of family support as being able to interfere in their attitude, behavior and relationship with drugs. Several studies show that lack of parental support, alcohol consumption in the family, the use of alcohol and/or other drugs by parents and/or older siblings, divorce, permissive attitudes, and inability to control the children are some of the factors that favor the consumption of alcohol and other psychoactive substances by adolescents.^(4,18,19)

Another relevant aspect pointed out by students was in regard to the greater severity in law enforcement for consumption and sale of illicit drugs compared to alcohol, and the mention of the arrest of childhood friends for drug use/trafficking, which may also present ambiguity as to the influence exerted by peers in the initiation and/or continuation of the consumption of psychoactive substances.⁽¹⁾

It was noticed, in the statements of students, some concern about the number of girls who adopt the posture of consumption, (re)affirming the socially constructed culture of a greater acceptance of alcohol consumption by males, as well as the major concern of the father in relation to alcohol consumption by the daughter, which can be interpreted as a continuation of the sexist culture on the education of children with regard to alcohol consumption.⁽³⁾

The fact of the possibility of an impact of consumption is recognized by students, who confirmed the existence of negative consequences in different degrees of severity, affecting people with whom they were friends, but the prevailing belief that it “only happens with others” was observed, showing the teenager’s own

sense of indestructibility, and that he/she is untouchable and nothing escapes his/her control.

The negative consequences reported by students, including death, are supported by the international literature. The World Health Organization (WHO) confirms the occurrence of different types of accidents related to the prior consumption of alcohol in the United States and Europe. Worldwide, each year, approximately 2.5 million deaths are attributable to alcohol. Excessive alcohol consumption is responsible for one in ten deaths among adults of working age in the United States, and remains a leading cause of premature mortality in the country.^(20,21) Those data are in line with the severity of substance use/abuse at the international level.

The software used was an appropriate data analysis tool, as it reduced the time devoted to this process, although it requires a careful preparation for the development of the corpus to be submitted, requiring several versions until the final drafting of text. The data revealed in this study may support the implementation of prevention/protection strategies involving health and education professionals, with the active participation of young people as protagonists in this process. For further research we suggest the implementation of such measures and the assessment the effectiveness of such programs.

Conclusion

The analysis of the students’ perception regarding the use of psychoactive substances revealed that, in the current scenario, the consumption of alcohol markedly permeates the juvenile universe. There is a standard of alcohol as an essential element during leisure time, in approaching the opposite sex, plus a feeling of pleasure and freedom, and the need for affirmation in the adult world. The huge media appeal and the influences of the social and the family environment were observed as essential in the control of, and in encouraging the use of, such substances.

Collaborations

Freitas EAM collaborated in the steps of study design, analysis, data interpretation, draft writing, crit-

ical review of the relevant intellectual content, and final approval of the version to be published. Luis MAV collaborated with the writing of the article, relevant critical review of the intellectual content and final approval of the version to be published.

References

1. Gil-Lacruz Ai, Gil-Lacruz M. Subjective valuation of risk perception and alcohol consumption among Spanish students. *Salud Mental (México)*. 2010; (33):309-16.
2. Mundt MP. The impact of peer social networks on adolescent alcohol use initiation. *Academic Pediatrics*. 2011;11(5): 414-21.
3. Jones SC, Magee CA. The role of family, friends and peers Australian adolescent's alcohol consumption. *Drug Alcohol Rev*. 2014;33(3):304-13.
4. Stafström M. Influence of parental alcohol-related attitudes, behavior and parenting styles on alcohol use in late and very late adolescence. *Eur Addict Res*. 2014; 20(5):233-40.
5. Reinert M. Enunciative postures and lexical world, stabilized in a statistic discourse analysis. *Language Soc*. 2007;3(121-122):189-202.
6. Kirkwood RN, Brandon SC, Moreira BS, Deluzio KJ. Searching for stability as we age: the PCA-Biplot approach. *Int J Stats Med Res*. 2013; 2(4):255-62.
7. Wang SH, Lin IC, Chen CY, Chen DR, Chan TC, Chen WJ. Availability of convenience stores and adolescent alcohol use in Taiwan: a multi-level analysis of national surveys. *Addiction*. 2014; 109(10):1763.
8. Gosselt JF, Van Hoof JJ, De Jong MD. Why should i comply? Sellers' accounts for (non-) compliance with legal age limits for alcohol sales. *Subst Abuse Treat Prev Policy*. 2012;7(5):2-12.
9. Grenard JL, Dent CW, Stacy AW. Exposure to alcohol advertisements and teenage alcohol-related problems. *Pediatrics*. 2013;131(2):369-79.
10. Russell CA, Russell DW, Boland WA, Grube JW. Television's cultivation of american adolescents' beliefs about alcohol and the moderating role of trait reactance. *J Child Media*. 2014; 8(1):5-22.
11. Huang GC, Unger JB, Soto D, Fujimoto K, Pentz MA, Jordan-Marsh M, Valente TW. Peer influences: the impact of online and offline friendship networks on adolescent smoking and alcohol use. *J Adolesc Health*. 2014; 54(5):508-14.
12. Pennay A, Lubman DI. Alcohol and energy drinks: a pilot study exploring patterns of consumption, social contexts, benefits and harms. *BMC Res Notes*. 2012; 369(5):2-10.
13. Price SR, Hilchey CA, Darredeau C, Fulton HG, Barrett SP. Energy drink co-administration is associated with increased reported alcohol ingestion. *Drug Alcohol Rev*. 2010;29(3):331-3.
14. Berger L, Fendrich M, Fuhrmann D. Alcohol mixed with energy drinks: are there associated negative consequences beyond hazardous drinking in college students? *Addict Behav*. 2013;38(9):2428-32.
15. Ramirez, R, Hinman A, Sterling S, Weisner C, Campbell C. Peer influences on adolescent alcohol and other drug use outcomes. *J Nurs Scholarsh*. 2012;44(1):36-44.
16. Ragan DT, Osgood DW, Feinberg ME. Friends as a bridge to parental influence: implications for adolescent alcohol use. *Soc Forces*. 2014; 92(3):1061-85.
17. Guyll M, Madon S, Spoth R, Lannin DG. Popularity as a predictor of early alcohol use and moderator of other risk processes. *J Stud Alcohol Drugs*. 2014;75(6):919-28.
18. Tornay L, Michaud PA, Gmel G, Wilson ML, Berchtold A, Suris JC. Parental monitoring: a way to decrease substance use among Swiss adolescents? *Eur J Pediatr*. 2013;172(9):1229-34.
19. Beck F, Legleye S, Chomynova P, Miller P. A quantitative exploration of attitudes out of line with the prevailing norms toward alcohol, tobacco, and cannabis use among european students. *Subst Use Misuse*. 2014; 49(7):877-90.
20. World Health Organization. *Global status report on alcohol and health*. Geneva: WHO; 2011.
21. Stahre M, Roeber J, Kanny D, Brewer RD, Zhang X. Contribution of excessive alcohol consumption to deaths and years of potential life lost in the United States. *Prev Chronic Dis*. 2014;11:130293.