Consumption of psychoactive substances, mental health and sexual behaviors as risk factors in the health of Colombian children and adolescents

Consumo de sustancias psicoactivas, salud mental y comportamientos sexuales como factores de riesgo en la salud de niños y adolescentes colombianos

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SUMMARY

This research aims to provide precise data on risk behaviors and protective factors for the health of secondary and high school students at a Colombian educational institution. The study has a quantitative approach with a descriptive scope, a convenience sampling was carried out that took as a sample of 656 students who received authorization from their parents and agreed to answer the voluntary, anonymous, and confidential survey. The 10 modules of the Global School Health Survey (GSHS) were applied, and this article presents the results regarding the modules of tobacco use, drug use, sexual behaviors, and mental health. The results show that the consumption of psychoactive substances occurs to a greater extent in

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men, that adolescents start a sexual life at an early age, and that the percentage of women who have seriously considered the possibility of suicide is higher than in men. It concludes with the need to implement support plans that reduce psychosocial risk factors in students. These plans should link various government institutions, educational institutions, and students' families to promote safe behaviors in adolescents.

Keywords: World survey of school health, consumption of psychoactive substances, mental health, sexual behavior, adolescents.

RESUMEN

El propósito de esta investigación es aportar datos precisos sobre conductas de riesgo y factores protectores para la salud de los estudiantes de educación básica secundaria y media, de una institución educativa colombiana. El estudio tiene un enfoque cuantitativo con alcance descriptivo, se realizó

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un muestreo por conveniencia que tomó como muestra 656 estudiantes quienes recibieron autorización de sus padres y accedieron a responder la encuesta de carácter voluntario, anónimo y confidencial. Se aplicaron los 10 módulos de la encuesta mundial de salud escolar (GSHS), y en este artículo se presentan los resultados referentes a los módulos de consumo de tabaco, consumo de droga, comportamientos sexuales y salud mental. Los resultados muestran que el consumo de sustancias psicoactivas se presenta en mayor medida en los hombres, que los adolescentes inician una vida sexual a temprana edad y que el porcentaje de mujeres que han considerado seriamente la posibilidad de suicidarse es mayor que el de los hombres. Se concluye con la necesidad de implementar planes de apoyo que reduzcan los factores de riesgos psicosociales en los estudiantes. Estos planes deben vincular a diversas instituciones gubernamentales, así como a las instituciones educativas y a las familias de los estudiantes, para promover comportamientos seguros en los adolescentes.

Palabras clave: Encuesta mundial de salud escolar, consumo de sustancias psicoactivas, salud mental, comportamientos sexuales, adolescentes.

INTRODUCTION

Risk behaviors are those repeated actions outside certain limits, which can divert or compromise the normal psychosocial development of a person during childhood or adolescence, with harmful repercussions for current or future life (1). Among these behaviors are addictions to substances such as alcohol, tobacco, or drugs, bad eating habits, sexual behaviors, and suicidal ideation, to mention a few (2,3).

In many countries around the world, research is being carried out to characterize the behavior of adolescents concerning these behaviors so that the state and society, in general, have accurate information to propose policies and carry out actions that allow mitigating the risks that arise from them derive (4). An example of this is the work of Guerrero-Alcedo et al. (5), which characterizes the protected sexual behaviors of Venezuelan students and the result of Arasi and Ajuwon (6), who study the same subject but in Nigerian adolescents. The risk factors and protective factors associated with a healthy lifestyle, alcohol, and tobacco consumption have

been studied in countries such as Chile, Mexico, Brazil, Lebanon, and Vietnam, to mention a few (7-11).

Although several standardized instruments measure these risk factors, one of the most popular is the global school health survey due to its wide dissemination (12). One advantage of this instrument is that it allows for comparing the behavior of populations with very different cultural, social, economic, and political characteristics, in this case of the study on passive smoking in adolescents from 63 countries (13) or the survey of physical violence and sleep disorders in adolescents from 89 countries (14).

The Global School Health Survey (GSHS) was developed by the "World Health Organization (WHO)" and the "Centers for Disease Control and Prevention (CDC)" in collaboration with UNICEF, UNESCO, and UNAIDS to provide accurate data on risk behaviors and protective factors for student health (15). The GSHS consists of ten core modules that address the leading causes of morbidity and mortality among children and adults worldwide. The modules are alcohol consumption, dietary behaviors, drug use, hygiene, mental health, physical activity, protective factors, sexual behaviors, tobacco use, violence, and unintentional injuries (16).

The WHO recommends that countries apply at least six of the 10 core modules of the questionnaire and allows country-specific questions to be added on topics of importance or unique interest. The data obtained through the GSHS survey make it possible to describe the variation in health risk behaviors and protective factors according to demographic characteristics (16). These results help guide the planning and implementation of prevention and mitigation policies and programs focused on adolescents between the ages of 13 and 17 in educational institutions. This research addresses the modules on the consumption of psychoactive substances, sexual behaviors, and mental health.

The consumption of psychoactive substances is measured through three modules in the GSHS: alcoholism, drugs, and smoking. The Alcoholism Module measures age at first alcohol consumption, current alcohol consumption, amount of alcohol consumption, how students obtain the alcohol they drink, binge drinking

episodes, and problems associated with alcohol use. The second module analyzes drug use throughout life, the age of first drug use, current drug use, and the origin of the drugs used. The smoking module measures current cigarette smoking, age of smoking initiation, everyday use of other tobacco products, attempted cigarette cessation, exposure to secondhand smoke, tobacco use by their models at continued,

The module on sexual behaviors that contribute to HIV infection, other Sexually Transmitted Infections (STIs), and unwanted pregnancies of the GSHS survey seeks to measure: the prevalence of lifetime sexual relations, age of first sexual intercourse, number of sexual partners, use of condoms, and contraceptive use. According to World Health Organization (WHO) (17), studies show that adolescents who start sexual activity at an early age are likely to have sexual relations with partners who have been at risk of exposure to HIV, and they probably do not use condoms. Likewise, young people between 15 and 24 are the most threatened group since they represent between 40 % and 50 % of those newly infected with HIV (18).

The adolescent mental health module seeks to measure feelings of loneliness, loss of sleep due to worry, suicidal ideation and attempts, and the existence of close friends. These are some factors of significant incidence worldwide for the deterioration of youth mental health. The OMS in 2009 already pointed out that approximately 20 % of children and adolescents had a disabling mental illness. Recently, various authors have affirmed that anxiety disorders, depression, other mood disorders, and cognitive and behavioral disorders are among the most common mental health problems among adolescents (19-21).

The consumption of psychoactive substances (cigarettes, drugs, and alcohol) in adolescents is a matter of great concern for today's society. The WHO (17) points out that, worldwide, alcohol consumption causes 3% of deaths and stresses that the leading cause of death among young people between the ages of 15 and 25 is unintentional injuries, the vast majority related to alcohol consumption. Likewise, young people who drink, use tobacco and other drugs, and participate in risky sexual behaviors. These phenomena are associated with diseases such as depression,

anxiety, HIV, and STIs, which affect the youth population worldwide and, in some cases, drive adolescents to suicide.

Regarding alcohol consumption in young people, the "Pan American Health Organization (PAHO)" (22) points out that worldwide, more than a quarter of all young people between the ages of 15 and 19 are drinkers, which represents 155 million teenagers. In many countries in the Americas, Europe, and the Western Pacific, alcohol consumption begins before age 15, a situation that worsens from 20 to 24, when young people reach episodes of excessive alcohol consumption (4,6). Likewise, multilateral organizations, such as WHO, UNICEF, and PAHO, among others, show their concern that excessive alcohol consumption can harm the psychological development of adolescents and negatively influence the school environment.

Colombian adolescents are not alien to the phenomena described above. In Colombia, some research indicates that from the ages of 12 and 13, young people start using psychoactive substances (23). Likewise, an association is observed between the consumption of psychoactive substances and the presence of mental disorders in adolescence (24). Given the evidence, this research aims to provide accurate data on risk behaviors and protective factors for the health of secondary and high school students from a Colombian educational institution. In this case, the GSHS was used, and the following sections report the findings corresponding to the modules on the consumption of psychoactive substances, sexual behaviors, and mental health.

METHODS

This cross-sectional research of a quantitative type (25) presents the descriptive analysis of the data collected from a convenience sample of 656 students from a public school in Duitama - Colombia, who agreed to answer the GSHS survey voluntarily. Anonymous and confidential. Regarding the ethical considerations in the application of the GSHS survey, it is essential to mention that the process of signing the informed consent by the parents and permission by the secondary and high school students was carried

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out. The sample consists of 320 students (48.8 %) female and 336 (51.2 %) males, from sixth to eleventh grade. The respondents are between 10 and 19 years old, belonging to socioeconomic stratum 1 to 3.

The survey was applied in May 2022, and the analysis was carried out using the free SPSS software version. Some variables were dichotomized to determine the prevalence of the analyzed behavior (26). Likewise, the tables discriminate the total percentage by gender and by a degree of the conditions explored in the modules studied. In addition, the analysis of bivariate relationships with the Pearson coefficient was performed to determine the association between the variables of alcohol consumption, tobacco consumption, drug consumption, sexual relations, suicidal ideation, a suicide plan, and suicide attempt.

RESULTS

The results of the modules on alcohol consumption, tobacco consumption, drug consumption, sexual behaviors, and mental health of the GSHS survey applied to adolescents from the sixth to the eleventh grade of the educational institution are detailed below. Table 1 describes the percentages corresponding to the alcohol consumption module.

Table 1 shows that 55.9 % of the students' state that they have consumed alcohol at least once in their lives; of this percentage, 24.1 % correspond to the female gender and 31.9 % to the male gender, among the adolescents who have consumed at least one alcoholic beverage, 15.5 % state that they destroyed it after their 14th birthday. In comparison, 40.4 % have ingested it before that age. The highest percentage of adolescents who consume alcohol is in ninth grade, followed by tenth and eleventh-grade students. In the alcohol consumption module, the percentage of men is higher than women, the contrary of whether they have had problems with their family due to alcohol consumption, where the female gender presents a higher percentage in the sixth and seventh grades.

40.2 % of adolescents state that they have consumed alcohol in the last thirty days, of which 14.8 % correspond to sixth-grade students between the ages of 10 and 14. Among the students surveyed, 20.1 % stated that they had consumed alcohol until they got drunk (unsteady when walking, unable to speak correctly, and sometimes vomiting). In the latter case, the highest percentage is found in ninth-grade (29.5 %) and eleventh-grade (29.5 %) students, followed by sixth-grade (15.9 %) and tenth-grade students (14.4 %).

Regarding how adolescents acquire alcohol for their consumption, there is: firstly, they purchase it in a store or on the street (10.2 %); secondly, they obtain it at home (9.9 %), and 5.6 % say they get it with their friends. Regarding alcohol consumption in the last thirty days, 3.5 % of those surveyed state that they have drunk more than 10 days a month, and 14.6 % report having had three or more drinks of alcohol per day.

Table 2 shows the percentages of the different behaviors for the tobacco consumption module. 22.9 % of students have smoked a cigarette at least once, with consumption being higher in men than in women (14 % vs. 8.8 %). Of this percentage, 16.2 % tried smoking for the first time before the age of fourteen, while 6.7 % stated that they had smoked after reaching that age. 10.7 % of students report having tried to quit smoking in the last 12 months. 14.2 % of total respondents stated that they had smoked cigarettes during the previous 30 days, the percentage of men being higher than that of women, except for the seventh grade, where the percentage of women exceeds that of men (7.5 % vs. 6.5 %).

Regarding the consumption of another form of cigarette, such as the vape or electronic cigarette, it is evident that 13.9 % of the adolescents surveyed state that they have used it in the last 30 days, presenting the highest percentages in the ninth (31.9 %), eighth grades (16.5 %) and seventh (15.4 %). Likewise, 10.7 % of those surveyed stated that they had tried to quit smoking in the last 12 months. 41.2 % of students report that other people, such as their father, mother, or legal representative, smoked in their presence in the last 7 days, as follows: 10 % of students state that their father, 1.8 % % have exposed them by the

Table 1. Percentage of alcohol consumption: total, by gender, and degree.

| Explored condition | T | | Ì | ì | | | | | | | | | | | |
|---|------|------|------|-----|------|-----|------|-----|-------|------|-------|-----|------|---------|------|
| | | Ŧ | Z | 6th | ے ا | 7th | ч | 8th | h | 9th | h | 10 | 10th | 11h | |
| | | | | Ţ | M | Ŧ | M | ī | M | Ţ | M | Ή | Z | Ħ | M |
| Have you consumed alcohol at least once in your life? | 55.9 | 24.1 | 31.9 | 5.7 | 8.2 | 5.4 | 7.6 | 6.5 | 8.2 | 10.6 | 13.9 | 6.5 | 10.6 | 8.2 | 8.4 |
| Did you consume at least one alcoholic drink in the last 30 days? | 40.2 | 17.4 | 22.9 | 6.4 | 8.6 | 6.1 | 4.9 | 5.7 | 8.3 | 12.5 | 13.3 | 7.2 | 10.2 | 8. | 8.7 |
| Consumption of at least one alcoholic drink for the first time before age 14. | 40.4 | 16.8 | 23.6 | 7.9 | 11.3 | 6.4 | 10.6 | 8.7 | 8.6 | 7.9 | 10.6 | 5.3 | 7.9 | 5.3 | 8.3 |
| He has been drunk 1 or more times in his life. | 20,1 | 7.5 | 12.7 | 5.3 | 10.6 | 2.3 | 3.8 | 8.0 | 3.8 | 11.4 | 18.2 | 5.3 | 9.1 | 12.1 | 17.4 |
| You have had problems with family or friends, skipped school, or gotten into a fight at least once due to drinking alcohol. | 10.2 | 6.7 | 5.3 | 6.0 | 3.0 | 9.0 | 6.0 | 6.0 | 6.0 | 14.9 | 23.9 | 7.5 | 7.5 | 4 3. | 0.9 |

Source: The authors

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Table 2. Percentage of tobacco consumption: total, by gender, and by grade

| Explored condition | E | F | , | 6th. | | 71 | 7th. | 8th. | - | 9th. | h . | 10th. | h. | 11th. | h. |
|---|------|----------|------|----------|------|-----|------|------|------------|------|------------|----------|------|----------|------|
| | Ξ | - | Z | <u> </u> | M | Ā | Z | Ā | M | Ţ | X | <u> </u> | X | - | M |
| Students who have smoked at least one cigarette in their life | 22.9 | <u>%</u> | 14.0 | 6.4 | 8.7 | 5.3 | 6.0 | 6.0 | 6.7 | 14.0 | 16.7 | 6.0 | 11.3 | 3.3 | 12.0 |
| Students who tried a cigarette for the first time at 14 years. | 16.2 | 6.3 | 6.6 | 4.7 | 12.3 | 7.5 | 8.5 | 7.5 | 8.5 | 12.3 | 15.1 | 5.7 | 11.3 | 6.0 | 5.7 |
| Did you have smoked cigarettes in the last 14.2 30 days? | 9.4 | 9.6 | 4.2 | 10.8 | 7.5 | 6.5 | 2.2 | 6.5 | 11.8 | 19.4 | 2.2 | 11.8 | 3.2 | 12.9 | |
| Students who used other types of tobacco, such as vaping or electronic cigarettes, in the past 30 days. | 13.9 | 5.3 | 8.5 | 4. 4. | 7.7 | 8. | 9.9 | 7.7 | % . | 15.4 | 16.5 | Ξ | 11.0 | 1:1 | 11.0 |
| Attempted to quit smoking in the last 12 months (smokers) | 10.7 | 3.5 | 7.2 | 2.9 | 8.6 | 4.3 | 5.7 | 8.6 | 8.6 | 12.9 | 14.3 | 4. | 17.1 | 2.9 | 12.9 |
| Other people have smoked in their presence in the last 7 days. | 41.2 | 19.8 | 21.3 | 6.8 | 10.7 | 6.8 | 6.3 | 8.1 | 4.7 | 11.1 | 13.0 | 5.6 | 7.8 | 5.6 | 6.7 |

Source: The authors

mother and 2 % state both parents have smoked in their presence.

Table 3 presents the results of the drug use module in the adolescents surveyed. 9.5 % of them have consumed some drug (marihuana, bazuco, cocaine, LSD, or synthetic drugs) one or more times in their lives. Among those who have used drugs, the highest percentage of students is in ninth grade (37.1 %), followed by eleventh grade (16.1 %) and tenth grade (14.5 %), and the highest consumption is found in adolescents aged 13 to 18 years (67.7 %). Regarding the sixth, seventh, and eighth grades, the highest consumption is located in the seventh grade (13 %), adolescents from 11 to 14 years of age: in this grade, consumption occurs in the same proportion in both genders.

It observed that 5 % of the adolescents surveyed stated that they used some drug in the last 30 days, evidencing the highest consumption in ninth grade (42.5 %), followed by seventh grade (18.2 %) and sixth grade (15.1 %). Students who used drugs at least once stated that drug use occurred for the first time when their ages ranged from 7 to 9 years (1.2 %) and 10 to 13 years (4.4 %). And from 14 years onwards (3.8 %).

Table 4 presents the module's results on sexual behaviors that contribute to HIV infection, other STIs, and unwanted pregnancies. 20.9 % of the students who responded to the GSHS survey have had sexual intercourse at least once in their lives, the percentage being higher in men than in women (13 % vs. 7.9 %). 6.9 % of the students had sexual relations before the age of fourteen, a situation more frequent in men than in women (4.7 % vs. 2.2 %).

Among those who say they have had sexual relations, 23.9% report not having used a condom the last time they had sexual relations. In addition, 62.3% state that they have used some method of birth control (withdrawal, interrupted intercourse, the rhythm method or safe period, birth control pills). 11.7% of the students surveyed stated that they had had sexual relations with two or more people throughout their lives, the percentage being higher in men than in women (7.9% vs. 3.8%).

Table 5 presents the results of the adolescent mental health module. 80.3 % of the students

Table 3. Drug use: total, by gender, and by degree

| Explored condition | L | 뇬 | M | 6th | ي ا | 7th. | نه ا | | j. | 9th | | 10 | th. | 11th | نے ا |
|---|-----|-----|------------|-----|-----|----------|------|-----|-----|------|------|-----|-----|------|------|
| • | | | | F | M | <u>F</u> | M | Έ. | M | Ā | W E | Έ. | M | F M | M |
| Consumption of drugs such as Marijuana, bazuco, cocaine, LSD, or synthetic drugs one or more times in their life. Drug use in the last 30 days. | 9.5 | 4.3 | 5.5 4.2 | 1.6 | 9.7 | 6.5 | 6.5 | 4.8 | 3.2 | 17.7 | 19.4 | 8.1 | 6.5 | 6.5 | 9.7 |

Source: The authors

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Table 4. Sexual behaviors: total, by gender, and by grade.

| Explored condition | | , | ; | 6th. | h. | 7th. | J. | 8th. | | 9th. | نہ | 10th. | h. | 111 | 11th. |
|--|--------------|----------|------|------|------|------|------|------|------|------|------|----------|------|------|-------|
| | - | <u>.</u> | Z | Ţ | M | Ţ | M | Ā | M | Έ. | M | £ | M | Ţ | M |
| Have you ever had sexual intercourse? | 20.9 | 7.9 | 13.0 | 7.0 | 7.3 | 3.6 | 5.1 | 1.5 | 5.8 | 14.6 | 17.5 | 5.1 | 11.7 | 12.4 | 14.6 |
| They had their first sexual relationship before they were 14 years old. | 6.9 | 2.1 | 7.4 | 2.2 | 20.0 | 8.9 | 13.3 | 2.2 | 13.3 | 8.9 | 15.6 | 4 4. | 6.7 | 4.0 | 0 |
| You have had sexual relations with two or more people in their lifetime. | 11.7 | 3.8 | 7.9 | 1.3 | 9.1 | 3.9 | 5.2 | 1.3 | 6.5 | 13.0 | 22.1 | 3.9 | 11.7 | 9.1 | 13.0 |
| Students who used a condom the last time that they had sexual relations. | 16.5 | 6.4 | 10.1 | 6.0 | 3.7 | 3.7 | 4.6 | 1.9 | 5.6 | 15.7 | 19.4 | 4.6 | 13.0 | 12.0 | 14.8 |
| Students who used other contraceptive methods. | 11.6 | 5.3 | 6.3 | 2.6 | 3.9 | 3.9 | 3.9 | 2.6 | 5.3 | 15.8 | 14.5 | 9.9 | 13.2 | 14.5 | 13.2 |

Source: The authors.

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Table 5. Mental health in adolescents: total, by gender and grade.

| Explored condition | | | | 9 | 6th. | 7th. | 4 | 8th. | ن ا | 9th. | j. | 10 | 10th. | 11 | 11th. |
|--|------|------|------|------|------|------|----------|------|---------|----------|------|------|---------|------|-------|
| | H | Έ | Σ | 14 | M | Ŧ | M | F | M | <u>F</u> | M | Έ4 | M | Ā | M |
| Students who have felt lonely in the last 12 months. | 80.3 | 43.8 | 36.6 | 8.0 | 7.4 | 9.3 | 8.3 | 2.6 | 4.7 | 11.8 | 6.6 | 7.8 | 7.2 | 8.0 | 5.3 |
| You have been so worried about something that you have been unable to sleep at night for the past 12 months. | 76.7 | 39.9 | 36.7 | 9.9 | 4. | 8 % | 8.3 | 6.6 | 8.2 | 12.1 | 11.1 | 7.2 | 4. 7 | 7.8 | 5.6 |
| Have you ever seriously considered the | 27.9 | 19.4 | 8.5 | 8.7 | 5.5 | 12.6 | 4. 4. | 12.6 | 0.9 | 18.0 | 7.7 | 9.3 | 4 4. | 8.2 | 2.7 |
| possibility of committed suicide in the past 12 months. | | | | | | | | | | | | | | | |
| Have made any suicide plans in the last 12 months. | 23.9 | 17.2 | 6.7 | 10.2 | 4.5 | 12.7 | 4.5 | 12.7 | 6.4 | 17.2 | 7.6 | 10.2 | 2.5 | 8.9 | 2.5 |
| Attempted suicide one or more times in the last 12 Months. | 19.1 | 13.7 | 5.3 | 12.8 | 5.6 | 13.6 | 3.2 | 13.6 | 4 8. | 15.2 | 8.8 | 10.4 | 3.2 | 4.9 | 4. |
| He has no close friends. | 7.2 | 3.8 | 3.4 | 2.1 | 4.3 | 8.5 | 4.3 | 10.6 | 12.8 | 14.9 | 14.9 | 4.3 | 8.5 | 12.8 | 2.1 |

Source: The authors.

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stated that they felt alone in the last 12 months, which is higher in women than in men (43.8 % vs. 36.6 %). Likewise, 76.7 % of the students report that in the last 12 months, they have been so worried about something that they cannot sleep at night, mainly affecting the female gender. 27.9 % of those surveyed have seriously considered the possibility of committing suicide, with a higher percentage of women compared to men (19.4 % vs. 8.5 %), a situation that occurs in all grades. Likewise, 23.9 % of adolescents state that they have made some plan to commit suicide in the last 12 months and 19. 1 % report having attempted suicide at least once in the past 12 months: across all grades and behaviors in this module, the percentage of women is approximately twice that of men. 7.2 % of students feel lonely by not having any close friends.

Table 6 shows the results of the analysis of bivariate relationships using Pearson correlations, where those tests with statistical significance p<0.05 were considered as relationships. It observed that the alcohol consumption variable shows a statistically significant relationship (p=0.0001) with the variables: having consumed tobacco, drug consumption, and sexual relations. In the case of the relationship between the variable's suicidal ideation with a suicide plan and suicide attempt, a significantly high relationship is evident. Likewise, the variables are directly related. As alcohol consumption increases, tobacco, drug, and sexual relations increase. Likewise, as the suicidal ideation variable increases.

Table 6. Correlation between variables

| | | Alcohol consumption | Tobacco use | Consumption of drugs | Sexual intercourse | Suicidal ideation suicide | Plan to commit attempt | Suicide |
|-------------|-----------|---------------------|----------------|----------------------|--------------------|---------------------------------|------------------------|---------|
| Alcohol | c.pearson | 1 | 0.366** | 0.213** | 0.365** | 0.155** | 0.124** | 0.141** |
| consumption | p. worth | | 0.0001 | 0.000 | 0.0001 | 0.0001 | 0.002 | 0.0001 |
| tobacco use | c.pearson | | 1 | 0.531** | 0.479** | 0.220** | 0.197** | 0.216** |
| | p. worth | | | 0.0001 | 0.0001 | 0.0001 | 0.0001 | 0.0001 |
| Consumption | c.pearson | | | 1 | 0.424** | 0.159** | 0.185** | 0.228** |
| of drugs | p. worth | | | | 0.0001 | 0.0001 | 0.0001 | 0.0001 |
| Sexual | c.pearson | | | | 1 | 0.124** | 0.116** | 0.152** |
| intercourse | p. worth | | | | 0 | 0.002 | 0.003 | 0.0001 |
| Suicidal | c.pearson | | | | | 1 | 0.734** | 0.693** |
| ideation | p. worth | | | | | | 0.0001 | 0.0001 |
| Plan to | c.pearson | | | | | | 1 | 0.729** |
| commit | p. worth | | | | | | | 0.0001 |
| suicide | _ | | | | | | | |
| Suicide | c.pearson | | | | | | | 1 |
| attempt | | | | | | | | |
| | No. | 656 | | | | | | |

^{**.} The correlation is significant at the 0.01 level (bilateral).

Source: Statistical analysis of SPSS package

DISCUSSION

This research provides relevant statistical data on behaviors related to the consumption of psychoactive substances, sexual behaviors, and mental health of Colombian secondary and high school students. Likewise, it allows the generation of possible prevention strategies and attention to risk factors that affect the health of adolescents.

Regarding the alcoholism module, the results show that a high percentage (55.9 %) of those surveyed state that they have consumed alcohol at least once in their lives, a condition that occurs mainly in the male gender, with a lower percentage of students who report not have consumed alcoholic beverages. Similar findings were reported by Linetzky et al. (27), who, when applying the global school health survey to Argentine students, found that 56.8 % of those surveyed indicated having had at least one alcoholic drink in their life, results that were significantly more frequent in males than in females. These authors state that as age increases, alcohol consumption progressively increases, contrary to the present investigation, where it was found that the highest consumption occurs in ninth grade. In contrast, it tends to decrease in the tenth and eleventh grades. Although in Argentina and Colombia, the sale of alcohol to minors under 18 years of age is prohibited, in the two investigations, the students state that they quickly acquire alcoholic beverages, either in stores, on the street, at home, or through family members and friends.

The results of the tobacco consumption module show that 22.9 % of adolescents have used tobacco at least once in their lives, and 14.2 % have consumed it in the last month, which shows that tobacco consumption began at an early age. Tobacco, Similar results show the application of the GSHS survey in countries like Argentina and Chile. The "Ministerio de Salud de Chile" (28) indicates that the percentage of students who report having consumed cigarettes at some time is 50.9 %. At the same time, the "Ministerio de Salud y Desarrollo de Argentina" (29) affirms that 20.4 % of students from 13 to 17 years old consumed some tobacco product in the last 30 days. Both studies show that the percentage in women is higher than in men: Chile 38.9 % and Argentina 21.8 %; contrary to this investigation, the highest percentage of tobacco consumption occurs in men (14 %).

In the same way, the results obtained in the sexual behaviors module are relevant, in which an onset at an early age is evident. 2.7 % of the students claim to have had sexual relations before the age of 11, 1.5 % at 12, and 2.6 % at 13. In this sense, the onset of sexuality occurs in some cases before the age of fourteen, the minimum

age established by the Colombian penal code for sexual consent, which constitutes a crime. The "Instituto Colombiano de Bienestar Familiar (ICBF)" (30) points out: "Any sexual act with children and adolescents under 14 years of age is considered sexual violence and is a crime."

The results of the mental health module showed significantly higher numbers of suicidal ideation. 27.9 % of the students surveyed state that they have seriously considered the possibility of suicide, 23.9 % have made plans to attempt suicide, and 19.1 % report having attempted suicide at least once. In addition, this situation affects women more frequently. The third world survey of school health applied in Argentina (29) yielded similar results since 21.55 % of students between the ages of 13 and 17 seriously considered the possibility of committing suicide in the last year, with more than double the percentage in women who in males. Indicates the need to establish suicide prevention plans with gender, which take into account protective factors to prevent suicidal ideation, like the psychological well-being of adolescents and their relational contexts (31,32), and which involves the development of institutional and family actors related to the well-being of adolescents (33,34).

CONCLUSIONS

The results of this study present relevant information that allows institutions to make decisions regarding the promotion and prevention plans for adolescent health. The need to implement experiential workshops for students in which thematic axes around emotional education are discussed, such as anger and depression control, treatment of suicidal behaviors, stress management, and substance use prevention, is evident. Psychoactive, responsible sexuality and other strategies contribute to improving the physical and mental health of children and adolescents.

The Global School Health Survey (GSHS) allows for collecting information of interest for the health of adolescents and identifying the main risk factors to which they are exposed. This research showed that the behaviors studied are more prevalent in ninth-grade students, so it is

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essential to prioritize intervention and mitigation strategies in adolescents in this educational level and age range.

The study demonstrates the importance of establishing alternatives for sexual education in adolescents since initiating sexual relations can generate other risk factors, such as pregnancy or sexually transmitted diseases and even the commission of crimes. Likewise, it is necessary to establish prevention strategies for the consumption of psychoactive substances in adolescents that involve the family and educational institutions, to train critical and empowered adolescents against the consumption of substances that affect health.

In short, it is necessary to implement support plans in educational institutions that reduce psychosocial risk factors in students. These plans must link various institutions, such as the Mayor's Office, family police station, health centers, ICBF, and childhood and adolescent police, among other entities that prioritize the well-being of students.

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