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PERCEPTION OF DAMAGE AND BENEFITS ASSOCIATED TO THE USE OF MARIJUANA IN ADOLESCENTS, VIÑA DEL MAR, CHILE

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ABSTRACT

Objective: analyze the perception of harm and benefits, and its association with the use of marijuana in high school students, as well as the intention to use it in a context of regulatory changes.

Method: a quantitative, exploratory, cross-sectional study was designed, applying a self-administered questionnaire to 268 high school students.

Results: The results showed that the declared consumption in the sample is higher than that obtained in previous studies in Chile, which had already warned of the increase in prevalence, compared to previous measurements. There is a low perception of risk associated with consumption and insecurity regarding benefits. In the framework of regulatory changes, no change was observed in the intention of use. Adolescent consumers would continue to do so as before, while those who have not consumed it, 25% would try it, and 60% would still not use it.

Conclusions: The current discussion in the country has focused on the effect that the change in the law would have, by itself, on adolescent consumption, however, it is relevant to direct efforts towards the perceptions of risk and benefits that they have, in order to stop the observed increasing in consumption in the country, in the latest studies.

DESCRIPTORS: Adolescent. To smoke. Cannabis. Adolescent behavior. Impacts on health. Perception.

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PERCEPCIÓN DE DAÑO Y BENEFICIOS ASOCIADOS AL USO DE MARIHUANA EN ADOLESCENTES, VIÑA DEL MAR, CHILE

RESUMEN

Objetivo: analizar la percepción de daño y beneficios, y su asociación con el uso de marihuana en estudiantes secundarios, así como la intención de uso en un contexto de cambios regulatorios.

Método: se diseñó un estudio cuantitativo, exploratorio, transversal, aplicando un cuestionario autoadministrado a 268 estudiantes de nivel secundario.

Resultados: Los resultados mostraron que el consumo declarado en la muestra es superior a lo obtenido en estudios previos de Chile, que ya habían alertado del aumento de la prevalencia, respecto a mediciones anteriores. Existe una baja percepción de riesgo asociado al consumo e inseguridad respecto a los beneficios. En el marco de cambios regulatorios, no se observó cambio en la intención de uso. Adolescentes consumidores lo seguirían haciendo tal como hasta ahora, mientras que aquellos que no la han consumido, un 25% la probaría, y el 60% seguiría sin utilizarla.

Conclusiones: La discusión actual en el país se ha focalizado en el efecto que el cambio en la ley tendría, por si misma, en el consumo adolescente, sin embargo, es relevante dirigir esfuerzos hacia las percepciones de riesgo y beneficios que ellos tienen, con el fin de detener el aumento en el consumo que se ha observado en el país, en los últimos estudios.

DESCRIPTORES: Adolescente. Fumar. Cannabis. Conducta del adolescente. Impactos en la salud. Percepción.

PERCEPÇÃO DE DANOS E BENEFÍCIOS ASSOCIADOS AO USO DE MACONHA EM ADOLESCENTES, VIÑA DEL MAR, CHILE

RESUMO

Objetivo: analisar a percepção de danos e benefícios, e sua associação com o uso de maconha em estudantes do ensino médio, bem como a intenção de uso em um contexto de mudanças regulatórias.

Método: realizou-se pesquisa quantitativa, exploratória e transversal, aplicando-se questionário autoadministrado a 268 estudantes do ensino médio.

Resultados: os resultados mostraram que o consumo declarado na pesquisa é superior ao obtido em estudos prévios no Chile, que tinham alertado sobre o aumento da prevalência, em relação às medições anteriores. Há uma baixa percepção de risco associada ao consumo e à insegurança em relação aos benefícios. No âmbito das mudanças regulatórias, nenhuma mudança na intenção de uso foi observada. Consumidores adolescentes continuariam a fazê-lo como antes, enquanto aqueles que não o consumiram, 25% tentariam, e 60% ainda não o usariam.

Conclusões: A discussão atual no país enfocou-se no efeito que a mudança da lei teria, por si só, sobre o uso feito pelos adolescentes. No entanto, é relevante direcionar esforços para as percepções de risco e benefícios que eles têm, a fim de impedir o aumento do consumo que tem sido observado no país nos últimos estudos.

DESCRIPTORIOS: Adolescente. Fumar. Cannabis. Comportamento do adolescente. Impactos na saúde. Percepção.

INTRODUCTION

The use of marijuana and its effects, especially in the adolescent population has been the subject of analysis in recent years. It has been established that there are negative short- and long-term effects of marijuana use on adolescent health, and that long-term side effects appear to be a consequence of excessive consumption and include the risk of addiction and impaired brain development.¹

According to the United Nations, marijuana is the most widely illicit substance used in the world, with a sustained increase in all the regions studied, there being concern about its use at an early age and its relationship with the escalation of consumption to other substances, in addition to the potential effects on physical and mental health.²⁻⁵

In most Latin American countries, the use of marijuana in students has increased, with an age of onset of consumption of this substance between 12-15 years. It has been observed that the prevalence of consumption, in this group, is inversely proportional to the perception of risk.²⁻³ Several studies have shown that the onset of drug use frequently occurs during the passage from childhood to adolescence, either experimentally, occasional use, abuse or misuse.⁴⁻⁵

Additionally, a discussion environment has been created in order to modify local regulations and policies related to marijuana in recreational or medicinal use, in different countries, especially in Latin America and the Caribbean. This context opens new questions about its use in adolescents, given that in the current scenario, consumption in this group has been increasing, so it is raised that the legalization or decriminalization of its use could mean a consumption increasing in this population.

The United Nations Office on Drugs and Crime (UNODC) states that, for adolescents and young adults, a more permissive regulation in relation to marijuana use correlates with a decrease in perceived risk, and a lower perception of risk is a predictor for an increase in usage.⁶

Adolescents, due to their developmental characteristics, tend to have a challenging behavior. During this period, development-specific changes can influence how adolescents perceive risks, act, and see the future and what they think of the world around them. In this stage, different clinical manifestations can appear, such as eating disorders or depressive symptoms, which, added to the impact of adolescent changes, can increase the risk of substance use.⁷

Then, the use of marijuana in adolescents is influenced by a significant number of variables, including, among others, the characteristics of adolescence, the influence of peers, availability of the substance, perceptions of risk and benefits, and the impact of the media message.⁸

In Chile, the consumption of marijuana in adolescents has been objectified in the National Study of Drug Use in Schoolchildren, carried out every two years since 1995. In the eleventh National Study on School Population, in 2015, it was shown that 34.2% of students between 13 and 17 years old reported having smoked marijuana at least once in the last year, with a significant increase since the study of the year 2013, when it reached 30.6%. The 2013's study had already warned a significant increase in consumption, from 19.5% to 30.6%, there being a continuous increase in consumption in students of all school levels; while in 2009, 6.5% of students in the eighth grade (13 years old) declared consumption, in 2015 this increased to 18.9%.⁹⁻¹⁰ The risk perception of frequent marijuana use has remained unchanged since 2013, when it showed a decrease of 21.1% compared to 48% in 2011; in addition, there was a significant increase in the proportion of students who declare that it is easy to obtain marijuana, which includes 43.7% who claim to be able to obtain it within the same day.¹⁰

In the country, the personal consumption of marijuana is considered legal, while cultivation, production, purchase and commercialization are illegal. In 2013, a project that modifies the drug law was suggested, in order to decriminalize the marijuana self-cultivation for medicinal purposes, which is currently in process.¹¹⁻¹² This situation has generated a wide debate, since in international studies

the pliability of the rule, allowing consumption for medicinal purposes, would result in an increase in illegal consumption.¹³⁻¹⁴

In this context, it is relevant to analyze the perception of harm and benefits of marijuana and its association with the use of marijuana in high school students, aged between 15 and 17 years old, as well as with the intention to use it in a context of regulatory changes.

METHOD

A quantitative, exploratory, cross-sectional study was designed using the Social Survey or Survey technique.

The local study is part of a multicenter investigation, carried out in ten cities in nine Latin American and Caribbean countries. The sample size was calculated considering a required absolute accuracy of 5%. Thus, each city was represented with a sample size of $n = 268$ adolescents.

Subsequently, the authorization was requested from the local Education Directorate to access educational establishments of state affiliation. Once the authorization was obtained, a simple random selection was made among all the establishments with students in the required age range, using the random function of Excel, to select one of them.

Finally, among the educational establishments, contact was made with the center selected by randomization, which is, public, mixed and with students ranging from 7th grade (12 years) to 4th grade of high school (18 years), obtaining the local authorization and collaboration to obtain the consent of the legal representatives of the students. Adolescents aged between 15 and 17 years old who were formally enrolled, who had the ability to read and write in Spanish, without needing any help and in which they could obtain informed consent and consent from their parents or legal representatives, were included in the study. At this level, a systematic sampling was conducted to obtain the number of students in each category, considering the total number of students in the age and gender range, according to the report of the local authority of the establishment. With this information, a proportional stratified sampling calculation was carried out by gender and age, selecting, afterwards randomly the students of the first to third years of high school education who participated in the study.

Each student signed an assent document for the participation, which is anonymous, voluntary and confidential.

The instrument used consisted of a self-administered questionnaire, with 23 items obtained from two different scales: Seven from the Inter-American System of Uniform Data of CICAD (SIDUC)¹⁵ for high school students and five of Monitoring de Future (MTF).¹⁶ The other eleven items correspond to the Benthin Risk Perception questionnaire.¹⁷

The SIDUC is a standardized method to obtain data on the consumption of psychoactive substances, being widely used in the Americas and the Caribbean.¹⁵ The items used are: Demographic data (Gender, age, grade) and marijuana consumption data (prevalence of life, prevalence-year, prevalence last 30 days), frequency of consumption and age of onset. Monitoring the Future is an instrument designed by the National Institute on Drug Abuse in the United States to explore behavioral changes and lifestyle orientations for American youth.¹⁶ Exploration items for general perception of the damage related to the frequent and experimental use of marijuana were included, as well as two questions about intention to use against the change of the law and the belief about marijuana medical use.

Finally, the Benthin scale assesses the perception of risk and benefits of the psychoactive substances consumption, with a Likert scale of seven points.¹⁷ Three items were added to the scale that assess perception of benefits in emotional, health and academic performance domains and a modification was made to evaluate only the perceptions regarding the harm and benefits of marijuana use and not of all psychoactive substances.

The questionnaire used consisted of a group of scales of the three instruments described. The questionnaire was translated into Spanish and Portuguese, in addition to the original English language, to be applied by the ten members of the multicenter study. An experimental test was conducted to ensure that participants understood the questions and to identify possible problems before starting data collection. In this way, a Cronbach's alpha of 0.673 was obtained, determining that the reliability of the test is low (expected >0.7), being necessary to revise the instrument to improve the reliability of the test in future investigations.

The data were analyzed using descriptive and inferential statistics. Descriptive statistics were used mainly for demographic data and prevalence of marijuana use. Inferential statistics were used to establish relationships and differences between variables related to perceptions of harm and benefits.

RESULTS

The study had the participation of 268 students of 1st, 2nd and 3rd high school grade of an educational establishment belonging to the Viña del Mar commune. A 47.8% of the participants were men and 52.2% were women, with an average age of 16 years (SD = .797) and a range of 15 to 17 years old. From the total participants, 22.8% belonged to the 1st grade, 42.9% to 2nd grade and 34.3% to 3rd grade.

Consumption prevalence

52% of the participants admitted to having used marijuana at some time in their lives. Of men, 44.5% and of women, 59%. The difference in consumption between men and women is statistically significant ($p < 0.05$).

In relation to the prevalence of consumption in the last year, 47.8% of consumption was obtained. In men, consumption was 39.8% and in women, 55%. The observed difference is significant ($p < 0.05$). The consumption of marijuana in the last month is 32.8%. 29.7% of men and 35.7% of women, although it is higher in women, the observed difference is not significant.

Regarding the age of onset, it was found that, on average, participants used marijuana for the first time at 14.25 years (SD = 1.3), with a range of 11 to 17 years. In relation to the distribution of participants that ensures that at least some of their friends have used marijuana, it is observed that 40% of students indicate that some of their friends use marijuana. Only 10.8% say that none of their friends consume, while another 9.7% say that all their friends consume.

Table 1 – Distribution of the Lifetime Prevalence of marijuana use according to Number of friends who use marijuana . Viña del Mar, Chile, 2015. (n=268)

Have you ever used marijuana?	How many of your close friends consume marijuana?					Total
	None of my friends	Some of my friends	Almost half of my friends	All my friends	I do not know	
No	21.1(27)	43.0(55)	15.6(20)	0.8(1)	19.5(25)	100(128)
Yes	1.4(2)	37.1(52)	33.6(47)	17.9(25)	10.0(14)	100(140)

Table 1 shows that those who claim to have used marijuana at some time report that almost half of their friends or all of their friends consume it, while only a percentage lower than 1.5% report that they do not have friends who consume the substance. Conversely, among those who have not consumed, 21% say they do not have friends who consume and only 0.8% acknowledge that all their friends consume.

Risk perception

The perception of general risk was assessed in relation to the frequency of use. In the occasional consumption situation, this is once or twice, half (49.6%) of the respondents perceive that this pattern of consumption has no risk, while 3.7% indicate that consuming it once or twice has a lot of risk. At the other extreme, in the case of regular consumption, 25.4% indicate the risk is high, while 12.3% indicate that regular consumption does not have any risk.

Perception of harm and benefits

To measure the perception of damages and benefits, the Benthin Risk Perception questionnaire was included, with the objective of analyzing the probable damages and benefits of marijuana consumption perceived by adolescents (Table 2).

Table 2 – Distribution of Perception of knowledge of risks, according to gender . Viña del Mar, Chile, 2015. (n=268)

Are the risks known to people of your age?	Gender (%)		Total (%)
	Men	Women	
Risks are definitely not known	7.0	4.3	5.6
Unknown risks	12.5	12.1	12.3
Slightly not known	7.8	19.3	13.8
I'm not sure	25.8	22.9	24.3
Slightly known	21.1	20.7	20.9
Known risks	15.6	12.1	13.8
Risks are definitely known	10.2	8.6	9.3

Table 2 shows that 24.3% of participants feel insecure about knowing the risks associated with marijuana use. 23% state that the associated risks are known and well known. There is no substantial difference between what was declared by men and women in the group. This data shows that, at this age, there is no complete knowledge of the consuming risks to make informed decisions.

Table 3 – Distribution of Perception on the influence of friends for consumption, according to gender. Viña del Mar, Chile, 2015. (n= 268)

To what extent are you influenced by your friends to smoke marijuana?	Gender (%)		Total (%)
	Men	Women	
Definitely no influence	34.4	37.9	36.2
No influence	23.4	24.3	23.9
Slightly uninfluenced	12.5	5.0	8.6
Unsure	14.1	14.3	14.2
Slightly influenced	7.8	12.1	10.1
Influenced	2.3	3.6	3.0
Definitely influenced	5.5	2.9	4.1

Table 3 shows the group's perception of the influence of friends on consumption. 60.1% of the total indicates not feeling influenced to use marijuana, without any difference by gender. In another aspect, 58.3% state that smoking marijuana can be avoided, with a higher proportion of women (66.3%) than men (52.4%) who perceive that consumption can be avoided.

Perception of benefits

From the analysis of the items of perception of benefits, it is observed that adolescents do not feel sure about them. 37% (n = 100/268) are not sure that smoking marijuana causes admiration in their friends, 24.6% (n = 66/268) is not sure that consumption helps them cope with their emotional problems, 31.7% (n = 85/268) is not sure that their physical well-being improves and 32.8% (n = 88/268) is not sure that they will improve their academic results either.

The same situation occurs when is inquire if the risks are greater than the benefits. 38.8% (n = 104/268) state that they feel unsure about this statement, while the remaining 26.5% (n = 71/268) state that the risks outweigh the benefits.

In the selected items, there are no important differences between men and women.

Intention of use

Given the possible decriminalization of self-cultivation in Chile, it is relevant to ask what would happen in a hypothetical scenario of marijuana availability.

Table 4 shows the intention of use in the study group. 33.6% indicated that, although the law would allowed it, they would not use it, being similar the groups of men and women, while 20.5% would try it. Only 10% say they would use it more frequently, in a decriminalization scenario.

Table 4 – Distribution of intention to use facing the decriminalization of marijuana use, according to gender. Viña del Mar, Chile, 2015. (n= 268)

If you were 18 years old and marijuana were legal What would you most like to do?	Gender (%)		Total (%)
	Men	Women	
I would not use it, even if it were legally available	38.3	29.3	33.6
I would try it	21.1	20.0	20.5
I would use it as frequently as I do today	14.8	19.3	17.2
I would use it more frequently	11.7	8.6	10.1
I would use it less	2.3	4.3	3.4
I do not know	11.7	18.6	15.3

Table 5 – Distribution of intention to use before the decriminalization of marijuana use, according to Prevalence of life of consumption. Viña del Mar, Chile, 2015. (n=268)

If you were 18 years old and marijuana was legal, which of the following options do you think you would do?	Have you ever smoked marijuana	
	No (%)	Yes (%)
I would not use it, even if it were legally available	59.4	10.0
I would try it	25.0	16.4
I would use it as frequently as I do today	1.6	31.4
I would use it more frequently	0.8	18.6
I would use it less	0.8	5.7
I do not know	12.5	17.9

Table 5 shows that, of those who have not used marijuana, 59.4% would remain without consuming it, even when it was available. However, those who already consume, 18.6% would consume more than today.

Finally, the survey explored the students' beliefs regarding the usefulness of marijuana for medicinal purposes, since this is the focus of the current discussion in the country. In the results, it

is observed that 48.5% believe that marijuana can be used for medical and recreational purposes. Only 9.7% believe that it should not be used in any case.

Association between risk perception and marijuana consumption

Table 6 shows the association between risk perception in occasional and regular consumption in students who have ever used marijuana. The same situation was observed in students with prevalence of consumption in the last twelve months. In those who have used marijuana in the last 30 days, there was a low perception of risk in sporadic, occasional and frequent consumption. Therefore, those who declare to consume in the last month consider that in all situations exposed there is a risk to health.

Table 6 – Association between risk perception and use of marijuana. Viña del Mar, Chile, 2015. (n= 268)

	Some time	Last 12 months	Last month
Risk if used once or twice	3.37	6.36	8.75*
Casual consumption risk	9.45*	9.19*	8.17*
Risk in regular consumption	18.81†	17.01†	18.99†

*p<0.05; †p<0.001

DISCUSSION

The objective of the study was to analyze the perceptions of harm and benefits of marijuana consumption in a population of high school students belonging to the public education system in an urban area of Chile. Another objective was related to the intention to use in the hypothetical context of regulatory changes, which are being discussed in the country, with a massive presence of promoters and detractors in social media.

The use of marijuana in secondary students has been reported with an upward trend in international studies. The UNODC 2015 report states that marijuana is the most widely used drug and that consumption in high school students in the United States is reported to be upward. Likewise, it is pointed out that the increase in consumption is important in Latin America, especially in Chile and Colombia.¹²

The results of this study showed that the declared consumption in the sample is higher than the national average, according to what was obtained in the Eleventh National Study of Drugs in the School Population, which had already warned about the increase in the prevalence of life, last year and last month. This prevalence would be the year 2015 of 43.7%, 34.2% and 20.1% respectively.¹⁰ This difference should be analyzed with caution, considering the representativeness of the sample obtained nationally. Following Castillo-Carniglia, it is argued that perhaps we are not witnessing the actual increase of consumption, but rather responses more honest from the respondents, in a context in which the acceptance of marijuana use is increasing.¹⁸ It should be remembered that the measurement of prevalence is based on the self-report of adolescents.

In general, women present a higher prevalence of consumption in the last month, year and sometime in life, and the differences are statistically significant in the last two cases. This finding is confronted with international evidence where, for example, in the United States, in general men have the highest prevalence of consumption, even though the increase in use has occurred in both sexes in recent years.^{19–20} On the other hand, it has been seen that adolescent women have a higher prevalence of licit drug use such as alcohol and tobacco, while male adolescents consume illicit substances with a higher prevalence.²¹

In this sense, it seems important to reflect from a gender perspective on the conditions of primary and secondary socialization of Chilean men and women. Regarding this, some international studies have affirmed the importance of self-esteem in early adolescence, as a protective factor against the onset and maintenance of tobacco and cannabis use over time.^{19,22} In this way, it is observed that low levels of self-esteem in girls leads more often to depression, anxiety and eating disorders and predisposes to risk behaviors.²²⁻²³

In the Chilean case, the high prevalence of mental illnesses in children and adolescents has already been documented, with anxiety disorders being more prevalent in women.²⁴ Therefore, a possible explanation could be found in the fact that the formation of girls' personality is permeated by the cultural meanings associated with femininity in Chile, a society with a strong gender inequality. In this sense, because of the socialization of gender roles, it could be leading to the formation of girls and adolescents with self-esteem problems. This aspect should be investigated in future work.

Likewise, the definition of strategies to prevent the use of drugs should be considered from a gender perspective, as well as the definition of protocols and public policies addressed, with a two-pronged approach: The impact of drug use on women of childbearing age, due to the effects on the child; and the relationship that could exist in the vulnerability of women to gender-related harm (sexual victimization, gender violence).^{21,25}

One of the risk factors that are associated with consumption is the influence of friends. The study showed that those who have never used marijuana have less contact with consumer peers, while consumers recognize that most of their friends consume marijuana. Even so, 60% of them do not recognize the influence of peers on consumption, while 58% say that this can be avoided. Then, the impact of having peers or consumer friends seems not to be perceived as a relevant factor by students. This could be explained by the levels of acceptance that the consumption has among adolescents. In this sense, consumption has probably been naturalized in such a way that the possibility of peer influence on one's own consumption is not questioned.

Low perception of risk seems to be relevant in consumer behavior. Students in general have a low perception of risk compared to occasional consumption, although it is also observed that the risks and benefits are not well known. In addition, students mostly do not feel scared by the risks of consumption.

These factors have been described in models that try to explain marijuana use in adolescents,⁸⁻²⁶ representing challenges to the prevention. The programs that are implemented must consider the effect of the peers and the lack of risks' perception for the achievement of the objectives.

In the current context of changes in the internal regulation on self-cultivation for medicinal purposes, 33% of those interviewed indicated that they would not use marijuana even if they were 18 years old and if it was legally allowed. When analyzed according to the previous experience of consumption, it is observed that those who have not consumed, most (59%) would still not try it, while 25% would try it; while those who have tried it, would consume it equal or more than at present. Although other researchers have found an association between the legalization or decriminalization of consumption and an increase in the use of marijuana^{27,28} in these students, it seems that they do not change their intention to do so when they have not already done so. The above is binding with findings of longitudinal studies in Asian students who have low rates of marijuana use initiation in adolescence and do not consume in later stages.²⁹ The explanations given in this regard have identified the participation of the family with high levels of communication as a protective factor against the use of substances. In this sense, it is argued that cultures that favor collectivism, such as Asiatic, create close ties between members that favor an attitude of rejection towards the use of drugs.³⁰

In the case of the students investigated, the aforementioned background allows us to reflect on the importance of primary socialization in later social life. It seems that, when the trajectories have

been developed without consumption and with high levels of family communication, the decision is strongly internalized and, despite the tendencies of peer groups and the possibilities of allowing their use, non-consumers do not change the projection of their behavior. It is suggested in future investigations to investigate the characteristics of the socialization users and non-users of marijuana.

Finally, considering that the change in the law proposed in Chile specifically considers self-cultivation for medicinal purposes, it is important to note that 29% of students consider that marijuana should be used for medicinal purposes, while 48% believe that it should be possible to use for medicinal and recreational purposes. Only 9.7 % reject the use for any reason. This is interesting, since the students themselves understand that the risks and benefits are not well known. The role of the media and the dissemination that has been done through mass campaigns to support the decriminalization of cultivation and use for medical purposes could have an impact and should be analyzed in detail.¹⁸⁻³¹

The findings of the study at the local level pose diverse challenges. First, it must be determined if the magnitude of the consumption found is over estimated and look for the factors that influence the difference observed between men and women, such as, for example, self-esteem. The fact that most consumers report that half or more of their friends also consume is something that should be taken into consideration in any intervention, given that there is evidence of the impact that this factor has on consumption.^{26,32-33}

The low perception of risk has been widely documented in the use of marijuana in adolescence,^{2,7,34-41} so it is not surprising that the results of this study show that adolescents do not consider that consumption has associated risks, and even when they perceive them, they do not fear them. These elements must be carefully considered in the prevention programs addressed to this group, looking for other aspects that for them may be more relevant to avoid consumption.

The context of change in the regulatory framework in Chile does not have great relevance in the intention to use. The current non-consumers, in most part, would maintain the situation of non-consumption and, current consumers, most of them, would maintain the same level or increase it. The current discussion in the country has focused, in part, on the effect that the change in the law by itself would have on adolescent consumption. It is necessary to consider that the response of the participants is posed in a hypothetical scenario, while the analysis in countries where the situation is real has shown that the regulatory change has had an impact on the prevalence of consumption.^{28,42}

The limitations of the study, in terms of its design, should be taken into consideration so as not to generalize the results to the national school population. The reliability of the instrument shows limitations that must be considered in the analysis and projection of the results. Finally, it must be considered that it is premature to conclude the effect of the regulatory change on the intention to use, since the situation posed to adolescents is hypothetical.

CONCLUSION

The local results of a multicenter project are shown, in an urban area of Chile. The results show a higher prevalence of marijuana use in school-age adolescents, compared to that reported in national studies, being higher in women than in men. The age of onset of consumption is, on average, 14 years old, as is the national report. The adolescents in the study showed a low perception of risk. In addition, they are not sure about the benefits. It was observed that, although they do not recognize the influence of peers, there is a greater presence of friends who consume in those who have smoked marijuana sometime, than in those who have not.

In relation to the intention of use, the adolescents who have consumed would maintain the current consumption or increase it, while those who have not done so until now, the majority indicates that they would not consume it, although its use was allowed, which should be carefully considered, in the context of the hypothetical question.

The most relevant findings of the study represent a challenge for the prevention strategies of the country. The consumption of marijuana in adolescents has had a constant and significant increase in recent years, and the study shows two relevant elements: the influence of peers, and the low perception of risks, which seem to be more relevant than the change in legislation in process. Thus, it is important for the development of prevention and health promotion strategies to consider active interventions in school groups, from an early age, whenever it seems that attitudes towards consumption are being mainly formed in the process of primary socialization.

The current study leaves the door open to new projects that consider, for example, qualitative aspects of the experience of adolescent consumers, in order to better understand the elements that they can understand as associated risks and benefits obtained. It is also interesting to develop studies that consider educational interventions and promotion of healthy behaviors, given the proportion of students who indicate that the risks are not well known.

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NOTES

CONTRIBUTION OF AUTHORITY

Study design: Tapia MGM, Khenti A.

Data collect: Tapia MGM.

Data analysis and interpretation: Tapia MGM, Khenti A.

Discussion of the results: Tapia MGM, Khenti A.

Writing and / or critical review of content: Tapia MGM, Khenti A.

Review and final approval of the final version: Tapia MGM.

ETHICS COMMITTEE IN RESEARCH

The multicenter project was approved by the CAMH Research Ethics Board. At local level, the approval of the Scientific Ethics Committee of the Faculty of Nursing of the Andrés Bello University was requested, with the registration L1/CECENF/79-2014. The entire research protocol followed international standards for research with human beings.

CONFLICT OF INTEREST

There is no conflict of interest.

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