

Factors associated with smoking among female adolescents

Fatores associados ao tabagismo entre adolescentes do sexo feminino

Amanda Márcia dos Santos Reinaldo¹, Maria Odete Pereira²

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ABSTRACT The objective was to learn about the factors associated with smoking among female adolescents. A descriptive, qualitative research, in two schools in Belo Horizonte, Minas Gerais, Brazil. A total of 75 female teenagers participated in the study. The content analysis was used with the support of the qualitative analysis support software. Tobacco use was associated with body weight control, socialization in the school setting, reduction of anxiety and stress, and poor perception of health risk. Actions to prevent tobacco use in the school environment should be planned considering gender, age, language and lifestyles.

KEYWORDS Tobacco use disorder. Adolescent. Women.

RESUMO *O objetivo foi conhecer os fatores associados ao tabagismo entre adolescentes do sexo feminino. Pesquisa descritiva, qualitativa, em duas escolas de Belo Horizonte, Minas Gerais, Brasil. Participaram do estudo 75 adolescentes do sexo feminino. A análise de conteúdo foi utilizada com o suporte do software de apoio à análise qualitativa. O uso de tabaco foi associado ao controle do peso corporal, socialização no ambiente escolar, redução da ansiedade e estresse e pouca percepção de risco para a saúde. Ações de prevenção ao uso de tabaco no ambiente escolar devem ser planejadas considerando gênero, faixa etária, linguagem e modos de vida.*

PALAVRAS-CHAVE *Tabagismo. Adolescente. Mulheres.*

¹Universidade Federal de Minas Gerais (UFMG), Faculdade de Medicina (FM), Programa de Pós-Graduação de Promoção de Saúde e Prevenção da Violência - Belo Horizonte (MG), Brasil.
Orcid: <http://orcid.org/0000-0003-0283-2313>
amandamsreinaldo@gmail.com

²Universidade Federal de Minas Gerais (UFMG), Departamento de Enfermagem Aplicada, Programa de Pós-Graduação em Enfermagem - Belo Horizonte (MG), Brasil.
Orcid: <https://orcid.org/0000-0002-9418-2524>
m.odetepereira@gmail.com



Introduction

Adolescence is a long-term transition phase into adult life permeated by physical, biological, psychic and psychosocial changes and can be characterized as a period of vulnerability and risk for many adolescents due to the changes inherent in this phase^{1,2}.

Among the situations that indicate the needs, problems and care related to adolescent health are violence, self-inflicted injuries, suicide and sexually transmitted diseases³.

Drug use among adolescents is a challenge for public health in Brazil and demands investment in resources at different levels of care. Minimizing the damage caused by use, abuse, and chemical dependence among adolescents should consider the singularities of this phase and the clinical side of the addictions. In this context, the use and the experimentation of tobacco are frequent, especially, among adolescents^{4,5}.

The use of tobacco among women has deserved the attention of the researchers of the area in national, international studies and in the documents of the World Health Organization, due to the increase of consumption⁴⁻⁸.

Tobacco use among adolescents, in Brazil, has been accompanied by historical research in the last ten years, which shows that, when compared to other North American countries, there is a low prevalence of experimentation and consumption among young people, but when comparing the historical series of the country, it is observed that the experimentation and the evolution to the consumption occur in an early form, especially among the poorest population, which points to the need to intensify investment in specific public policies for this age group⁴.

The National Tobacco Control Program (NTCP), created in 1989, and with the adhesion of Brazil to the Framework Convention on Tobacco Control (FCTC) developed by the World Health Organization in 2005, with regard to policies to control and reduce tobacco consumption, have had an effect and have reduced the prevalence of global

consumption of the substance^{4,5,9}.

Given this scenario, the study proposed to discuss the use of tobacco among female adolescents, high school students from public and private schools in Belo Horizonte, Minas Gerais, Brazil.

It is believed that knowing the experiences and motivations of the adolescents in relation to the use of tobacco contributes to the planning of actions of prevention and treatment of smoking, as well as directs interventions to promote the health of adolescents in situations of risk and vulnerability to the use of tobacco.

Methods

This is a qualitative and descriptive study. The data was collected in four high schools, with female adolescents, and the data collection procedure adopted was the focal group technique described by Barbour¹⁰.

The moderator of the group was the lead investigator of the study and two observers, members of the research team, who recorded their impressions on the groups in a field diary participated. The groups were recorded in audio for later transcription and analysis. The inclusion criteria in the study were: the interest and acceptance to participate in the research; the authorization of the country of the students to participate in the study, and one or more criteria for the diagnosis of nicotine dependence according to the International Classification of Diseases (ICD)¹¹.

The research project was presented to the directors, coordinators and teachers of the schools involved at the beginning of the first semester of 2015 and approved by the schools in the same period. The presentation of the project to the students was carried out at different times during the semester. Those interested in collaborating with the study should send an e-mail to the principal researcher indicating their interest in participating in the groups that would be held the following year, and from that moment, meetings were

scheduled in schools for the distribution of the Free and Informed Consent Term and signature by the legal guardian of the adolescents.

The students interested in participating in the study were previously interviewed to respond to an instrument developed by the researchers based on the diagnostic criteria for substance use in the International Code of Diseases (ICD-10). Faced with the positive response to the presence of one or more dependency criteria, their participation was confirmed.

The data collection was carried out in the months of April, May and June of 2016 in the schools, scenarios of the research. The closure of the groups in the schools obeyed the criterion of saturation of the data, since the subjects presented themselves repeatedly and without new contributions for their analysis and understanding.

The sources of information for the research were the transcriptions of the recordings of the focus groups performed with the adolescents at the very school where they studied and the field diaries of the group observers. Ten focal group sessions were held for one and a half hours for each group of adolescents (Seven groups of nine participants and one group of 12). The guiding focus of the focus group was: 'Tobacco use and motivation for use among adolescents'.

The audio recording of the groups was transcribed and analyzed through Content Analysis, and consisted of: pre-analysis, material exploration and treatment of results. In the pre-analysis phase, the organization and the floating reading of the transcribed material was performed. In the following phases, the exploration of the material with more acumen and the treatment of the results in such a way were to be significant and valid^{11,12}.

Data was tabulated using WebQualitative Data Analysis (WebQDA) analysis software for texts, videos, audios and images. The WebQDA system is organized into three areas: 1. Sources – where the system is fed with research data and organized according to the researcher's need; 2. Creation of codification or categories - interpretative or descriptive,

and 3. Questioning – the researcher creates the dimensions, indicators or categories, whether interpretative or descriptive, that will be analyzed from agreements with models of analysis previously elaborated for each of them¹³.

Thus, the categories of analysis identified were: 1. Use of tobacco for weight loss; 2. Use of tobacco to be part of a group; 3. Use of tobacco to reduce anxiety and stress and 4. Other issues identified.

After completing the above steps, the authors made inferences and interpretations of the data, correlating them with the study objective and the literature on the subject.

The possible risks of eventual embarrassment at the time of the groups were minimized, since the participants of the research had access to audio recordings, field journal to the records, transcriptions, and the right to review (reading, review, deletion and approval) of the transcript of their speeches in the group. The participants of the research did not make modifications in the collected material.

The research project was approved under the number 0482.0.203.000-09 of the Research Ethics Committee of the Federal University of Minas Gerais. To carry out the study, the legal guardian of the collaborating schools and adolescents signed the Free and Informed Consent Term and the adolescents under the age of 18 signed the Term of Assent.

Results

In order to discuss the use of tobacco among female adolescents, high school students from public and private schools in Belo Horizonte, Minas Gerais, Brazil, the authors, using the methodological strategies described, will present, in subcategories the results of the research.

A total of 75 adolescents between 14 and 17 years of age, enrolled in the high school of public schools (40 participants) and private (35 participants), in the city of Belo Horizonte – Minas Gerais, who used tobacco for more than a year. The adolescents lived in the

metropolitan area of Belo Horizonte, Minas Gerais, and declared themselves white (55), black (5) and brown (15), lived with parents (58), grandparents (13) and other members of family (4). Regarding the use of tobacco by parents, 47 reported that both or one of the parents (28) used tobacco during the period of data collection, with the use of tobacco by parents (38 men) being greater than use among mothers (nine women). In relation to the time of tobacco use: 12 smoked more than four years ago; 23, three years ago; nine, two years ago and the others, a year ago. The frequency of use was, in 36, five to ten cigarettes per day, four to six cigarettes per day and the other two to three cigarettes per day. The use of other drugs associated with tobacco was: 27 used alcohol, nine used marijuana and the other only tobacco.

Use of tobacco to lose weight

Among the 75 adolescents participating in the study, 27 reported having started using tobacco to lose weight or maintain their weight. According to them, when reaching the ideal weight, the use can be revised, because the smell of the tobacco bothers them.

The question of self-image and tobacco use for adolescents, who started using tobacco to lose weight or maintain their weight, was an issue addressed in the groups. For them, tobacco ‘takes away hunger’. Tobacco, in this case, was used as an appetite suppressant. In general, it is used near or at lunchtime, because the first swallow and the feeling of satiety from the levels of nicotine in the blood, contribute to the adolescent to stay fast for a good part of the day or to feed as little as possible, the which means ‘to not pass out’ because of the hours of prolonged fasting. Some overweight adolescents reported that, even using tobacco, they did not lose or gain weight, which encouraged them to continue using.

At weekends, at home, this practice deserves care and attention. In this period, when they can not smoke, the participants perceive

a higher intake of food. To compensate, in the following week, they consume more tobacco to lose ‘the weight’ acquired in the weekend.

Teenage girls often, use the cash or snack money to buy tobacco and never buy a pack because they fear they will be discovered by their parents, thus, avoiding being caught by tobacco possession. This strategy is also used to control daily consumption. The buying of a pack of cigarettes is held in association with friends who smoke.

Some participants were ‘caught smoking’ by one or both parents, siblings, or relatives during school holidays, when drinking becomes more difficult due to staying at home with family members. When discovered, they claim to have smoked just to experiment, and in their assessment, the issue is resolved. Among adolescents, 15 were victims of physical violence by their parents (when they were found), seven were punished as corrective strategies, and one was forced to eat cigarettes by their father.

The adolescents who were victims of violence, when they were discovered, had, as a first reaction, confronted the aggressor, who, according to them, generally use tobacco. For them, the parents’ reaction was inadequate, especially those who use tobacco, which indicates the need for clarification actions with parents regarding prevention of tobacco use and management of the situation.

Use of tobacco to be part of a group

Tobacco use among 45 adolescents was associated with the desire to be identified as part of a differentiated, extroverted and adult group. Teenage girls say that only ‘legal’ schoolchildren use tobacco, and are usually the ones who are free to go out with friends, go to parties without parental vigilance, and date straight or homosexual relationships.

For participants, belonging to a ‘differentiated’ group is important. They also point to the fact as a way to protect themselves from other groups that do not share the same lifestyle.

Teenagers believe that girls who smoke have

more freedom to have male friends without necessarily being considered 'easy' or masculinized. According to them, tobacco allows them to approach the opposite sex and, to live under the protection of the group of 'smokers', with greater bond of friendship, confidence and companionship.

Participants in this study believe that tobacco has contributed to a mature appearance, which also motivates them to use. Among them, 37 affirm that smoking attracts older people to their affective relationships. When this happens, they feel they are part of the 'adult' group. On the other hand, it exposes them to risks of affective violence in relationships with people who, in general, would not be part of their circle of friends.

The adolescents estimate that after the onset of tobacco use, their lives and personal relationships with their friends improved in relation to the bond compared to periods when they did not use tobacco. Among them, ten stated that, at the time of data collection, they had fewer friends compared to when they did not use tobacco, but, on the other hand, the quality of friendship bonds improved.

Participants believe that if they decide to stop tobacco use one day, it would not be easy, but it is possible. Of these, 28 said they did not visualize the future without tobacco; six claimed to have remained unused for two to three months and stated that only in the first 15 days did they present physical and psychic symptoms attributed to the lack of the substance. The indicated symptoms were: increased appetite, anxiety, irritation, difficulty solving problems and an adolescent reported feeling sad without the substance. They believe that the real desire to cease use makes abstinence more 'quiet'. The rest do not think about it.

Use of tobacco to reduce anxiety and stress

Anxiety and stress were cited as triggers of increased tobacco use, especially when

it comes from family pressures, social relationships in school, affective relationships, and uncertain future.

Family pressures were perceived in different ways: pressure to choose a profession, get a job, leave the boyfriend or friends that parents or family do not accept, pressure to lose weight or to gain weight, study, work, or stand out in something.

Cohabitation with smoking parents has been cited as something that makes it easier to consume, but they do not believe that this dictates their children's tobacco use. They cite examples of friends who use tobacco, although their parents do not use the substance.

Several factors were mentioned as motivational for tobacco consumption, among them, the sensation of relaxation triggered after consumption. Tobacco use was cited as a way of breaking the house rules or just as a veiled revenge against parents. Reasons for revenge range from overcontrol to lack of control.

For adolescents, school is not an institution that presses, but the school environment is. Teaching and learning issues do not bother them, but the social relations established in it are valued, since all participants want to be highlighted in some way and tobacco is identified as a way to achieve this goal, even if momentarily.

For the participants, affective relationships, especially dating and friendship, when perceived as stressful, influence the increase in the quantity and frequency of tobacco use. In this sense, 38 adolescents reported increasing the frequency of consumption when they have problems in the relationship with the people with whom they live. They perceive that adults behave in the same way and therefore see this fact as an issue inherent in the person's relationship to substance.

The future afflicts them by generating anxiety. They are afraid they will not get a good job; of not entering university; of not having a companion in the future; not have access to the consumer goods they want. These are issues shared with friends who, in general, use tobacco.

One teenager called the 'smoking together' time as a space where 'heavy' issues that bothered her, and generated doubts and uncertainties can be discussed. Tobacco, at that time, had the feeling of relaxation to think better about problems or not to think about it.

Other issues identified

The onset of tobacco use was associated with the curiosity, influence of friends, the fact that they understood consumption as normal, found it 'legal', or because they read somewhere that they lose weight.

The purchase of the product is carried out in commercial banks near the school or on the way from home to school or vice versa. The purchase is made in retail units. Some teens say they subtract units or packs of cigarettes from parents or other family members who smoke.

The relationship between tobacco and illness due to tobacco use has not been shown to be of concern to adolescents. Thus, examples of family members, models, actors and musicians who smoke and remain healthy were cited as a way to justify the use and certainty that tobacco does not harm health. Examples of people who did not smoke and died of lung cancer were also cited. They say they have information about the health effects of tobacco, but that does not worry them, because they estimate that their consumption is small and that when they want to stop using, they will have no difficulty. They claim, in general, that the media may exaggerate information about the risk of tobacco use.

What bothers them in relation to consumption is the smell of tobacco smoke when pointed out by third parties and the difficulty in consuming at desired places and times. Finally, they mention the appearance of the hair, lackluster and with an unpleasant smell. In this way, they point to issues associated with self-image, appearance and aesthetics that bothers them in relation to consumption.

Discussion

The use of tobacco among adolescents with the goal of losing or controlling body weight is evidence established by the scientific literature¹³⁻¹⁶. Adolescents, in general, eat unhealthy food; use prescription and nonprescription appetite suppressants; follow fashionable diets advocated by public figures of media appeal, who come to them through social media, which influences their way of life in relation to self-image.

The search for perfect body image within rigid patterns; the difficulty of emotional self-regulation and coping strategies in relation to situations in which they feel excluded or stigmatized by obesity or their self-image are associated with greater tobacco use compared to adolescents who present weight within normal and healthy parameters^{17,18}.

According to a survey of high school students in the United States, overweight adolescents are considered vulnerable to tobacco, alcohol and other drug use, high-risk sexual behavior, and suicide. The study showed a higher risk for tobacco use before 13 years among obese adolescents¹⁷.

Adolescence is a period in which social skills, among others, develop or consolidate. In this moment of transition, it is natural for adolescents, through their social interactions, to adjust and learn to cope with the changes, challenges and possibilities of adult life. Group life softens fragile social skills¹⁹. Research conducted in Colombia, with students and non-students, showed that tobacco use was higher among boys. For girls, the possibility of socialization was one of the reasons for tobacco use²⁰.

The increase in tobacco consumption among girls was observed in 29 European countries. A study in that continent, with 50,338 15-year-old adolescents, pointed out that the girls reported weekly use, associated with social events, and living with other adolescents²¹.

A study conducted in the UK showed that the feeling of belonging to a group may be a

protective or risk factor for the adolescent. Thus, belonging to a group in which the bond is determined by the shared use of psychoactive substances is considered a risk factor²².

The emergence of behaviors, such as: tobacco use, antisocial behavior, alcohol consumption and unprotected sexual intercourse, increase the risk of morbidity and premature mortality. Group interaction in these cases can be positive when it protects adolescents from such practices, although this age group is not always clear about what can be considered a healthy relationship²².

Adolescence, as a transition phase and personality formation, exposes adolescents to issues related to self-confidence, self-esteem, anxiety, depression and stress. In an attempt to become more sociable, the adolescent experiences tobacco in order to improve her self-image, making her more sociable and attractive²³.

Several aspects contribute to female susceptibility and vulnerability to tobacco use. Evidence suggests that because they are more susceptible to anxiety disorders and have difficulty managing stress, women are more likely to use tobacco in both behavioral and clinical trials²⁴.

The parental relationship, social experiences and skills also contribute to the onset of tobacco use, as well as make it difficult to maintain abstinence and, therefore, make treatment difficult²⁵. In general, the abstinence syndrome in women has peculiarities that manifest themselves through: irritation; emotional lability; depression; anxiety; insomnia; increased appetite and difficulty concentrating²³.

Studies indicate that conflicting relationships with one or both parents who are absent, negligent, permissive, overprotective, authoritarian, indulgent, indifferent, and who use alcohol, tobacco or other drugs are variables that are associated with experimentation and use of tobacco²⁴.

In relation to the ease found by adolescents to buy tobacco near the school and on the way to it, it is possible to think of the noncompliance with the public policies adopted by Brazil, in the sense of controlling

the use of tobacco, among them: the prohibition of tobacco sales under 18 years of age; smoke in enclosed places; advertising; the establishment of warning clauses and images in packets; the increase in the minimum tax levied in relation to the price of cigarettes; the restriction of additives that may enhance, enhance and modify the taste and aroma of the products and the use of generic packaging to make them less attractive, especially, to young people⁸.

The measures cited for the control of tobacco use have a significant impact on the reduction of consumption and are in line with the Framework Convention on Tobacco Control established by the World Health Organization in 2010²⁶. There is a need for systematic supervision so that retail sales of tobacco to retailers under the age of 18 do not occur.

A Scottish study, that evaluated the density of retail outlets near schools and homes of schoolchildren showed that there was no significant difference in consumption. The mapping indicated the need to reduce points of sale in both places, as an alternative to inspection in spaces considered to be more infantile, such as school, for example²⁷.

The research data corroborate the scientific production in the area, although it presents the limits of the cultural context in which it was developed. The study does not allow generalizations, but the authors infer that the discourses of the research participants are intertwined and reflect issues experienced by female adolescents in relation to tobacco consumption and can be verified in other contexts.

The limitations of the study are related to sample size and local characteristics of the research scenarios. Some advances and retreats can be identified, among them, the need for research with larger groups in diverse contexts that consider the qualitative component of the topic under discussion and the need to create and validate instruments to measure the consumption of tobacco among female adolescents.

Conclusions

It is known that overweight and anxiety are two components present in the life of most women and that they feed back, and tobacco use has been associated with the control of both, since adolescents believe in this association, making use of it to inhibit the appetite and reduce anxiety.

The need to belong to a group, characteristic of adolescence, also encouraged adolescents to start using tobacco as a facilitator for engagement in groups of the same age group, especially those in which the male gender predominated. For adolescents, engaging in these groups would not be possible without tobacco use.

Weight control, anxiety and the difficulties of social relations are part of the adolescent universe. In this sense, it is important to promote actions that clarify this population about the risk of association of tobacco use with weight control, sociability and reduction of common anxiety among young people.

In this sense, the authors point out the need

for problematizing strategies for the prevention of tobacco use, aimed at the adolescent female audience, taking into account the specificities of the age group, such as language and lifestyles, and educational actions with parents in relation to drug use management.

It is necessary to research and discuss how and what to do to sensitize the adolescents in relation to the diseases caused by tobacco consumption; the issues related to conscious consumption, despite the information on the risk of tobacco use for health pointed out in the study; the expressed behavior that stopping smoking is simple and without health implications and, finally, how to deal with the tensions involved in the adolescent/consumption relationship.

Collaborators

Reinaldo AMS and Pereira MO contributed to the research, data collection and processing, analysis and writing of the article. ■

References

- Blum RW, Bastos FI, Kabiru CW. Adolescent health in the 21st century. *The Lancet* [internet]. 2014 abr [acesso em 2016 abr 2]; 379(9826):1567-1568. Disponível em: <https://www.ncbi.nlm.nih.gov/pubmed/22538177>.
- Sansores RH, Ramírez-Venegas A. COPD in women: susceptibility or vulnerability? *Eur. Respir. J* [internet]. 2016 [acesso em 2016 abr 2]; 47:19-22. Disponível em: <http://erj.ersjournals.com/content/erj/47/1/19.full.pdf>.
- Moghaddam HT, Shahinfar S, Bahreini A, et al. Adolescence Health: the needs, problems and attention. *Int. J. Pediatr.* [internet]. 2016 fev [acesso em 2016 abr 2]; 4(2):1423-1438. Disponível em: http://ijp.mums.ac.ir/article_6569_730511251d3e060fdd0318cecf61c984.pdf.
- Figueiredo VC, Szklo AS, Costa LC, et al. Erica: Prevalência de Tabagismo em Adolescentes Brasileiros. *Rev. Saúde Pública* [internet]. 2016 [acesso em 2016 abr 2]; 50(supl1):1s-12s. Disponível em: http://www.scielo.br/pdf/rsp/v50s1/pt_0034-8910-rsp-S01518-87872016050006741.pdf.
- World Health Organization. WHO Framework Convention on Tobacco Control. Geneva; Suíça: World Health Organization; 2005.
- Martins MMM, Souza J, Silva AA. Crianças e adolescentes usuários de substâncias no serviço de emergência psiquiátrica. *Acta Paul Enferm* [internet]. 2015 [acesso em 2016 abr 2]; 28(1):13-18. Disponível em: <http://www.scielo.br/pdf/ape/v28n1/1982-0194-ape-028-001-0013.pdf>.
- Silvino MCS, Barboza CL, Oliveira MLF. Hospitalization of children and adolescents for drug use. *J Nurs UFPE on line* [internet]. 2015 [acesso em 2016 abr 2]; 9(8):8810-6. Disponível em: <https://periodicos.ufpe.br/revistas/revistaenfermagem/article/download/10665/11700>.
- Carvalho LB. Controle do tabaco: uma análise sobre paternalismo e liberdade. *Rev Direito Sanitário* [internet]. 2015 fev [acesso em 2016 abr 2]; 16(3):13-35. Disponível em: <https://www.revistas.usp.br/rdisan/article/download/111647/109678>.
- Ford A, Moodie C, Purves R, et al. Adolescent girls and young adult women's perceptions of superslims cigarette packaging: a qualitative study. *BMJ Open* [internet]. 2016 [acesso em 2016 abr 2]; 6(1):1-8. Disponível em: <http://bmjopen.bmj.com/content/bmjopen/6/1/e010102.full.pdf>.
- Barbour R. Grupos Focais. Porto Alegre: Artmed, 2009.
- Nunes SOV, Vargas HO, Nunes LVA, et al. A Dependência do Tabaco. In Nunes SOV, Castro MRP. Tabagismo: Abordagem, prevenção e tratamento. Londrina: Eduel; 2011. p. 41-54.
- Bardin L. Análise de conteúdo. Lisboa: Edições 70, 2009.
- Costa AP, Linhares AP, Souza FN. Possibilidade de análise qualitativa no WEBQDA e colaboração entre pesquisadores em educação e comunicação. In: Anais 3º Simpósio Educação e Comunicação: Ininclusão possibilidades de ensinar e aprender; 2012 set 18; Aracaju: UNIT; 2012. p. 276-286 [acesso em 2018 dez 18]. Disponível em: <http://geces.com.br/simpósio/anais/anais2012/>.
- Rosa MF, Gonçalves S, Antunes H. Comportamentos de risco e excesso de peso na adolescência: Revisão da literatura. *Acta Pediatr Port* [internet]. 2012 jun [acesso em 2016 abr 3]; 43(3):128-134. Disponível em: <http://actapediatrica.spp.pt/article/view/1275>.
- Garcia DM, Mekitarian Filho E, Gilio AE, et al. Estado nutricional, autopercepção do estado nutricional e experimentação de drogas lícitas em adolescentes. *Rev. Paul Pediatr* [internet]. 2015 [acesso em 2016 abr 3]; 33(3):332-339. Disponível em: <http://www.scielo.br/pdf/rpp/v33n3/0103-0582-rpp-33-03-0332.pdf>.

16. Crone EA, Dahl RE. Understanding adolescence as a period of social-affective engagement and goal flexibility. *Nat Rev Neurosci* [internet]. 2012 set [acesso em 2016 abr 3]; 13(9):636-650. Disponível em: <https://www.ncbi.nlm.nih.gov/pubmed/22903221>.
17. Restrepo A, Montoya NE. Tobacco use among adolescents at school and out-of-school in Medellin, Colombia: a population survey. *Rev de la Fac de Ciencias Méd.* 2015 fev [acesso em 2016 abr 4]; 73(3):270-283. Disponível em: <https://revistas.unc.edu.ar/index.php/med/article/view/13835>.
18. Pfortner TK, Hublet A, Schnohr CW, et al. Socioeconomic inequalities in the impact of tobacco control policies on adolescent smoking. A multilevel study in 29 European countries. *Addictive Behaviors* [internet]. 2016 [acesso em 2016 abr 5]; 5(3):58-66. Disponível em: <https://www.ncbi.nlm.nih.gov/pubmed/26454551>.
19. Kipping RR, Campbell RM, MacArthur GJ, et al. Multiple risk behaviour in adolescence. *J. Public Health* [internet]. 2016 [acesso em 2016 abr 5]; 34(1):1-9. Disponível em: <https://www.ncbi.nlm.nih.gov/pubmed/22363025>.
20. Torres OV, O'dell LE. Stress is a principal factor that promotes tobacco use in females. *Progress in Neuro-Psych & Bio Psych* [internet]. 2016 [acesso em 2016 abr 7]; 65:260-268. Disponível em: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4618274/>.
21. Bird Y, Staines-Orozco H, Moraros J. Adolescents smoking experiences, Family structure, parental smoking and socioeconomic status in Ciudad Juárez, Mexico. *Inter J for Equity in Health* [internet]. 2016 fev [acesso em 2016 abr 3]; 10(1):15-29. Disponível em: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4761169/>.
22. Lombardi EMS, Prado GF, Santos UP, et al. O tabagismo e a mulher: Riscos, impactos e desafios. *Bras. Pneumol* [internet]. 2011 [acesso em 2016 abr 7]; 37(1):118-128. Disponível em: http://www.scielo.br/pdf/jbpneu/v37n1/en_v37n1a17.pdf.
23. Tondowski CS, Bedendo A, Zuquette C, et al. Estilos parentais como fator de proteção ao consumo de tabaco entre adolescentes brasileiros. *Cad. Saúde Pública* [internet]. 2015 [acesso em 2016 abr 3]; 31(B12):2514-2522. Disponível em: https://www.scielo.org/article/ssm/content/raw/?resource_ssm_path=/media/assets/csp/v31n12/0102-311X-csp-31-12-2514.pdf.
24. Cerutti F, Ramos SP, Argimon IIL. A implicação das atitudes parentais no uso de drogas na adolescência. *Acta. colomb. Psicol* [internet]. 2015 maio [acesso em 2018 out 20]; 18(2):173-185. Disponível em: <http://www.scielo.org.co/pdf/acp/v18n2/v18n2a15.pdf>.
25. Hallal ALLC, Figueiredo VC, Moura L, et al. The use of other tobacco products among Brazilian school children (PeNSE 2012) *Cad. Saúde Pública* [internet]. 2017 [acesso em 2018 out 20]; 33(supl3):e00137215. Disponível em: http://www.scielo.br/pdf/csp/v33s3/en_1678-4464-csp-33-s3-e00137215.pdf.
26. Portes LH, Machado CV. Convenção-Quadro para o Controle do Tabaco: adesão e implantação na América Latina. *Rev. Panam Salud Publica* [internet]. 2015 [acesso em 2016 abr 6]; 38(5):370-379. Disponível em: https://www.scielo.org/article/ssm/content/raw/?resource_ssm_path=/media/assets/rpsp/v38n5/v38n5a04.pdf.
27. Shortt NK, Tisch C, Pearce J, et al. The density of tobacco retailers in home and school environments and relationship with adolescent smoking behaviours in Scotland. *Tob Control* [internet]. 2016 [acesso em 7 abr 2016]; 25:75-82. Disponível em: <http://tobaccocontrol.bmj.com/content/early/2014/11/04/tobaccocontrol-2013-051473>.

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