

PERCEPTION OF RISKS AND BENEFITS ASSOCIATED WITH THE USE OF CANNABIS AMONG STUDENTS IN BRASILIA, BRAZIL

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ABSTRACT

Objectives: to analyze the perception of data on and benefits of cannabis, and its association with the use among Brazilian students in public high schools between the ages of 15 and 17, as well as to analyze the intention of these adolescents to use cannabis in the hypothetical context of regulatory changes in Brazil.

Method: a quantitative cross-sectional study involving 268 students aged 15 to 17. The instruments of data collection were: *Inter-American Drug Use Data System Secondary Students School Survey*; *Monitoring the Future*; *Benthin Risk Perception Measure*; and an item on intent to use cannabis in the context of regulatory changes. Data were analyzed through descriptive and inferential statistics.

Results: 23.5% of the students use cannabis. The average age they started using was 14 years old ($SD=1.802$); 56.3% perceive a high risk of using cannabis regularly, 58.6% consider the risk to be greater than the benefit; and most of them have no intention of using cannabis.

Conclusion: Prevention strategies that focus exclusively on the harmful effects of drugs are not effective, and a more realistic approach focused on health promotion is more likely to show positive results. Conclusion: The intention to use cannabis in case of regulatory change showed that the scenario would not change significantly, since the proportion of those who would use it is very similar to the one that has already used the drug.

DESCRIPTORS: cannabis. Adolescent behavior. Risk factors. Government regulation. Illicit drugs.

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PERCEPÇÃO DE RISCOS E BENEFÍCIOS ASSOCIADOS AO USO DE MACONHA ENTRE ESTUDANTES DE BRASÍLIA, BRASIL

RESUMO

Objetivos: analisar a percepção de danos e benefícios da maconha, e essa associação com seu uso, entre estudantes de escolas públicas brasileiras do ensino médio, com idades entre 15 e 17 anos, assim como analisar a intenção desses adolescentes de usar maconha no contexto hipotético de mudanças regulatórias no país.

Método: estudo transversal quantitativo em que participaram 268 estudantes, com idade entre 15 a 17 anos. Os instrumentos de coleta de dados foram: *Inter-American Drug Use Data System Secondary Students School Survey*; *Monitoring the Future*; *Benthin Risk Perception Measure*; e um item sobre intenção de usar maconha no contexto de mudanças regulatórias. A análise dos dados deu-se por meio de estatística descritiva e inferencial.

Resultados: dos estudantes, 23,5% usaram maconha. A média de início do uso foi 14 anos ($DP=1,802$); 56,3% percebem grande risco de usar maconha regularmente, 58,6% consideram que o risco é maior do que o benefício; e a maioria não tem intenção de usar maconha.

Conclusão: As estratégias de prevenção com foco exclusivo nos efeitos nocivos das drogas não são eficazes, sendo que uma abordagem mais realista e com foco na promoção da saúde tem mais chance de encontrar resultados positivos. Conclusão: A intenção de uso da maconha em caso de mudança regulatória mostrou que o cenário não mudaria muito, pois a proporção dos que a usariam é muito semelhante à daquela que já fez uso da droga.

DESCRITORES: cannabis. Comportamento do adolescente. Fatores de risco. Regulação governamental. Drogas ilícitas.

PERCEPCIÓN DE RIESGOS Y BENEFICIOS ASOCIADOS AL USO DE LA MARIHUANA ENTRE ESTUDIANTES DE BRASÍLIA, BRASIL

RESUMEN

Objetivos: analizar la percepción de los daños y beneficios de la marihuana, y la asociación con su uso entre estudiantes de escuelas públicas brasileñas de la escuela secundaria, con edades entre 15 y 17 años, así como analizar cuál es la intención de estos adolescentes de consumir marihuana en un contexto hipotético de cambios en las leyes en Brasil.

Método: estudio transversal cuantitativo en que participaron 268 estudiantes, con edades entre 15 y 17 años. Los instrumentos para la recolección de datos fueron: *Inter-American Drug Use Data System Secondary Students School Survey*; *Monitoring the Future*; *Benthin Risk Perception Measure*; y un punto sobre la intención de consumir marihuana en un contexto de cambios en las leyes. Se llevó a cabo el análisis de los datos a través de la estadística descriptiva e inferencial.

Resultados: de los estudiantes, 23,5% dicen haber consumido marihuana. La media de inicio del uso fue de 14 años ($DE=1,802$); 56,3% dicen notar que es un gran riesgo consumir marihuana regularmente; 58,6% consideran que el riesgo es mayor que el beneficio; y la mayoría no tiene la intención de consumir marihuana.

Conclusión: Las estrategias de prevención con enfoque exclusivo en los efectos nocivos de las drogas no son eficaces, siendo que un abordaje más realista y con enfoque en el fomento de la salud tiene más chances de obtener resultados positivos. Conclusión: La intención de consumir marihuana en caso de cambios legales demostró que el escenario no cambiaría mucho, dado que el porcentaje de aquellos que la consumirían es muy semejante al porcentaje de estudiantes que ya la consumen.

DESCRITORES: Cannabis. Conductas del adolescente. Factores de riesgo. Regulación gubernamental. Drogas ilícitas.

INTRODUCTION

The drug issue is a worldwide concern due to its high frequency and the social, psychic, and biological harm it causes, especially among the most vulnerable population, such as children and adolescents. During adolescence there is a rapid biological and psychosocial development, and problems arising from drug abuse can influence throughout life.¹ There seems to be a consensus among scholars that the earlier the onset of drug use, the greater the risk of psychic, physical, and social harm to human development.²⁻⁴

Cannabis is the most commonly used illicit drug,⁵ its recreational use has become almost as common as the use of tobacco among adolescents and young adults in recent years⁶ and one of the possible reasons for this is to believe that it is a light drug.⁷ The high incidence among adolescents and young people has been the called the attention of researchers worldwide, especially due to the damages associated with the abuse, such as mood disorders and damages to the cognitive and motivational processes of the youngsters.⁸

Epidemiological researches on drug use in Brazil are not carried out systematically, with the last two studies with student populations taking place in 2003 and 2010, respectively, and there is no other statistical basis that can support comparisons of patterns of consumption over the years in these or other populations of the country.⁹ Based on the information available in the last two studies, it can be stated that, although the abuse of licit and illicit drugs among adolescents has declined over the years, there is still a high consumption of licit drugs, especially alcohol.⁹ On its turn, according to data from the Brazilian Center for Information on Psychotropic Drugs – CEBRID,¹⁰ cannabis is the most used illicit drug among middle and high school students of the public school system. In the last survey conducted in Brazil in 1997, the capitals with the highest consumption of this drug were Curitiba (11.9%) and Porto Alegre (14.4%). On the other hand, it was found that 7.6% of students in Brazil reported having already tried cannabis once in their lifetime. With respect to previous studies, cannabis was the drug that had its “use in life” increased, rising from 2.8% in 1987 to 7.6% in 1997. Frequent and heavy use of cannabis also had a statistically significant increase in recent surveys in 2012.⁵

The epidemiology of cannabis use in Brazil shows that this issue cannot go on without frank and decisive confrontation, as there is an increased use of cannabis among students¹¹ and a high use among homeless children.¹² The First Household Survey on Drug Use in Brazil¹³ revealed that 6.9% of the 47 million inhabitants from the 107 largest Brazilian cities have already consumed cannabis at least once in their lives, totaling 3.249 million people. Data from the Second Survey on the Use of Psychotropic Drugs among the Overall Population¹⁴ demonstrated that 12 million Brazilian citizens (22.8%), aged between 12 and 65 years old, used a drug (other than alcohol and tobacco) during their lifetime. Alcohol (74.6%) and tobacco (44%) were the most frequently used licit drugs; and cannabis (8.8%) and cocaine (2.9%) were the most commonly used illicit drugs.

According to the Sixth Survey of the Brazilian Center for Drug Information,⁹ conducted with students between 10 and 19 years of elementary and high school of public and private schools in the 27 Brazilian capitals, it was verified that “use in life” (when the person uses any psychotropic drug at least once in their life), in public educational institutions, was reported by 59.3% of the students, while in private schools, was informed by 65% of the students interviewed. The category “use in the year” (when the person used a psychotropic drug at least once in the 12 months prior to the survey) was reported by 41.1% of students in public schools and 47.5% of students in private schools. Regarding the frequency of “use in the month” (when the person used psychotropic drugs at least once in the 30 days prior to the survey), the percentage was 23% in public schools and 20.6% in private schools.⁹

When comparing data from the two surveys on drug use among primary and high school students in Brazil conducted by CEBRID in 2004 and 2010,^{9,11} there is a decrease in “use in life” of drugs in general in all age groups surveyed. In the age group between 10 and 12 years old, “use in life” in 2004 was 10.2% and in 2010 it was 4.6%; in the group between 13 and 15 years old, the use in 2004 was 20.3% and in 2010, 8.4%. Between 16 and 18 years of age, use was 26.5% in the 2004 study and 15.7% in 2010. On the other hand, there was a decrease in the “use in the year” of drugs among students in comparison with the research carried out in 2004. This decrease (from 19.6% to 9.9%, excluding alcohol and tobacco) reverses a growing trend that has been observed in all surveys conducted since the 1990s. The exception is cocaine, whose consumption has increased (from 1.7% in 2004 to 1.9% in 2010), but its use is still low compared to other drugs such as alcohol, tobacco, inhalants and cannabis. In the specific case of crack, there was also a decrease in use (from 0.7% in 2004 to 0.4% in 2010), although the number of student users is so unimpressive that it does not allow consistent statements.

This downward trend in use was not consistent within the national scenario. In Brasilia, for example, between the years 2004 and 2010, there was a decrease in the number of students who reported smoking in the year and in life, but there was no difference in the use of alcoholic beverages. It was also observed an increase in students who reported use in life of other drugs. The main changes for use in the year involved increased use of inhalants and cocaine.⁹

There are studies that show evidence that prolonged use of cannabis may cause cognitive and motor impairment^{5,15-16} or deficits in social skills.¹⁷ From a literature review on the effects of cannabis on executive functions, an evidence-based study found that there is an interesting pattern of recovery of some functions, as well as the persistence of other deficits.¹⁸ The acute effects of cannabis use are evident in attention and information processing skills, with probable recovery from these functions after a month or more of abstinence. Decision-making and risk problems are not necessarily evident immediately after smoking. However, if cannabis use is heavy and chronic, disability may arise and not disappear with abstinence, particularly if the abuse starts in adolescence, i.e. when maturity of executive functions has not been achieved. On the other hand, a British study suggests that there are no structural changes in the brains of chronic users of cannabis, whether adults or adolescents.¹⁶ The use of cannabis impairs acute inhibition and promotes impulsivity; during abstinence, these deficits are more evident in tasks that require conceptual training, planning, and sequencing skills. Working memory is significantly impaired after acute exposure to cannabis, but these deficits may disappear with sustained abstinence.¹⁸ In summary, it is important to note that there is no evidence in the literature that occasional use of cannabis may cause harmful effects.⁷

The international Drug War pact and prohibitionist measures, of which Brazil was a signatory in the three UN conventions, seem to have finally recognized its collapse. The debate on cannabis has been making progress in many countries as it is the most used illicit drug in the world. Faced with this scenario of regulatory changes, it is worth to investigate what teenagers think about the effects of cannabis and how they will behave towards the legalization and regulation of its use.

Due to the low impact when compared to other substances, their therapeutic potential, and their use in the context of harm reduction, there may have been a decrease in the perception of their risks by cannabis users. This possibility worries health professionals and urges the creation of promotion and prevention policies in the drug context, as such perception directly interferes in the decision-making scale for the use.¹⁹⁻²²

The objective of this study was to analyze the perception of damages and benefits of cannabis, and the association with its use, among students from public high schools in Brazil, aged between 15 and 17 years of age, as well as to analyze the intention of these adolescents to use cannabis in the hypothetical context of regulatory changes in the country.

The same study was also carried out in eight other countries in Latin America, Central America, and the Caribbean (Belize, Chile, Colombia, Jamaica, Mexico, Dominican Republic, Saint Kitts, and Trinidad and Tobago). The research was carried out with the support of the *Centre for Addiction and Mental Health* (CAMH) of the University of Toronto, Canada and the Inter-American Drug Abuse Control Commission of the Organization of American States (CICAD/OAS). In Brazil, the University of Brasilia was responsible for carrying out the study.

METHOD

This quantitative cross-sectional study was part of a multicenter study in 10 cities from 9 countries, being the results referring to the Brazilian sample of the Federal District presented herein.

The study involved 268 students of the 1st to the 3rd year of high school (50.7% of the 1st year, 26.1% of the 2nd and 23.1% of the 3rd) from three public schools in the Federal District, aged 15 to 17 (38.8% aged 15, 32.1% aged 16 and 29.1% aged 17). Of the students, 35.1% were male and 64.9% were female. The inclusion criterion was to be a student aged 15 to 17, enrolled in the selected school, who had the ability to read and write without any assistance, and could provide free and informed consent and authorization from family members. There was a representative sample of 268 students and a mean effect size at a level of $\alpha = 0.05$.

The instrument of data collection was a combination of scales derived from three instruments, namely: a) *Inter-American Drug Use Data System Secondary Students School Survey* (SIDUC); b) *Monitoring the Future* (MTF); c) *Benthin Risk Perception Measure*; e d) a hypothetical question about the intention to use cannabis was created. Altogether, the instrument consisted of 23 multiple choice questions in Likert scale format. No studies were found in the literature on the validation of these scales for Brazil.

SIDUC is a standardized methodology designed to gather data, create explanatory concepts, and support responses to address the use of psychoactive substances in the Americas and the Caribbean (Organization of American States, Inter-American Drug Abuse Control Commission, and Inter-American Observatory on Drug Abuse of 2011). Ten items on consumption behavior of this questionnaire were used: three questions collected demographic data on sex, age, and education; two items about having friends who use cannabis; one item on declaration of cannabis use and age of first use; two six-point multiple-choice Likert scale items on consumer behavior in the last 12 months and last 12 days, respectively, and three items on risk perception of cannabis consumption with four points (1 - no risk, 2 - low risk, 3 - medium risk, 4 - high risk). A lower score in this last item represents a lower perception of consumption risk.

MTF is an annual survey on lifestyles and youth values designed to explore changes in important values, behaviors, and lifestyle orientations of the contemporary American youth.²³ This study included three of its items that investigate the general perception of damage related to the frequent and experimental use of cannabis, registered on a five-point scale.

The *Benthin Risk Perception Measure Instrument*²⁴ uses a seven-point scale to evaluate the perceived risks and benefits of several behaviors. It has been widely used in studies investigating the perception of risk, damage, and benefits, most of which have reported a Cronbach's alpha of 0.70.^{25–28} In addition, a Spanish version of this measure is available and used in Latin America.²⁹ For this study, a slightly modified version was used to investigate the participants' perceptions on the damages and benefits of smoking cannabis. This modified version was composed of 11 questions: eight items from the original scale and three additional items.

In addition to the use of these scales, a hypothetical question about the intention to use cannabis was also presented in the case of regulatory changes with six alternative responses. The question was: "If you were 18 years old and cannabis use were legalized and regulated, what would

you probably do?" The response options were: Would not use it, even if it was legally available; Would try it; Would use it as much as ever; Would use it more often; Would use it less; Does not know". The response frequency for each alternative was calculated, and the item was analyzed in association with the option of whether or not they already used cannabis. Thus, the analysis was intended to discover how those who do not use the drug would hypothetically behave in case it is legalized and regulated in the future.

First phase: request for authorization to carry out the study

First, the project was approved by the Research Ethics Committee of the Institute of Human Sciences of the University of Brasilia. Upon authorization by the State Department of Education of the Federal District to carry out the research, the schools of the district network were contacted and only three of them accepted the invitation to participate in the research. The free and informed consent of the students participating in the three elected schools and their parents was obtained. Proper precautions were taken to ensure the interviewees' anonymity and confidentiality, and they were informed about this right.

Second phase: data collection and analysis

The questionnaire was completed in the classroom, with the school desks away from each other to avoid information sharing. To collect data, the principal researcher had the help of assistants to distribute the questionnaires, and the procedure was carried out in pairs of properly trained researchers. The total questionnaire presented a Cronbach alpha reliability coefficient of 0.747, which provides a good internal consistency index to the instrument. The collection took place in a single day, and the school board offered space to complete the questionnaire during the regular school activities.

Data was analyzed using descriptive and inferential statistics. Descriptive statistics were used to describe demographic and prevalence data, using frequencies and percentages. Inferential analysis was used to explore the correlations through and T-test.

RESULTS

The results showed that 23.5% of the participants reported having used cannabis (29.8% of men and 20.1% of women): 19% in the last year (25.5% of men and 15.5% of women) and 9.7% in the last month (14.9% of men and 6.9% of women). Regarding sex, there was no significant difference between the prevalence of using sometime in life ($\chi^2=3.175$, $p=0.075$), but there was a significant difference in comparison with the prevalence in the last year ($\chi^2=3.972$, $p=0.046$) and in the last month ($\chi^2=4.455$, $p=0.035$), such occurrences being higher among men.

With respect to the age at which they started using cannabis, it was found that the average age of onset was 14 years of age ($SD=1.802$), with the minimum age reported of 9 years and the maximum age, 17 years.

Regarding cannabis use by friends, more than half of the participants (59.5%, $n=164$) stated that at least some of their closest friends use cannabis. Of these, 63.9% were men and 57.4% were women. On the other hand, 29.5% reported that none of their close friends used cannabis, of which 25.5% were men and 31.6% were women.

The risk perception according to the frequency of use of cannabis was assessed: most participants (56.3%, $n=151$) perceived a high risk of using cannabis regularly, 33.6% ($n=90$) perceived average risk of using cannabis once in a while, and 32.5% ($n=87$) perceived little risk of using cannabis once or twice (Figure 1).

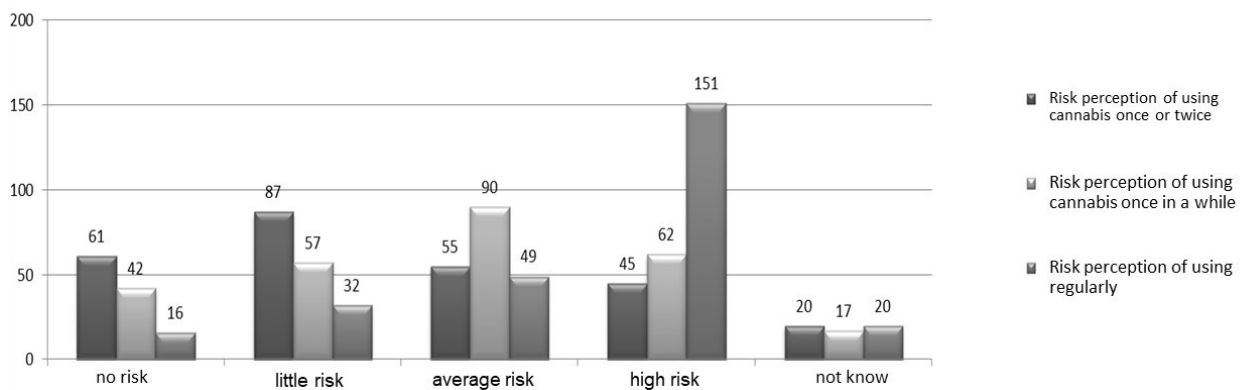


Figure 1 – Risk perception of using cannabis according to frequency of use, Brasilia, July 2015

It was found that 56.9% of women believe that the risks are fully known or known, and 24.7% believe that the risks are little known. Men believe that risks are well known or known (44.6%), while 21.3% believe that risks are little known. A small percentage of both men and women believe that the risks are totally or partially unknown.

Regarding the perception of the risks for themselves and others associated with the use of cannabis, it was observed that more than half considered that smoking cannabis is a risk behavior both for themselves and others, being this perception greater among women. The uncertainty about individual risk (22.3%) and the risk for others (19.1%) was higher among men (see Table 1).

Table 1 – Perception of individual and other risks by men and women associated with cannabis use, Brasilia – July 2015

	Individual risk			Risk for others		
	Total n	Men %	Women %	Total N	Men %	Women %
Definitely at risk	149	18.1	29.9	26.9	21.3	29.9
At risk	45	24.5	31.6	34.3	24.5	39.7
Little at risk	12	11.7	15.5	12.7	16.0	10.9
Uncertain	12	22.3	12.6	14.2	19.1	11.5
Little not at risk	33	4.3	2.3	3.7	7.4	1.7
Not at risk	13	11.7	6.3	6.0	8.5	4.6
Definitely not at risk	4	7.4	1.7	2.2	3.2	1.7

On the other hand, 72.4% (n=149) of the participants stated they are not influenced by their friends to smoke cannabis. Women (75.3%) reported less influence than men (67%). In addition, they were less likely (2.9%) to consider themselves influenced by their friends, whereas, among men, this trend was higher (8.5%).

It was observed that, of the total sample, 34.7% do not consider that teenagers who smoke cannabis were admired by their peers and that trend is very similar for both sexes. However, it is noteworthy that both men and women are not sure that this is the case (29.5%).

Regarding the possible risks and benefits associated with cannabis use, slightly more than half of the total sample (58.6%) considered the risk to be greater than the benefit, and this trend is higher among women (65%) than among men (46.8%). The perception that the benefits are greater than the risks was observed in 20.5% of the sample (Table 2)

Table 2 – Percentage of men and women who answered the question about the possible pleasures or other benefits associated with the use of cannabis, Brasilia, July 2015

	Total (n)	Men (%)	Women (%)
Much greater risk than benefits	86	27.7	34.5
Greater risk than benefits	47	11.7	20.7
Slightly greater risk than benefits	24	7.4	9.8
Uncertain	56	26.6	17.8
Slightly greater benefits than risk	20	8.5	6.9
Greater benefits than risk	21	10.6	6.3
Much greater benefits than risk	14	7.4	4.0

On the other hand, most students perceive that use of cannabis does not facilitate coping with emotional struggles (56.9%). Of the sample, 31.1% believe that cannabis helps to some extent. Men (17.2%) are more uncertain than women (9.2%) (Table 3).

Table 3 – Percentage of men and women who answered the question about the benefits of cannabis in coping with emotional problems, and improving physical wellness and academic performance, Brasilia, July 2015

	Total (%)	Men (%)	Women (%)
Benefits of cannabis in coping with emotional problems			
Definitely does not help	28.5	23.7	31.0
Does not help	23.2	15.1	27.6
Almost does not help	5.2	7.5	4.0
Uncertain	12.0	17.2	9.2
Helps a little	15.7	16.1	15.5
Helps	12.0	15.1	10.3
Definitely helps	3.4	5.4	2.3
Benefits of cannabis in improving physical wellness			
Definitely does not help	34.0	30.9	31.0
Does not help	26.9	21.3	27.6
Almost does not help	3.7	3.2	4.0
Uncertain	17.9	24.5	9.2
Helps a little	9.0	11.7	15.5
Helps	4.5	4.3	10.3
Definitely helps	4.1	4.3	2.3
Benefits of cannabis in academic performance			
Definitely does not help	56.2	45.2	62.1
Does not help	21.7	25.8	19.5
Almost does not help	3.4	3.2	3.4
Uncertain	10.1	15.1	7.5
Helps a little	4.9	5.4	4.6
Helps	1.9	1.1	2.3
Definitely helps	1.9	4.3	0.6

Finally, participants believe that use of cannabis is not associated with improved physical (64.6%) or academic (81.3%) wellness. Women perceive the most that cannabis definitely does not improve academic performance (62.1% vs. 45.2% of men) and are also less uncertain about it (7.5% vs. 15.1% of men) (see Table 3).

A significant association was found between perceived risk and frequency of use for occasional, casual, and frequent use regarding having used cannabis sometime in life, in the last year, and in the last month. Regarding the prevalence in the last month, there was an association between having used cannabis in the last 30 days and a low perception of risk for occasional consumption ($c^2_{(3)}=32.745$, $p<0.000$), casual ($c^2_{(3)}=63.448$, $p<0.000$) and frequent ($c^2_{(3)}=40.798$, $p<0.000$). In all cases, there was a relationship between use of cannabis and a lower risk perception.

The intension to use and beliefs about the medical use of cannabis in the context of regulatory changes were evaluated. The results showed that 68.7% of the participants did not intend to use cannabis (at age 18) in the context of regulatory changes (71.8% of women and 62.8% of men), and even if it were legalized and regulated, 25.4% would try or would continue to use, while 5.6% do not know (Table 4).

Table 4 – Percentage of men and women who answered the question about use according to age and legalization of cannabis, Brasilia, July 2015

	Total %	Men %	Women %
Would not use, even if it were legally available	68.7	62.8	71.8
Would try	11.6	11.7	11.5
Would use it as much as ever	8.2	9.6	7.5
Would use more often than now	5.6	10.6	2.9
Would use less than now	0.4	0.0	0.6
Does not know	5.6	5.3	5.7

Regarding the considerations on use of cannabis, 53.4% were in favor of its use for medicinal purposes (39.4% of men and 61% of women), and 25.6% felt that cannabis should be used for both medicinal and recreational purposes (38.3% of men and 18.6% of women). The legalization of cannabis for recreational purposes was indicated by 1.9%, being more accepted among men, which percentage was 4.3% for men vs. 0.6% for women. Of the total sample, 15% thought that it should not be used at all (13.8% of men and 15.7% of women). The percentage of those who did not have an opinion was very similar: 4.3% of men and 4.1% of women (Table 5).

Table 5 – Percentage of men and women who answered the question if they are in favor of medical and recreational use of cannabis, Brasilia, July 2015

	Total (%)	Men (%)	Women (%)
Definitely should not be used	15.0	13.8	15.7
Should be able to be used for medicinal purposes	53.4	39.4	61.0
Should be able to be used for recreational purposes	1.9	4.3	0.6
Should be able to be used for both medicinal and recreational purposes	25.6	38.3	18.6
Does not know	4.1	4.3	4.1

In order to analyze the association between intention to use and perceived risk according to frequency, the results were grouped into two groups: those who said they did not use cannabis (68.7%) and those who stated an intention to try it or continue using (25.8%). Those who answered they did not know (5.6%) were excluded from the analysis.

The results showed a significant association between risk perception according to frequency of use and intention to use cannabis in the context of regulatory changes, both for experimental use ($\chi^2_{(3)}=50.925, p=0.000$), for occasional use ($\chi^2_{(3)}=63.963, p=0.000$) and for frequent use ($\chi^2_{(3)}=64.200, p=0.000$). In all cases a relation between lower risk perception and intention to use was observed.

DISCUSSION

The results of this study confirm the higher prevalence of men than women who use cannabis. However, it was found a higher proportion of cannabis use in this study in comparison with others, which seems to confirm the trend of increased use of cannabis among students in Brasilia over the last few years, as shown by the surveys.⁹ This data requires a careful look at prevention strategies in schools. In addition, the vast majority of interviewees report having close friends who use the drug (although they say they are not influenced by friends).

Most adolescents seem to know the risks associated with abusive use of cannabis, but most of them do not perceive a great risk in the occasional use. Both sexes, but especially women, consider cannabis use as risky behavior, both for themselves and for others. In addition, more risks were pointed out than benefits of its use, although there is a favorable position to use cannabis for medicinal purposes. As expected, adolescents who do not see any risk in cannabis use were those who reported using the drug.

One fact that draws attention for its gravity, although not statistically significant, was the fact that there was in the sample a participant who started using the drug at age 9. It is known that the prognosis of those who use drugs early may be associated with a greater risk of psychic, physical, and social impairment in human development.¹⁻⁴

Although this study does not provide consistent claims about future behavior related to the use of cannabis, data on intention to use in the hypothetical case of regulatory change show that the scenario would not change much as the proportion of those who said that would use it is very similar to the one that has already used the drug, that is, most do not intend to use cannabis if it is legalized.

The inclusion of the topic of drug addiction in the continuing education of educators is justified by the pattern of drug use among children and adolescents portrayed by research and studies in the area. Researches shows that it is in the passage from childhood to adolescence that the use of drugs begins, whether as mere experimentation, occasional consumption, abusive or improper use.^{23,24} Different studies confirm that the age of the first use is more precocious⁵, which considerably increases the risks of drug abuse and the occurrence of problems or situations of vulnerability, such as: health damage, relationship and violence problems, decreased academic performance, and increased school dropout. Epidemiological studies on the use of drugs by the Brazilian population confirm the importance of actions to promote integral health within the school community.⁹⁻¹⁴

The legacy of the lost drug war has left us with important lessons that can point us to the possible regulatory models we want. Different drugs with different damages in different settings may need different approaches. Any change in this context should be supported by investments in evidence-based education, counseling, and treatment services to stop drug use and increase safety among users. Health should be at the center of this debate and, therefore, health professionals must ensure the preservation of the rational and human dimension in health policies, to the prejudice of the populist rhetoric of criminalization of users.³⁰

One of the limitations on this study is that its results do not allow for generalization, since a convenience sample was used. On the other hand, it is not possible to attribute a causal relationship between the variables because it is a cross-sectional study. Moreover, considering that drug use during adolescence is a complex subject that involves several risks and protection factors in several domains, this study did not cover the complexity of the phenomenon and it is limited to the study of the perception of risks and benefits. Finally, given the hypothetical nature of the matter of intention to use in the context of regulatory changes, the results are not useful for making consistent predictions. Despite these limitations, the findings are important for the debate on public health prevention and promotion policies.

CONCLUSION

Study participants appear to know about the risks associated with use of cannabis, although many consider the information to be limited. In general, participants feel that the risks of using cannabis outweigh the benefits, although many believe that cannabis helps to some extent. The intention to use cannabis (when they turn 18) in a legalized setting was not worrisome, and there was a favorable position regarding the medical use of cannabis.

Drug abuse losses lie in its potential to lead to other risk behaviors, such as violence, drug driving, and risky sexual behavior, which can further aggravate the youth's vulnerability. By considering how vulnerable they are to the different forms of violence and abuse of licit and illicit drugs, and when we consider the high rate of mortality from external causes for this population, the need to prioritize comprehensive health care for adolescents and young people is identified. It is recommended interventions aimed at preventing the use of cannabis, since the occurrences pointed to important values. However, the strategies to approach the theme should be to address the issue in a realistic way, as it is already known that prevention strategies with an exclusive focus on the harmful effects of drugs are not effective, and an approach focused on the integral promotion of health is more likely to find positive results.

In any case, the changes we see in the western world scenario have converged toward a greater tolerance of cannabis use. On its turn, students in Brasilia have shown a continuous increase in the use of cannabis, and educators seem to ask experts for help in how to proceed in this context. Undoubtedly, prevention measures at all levels (primary, secondary, and tertiary or universal, selective and indicated), as well as their monitoring and evaluation, need to be systematically adopted in schools in Brazil.

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NOTES

CONTRIBUTION OF AUTHORITY

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Data analysis and interpretation: Conceição MIG, Ventura CA.

Discussion of the results: Conceição MIG, Ventura CA.

Writing and / or critical review of content: Conceição MIG, Ventura CA.

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ETHICS COMMITTEE IN RESEARCH

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CONFLICT OF INTEREST

There is no conflict of interest.

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