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ORIGINAL

Anxiety, depression, and alcohol consumption in high school students

Ansiedad, depresión y consumo de alcohol en estudiantes de bachillerato

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ABSTRACT

Introduction: adolescents face different mental health problems (anxiety and depression), and to face them, some of them consume legal substances, exposing them to risks and personal, social, and family problems, negatively impacting their lifestyles.
Objective: to determine the relationship between anxiety, depression, and alcohol consumption in high school students.
Method: non-experimental, quantitative, descriptive, correlational, and cross-sectional research, in a sample of 251 high school students, with simple random probability sampling, applying the Beck anxiety and depression inventories and the AUDIT questionnaire, with descriptive and inferential analysis in accordance with national ethical aspects for research.
Results: 53,8 % are female and 46,2 % male, 62,5 % are 15 to 16 years old, 39,0 % are in the fifth semester (35,9 %) third, with Catholic religion 75,7 %. In relation to the classification of variables, 66,9 % have very low anxiety, moderate (23,9 %) and severe (9,2 %). 39,0 % present minimal depression, 20,3 % mild, 22,3 % moderate and 18,3 % severe. 50,6 % are abstinent from alcohol, 29,5 % occasional drinking, 17,1 % risk, 1,6 % harmful and 1,2 % alcohol dependence.
Conclusions: there is a relationship of anxiety and depression (rs=0,647, p=<0,01); anxiety and alcohol consumption (rs= 0,178, p=<0,01) and concern that anxiety (rs= 0,194, p=<0,01) and depression (rs= 0,155, p=<0,01) levels are more developed in people who tried alcohol early age (rs= 0,219, p=<0,01). It is necessary to intervene in a timely manner to reduce risks, ensure permanence and completion of studies, since the older the age, the problem may become more acute, given that alcohol is a legal and portal drug.

Keywords: Anxiety; Depression; Alcohol Consumption; High School; Students.

RESUMEN

Introducción: los adolescentes se enfrentan a diferentes problemas de salud mental (ansiedad y depresión), para enfrentarlos, algunos consumen sustancias legales, exponiéndolos a riesgos y problemas personales, sociales y familiares, impactando de manera negativa en sus estilos de vida.
Objetivo: determinar la relación de ansiedad, depresión y consumo de alcohol en estudiantes de bachillerato.

Método: investigación no experimental, cuantitativa, descriptiva, correlacional y transversal, en una muestra de 251 estudiantes de bachillerato, con muestreo probabilístico aleatorio simple, aplicando los inventarios: ansiedad, depresión de Beck y el cuestionario AUDIT, con análisis descriptivo e inferencial con apego a los aspectos éticos nacionales para la investigación.
Resultados: el 53,8 % son mujeres y 46,2 % hombre, el 62,5 % tiene 15 a 16 años, 39,0 % cursa el quinto semestre (35,9 %) tercero, con religión católica 75,7 %. En relación con la clasificación de variables, el 66,9 % tiene ansiedad muy baja, moderada (23,9 %) y severa (9,2 %). El 39,0 % presenta depresión mínima, 20,3 % leve, 22,3 % moderada y 18,3 % grave. El 50,6 % está en abstinencia al alcohol, 29,5 % consumo ocasional, 17,1 % riesgo, 1,6 % perjudicial y 1,2 % dependencia alcohólica.
Conclusiones: existe relación de ansiedad y depresión (rs= 0,647, p=<0,01); ansiedad y consumo de alcohol (rs= 0,178, p=<0,01) y preocupa que los niveles de ansiedad (rs= 0,194, p=<0,01) y depresión (rs= 0,155, p=<0,01) están más desarrollados en personas que probaron alcohol temprana edad (rs= 0,219, p=<0,01). Se debe intervenir, de manera oportuna para disminuir riesgos, asegurar permanencia y conclusión de estudios ya que, a mayor edad, el problema puede agudizarse, dado que el alcohol, es una droga legal y portal.

Palabras clave: Ansiedad; Depresión; Consumo de Alcohol; Bachillerato; Estudiantes.

INTRODUCTION

Anxiety is considered by the World Health Organization[1] to be a disease in which a person experiences excessive fear and worry, leading them to adopt behaviors that can be dangerous to others and even disable them in carrying out daily activities, such as recreation or living with other human beings. Symptoms may include distress or a decrease in essential functions in the individual.

In 2022, the WHO[1] pointed out that different types of disorders can be classified according to how the person behaves in response to certain stimuli, including generalized anxiety (excessive worry), panic disorder (panic attacks), social anxiety (excessive fear and worry in social situations), separation anxiety (excessive fear or anxiety when separated from individuals with whom the person has a deep emotional bond). Without a diagnosis and psychological treatment tailored to the characteristics of the individual, this illness can become more severe and disabling.

On the other hand, depression[2] is considered a mental disorder with specific characteristics that influence emotional states, presenting itself through excessive sadness. In some cases, it can be hereditary, caused by emotionally charged events or changes in hormone levels, which can affect the individual's interest in activities that they used to enjoy when they were in good health.

Depression is a common mental disorder that lowers a person's mood, sometimes for long periods. It can affect family relationships, friendships, and problems at school or work. People who suffer from stressful events are more likely to suffer from this mental disorder, and it is worth noting that women are more likely to experience this symptom than men.[3]

Therefore, these two conditions,[1] can be causal factors in the use of addictive substances among young people, especially alcohol, legal drugs, and gateways to other illegal drugs that can exacerbate the problem, especially since the person is in a stage of mental maturation. The decisions made at that time were not thoroughly considered in terms of the complications they would bring later on. That is why it is regarded as a threat to public health.[4] If immediate action is not taken, the problem could worsen and increase morbidity and mortality statistics at the global, national, state, and local levels.

Depression and anxiety have similar symptoms, such as sudden mood swings, and alcohol consumption in some cases could worsen their health, even their quality of sleep, as it causes dependence and increases their levels of anxiety and depression.[1]

Alcohol consumption causes more than 200 diseases, violence-related injuries, traffic accidents, and health problems such as mental and behavioral disorders, non-communicable diseases, trauma, and dependency patterns: liver cirrhosis, cancer, and cardiovascular disease. Every year, 3 million deaths worldwide are caused by the harmful use of this substance, representing 5,3 % of all deaths.[5]

When a person consumes alcoholic beverages, they generally develop signs of disinhibition: they argue, are aggressive, experience fleeting mood swings and problems with attention, as well as difficulties in judgment and personal performance. There is also evidence of neurological impairment: imbalance or unsteady gait, slurred speech, poor coordination, nystagmus, and decreased level of consciousness.[6]

The conditions mentioned above related to harmful alcohol consumption cause more than three million deaths worldwide, accounting for 1 in 20 deaths and 5,3 % of all deaths, of which more than three-quarters were men.[5] Furthermore, harmful consumption of this substance causes more than 5,0 % of the global burden of disease.[5]

Of all alcohol-attributable deaths globally, 28,0 % were due to injuries, such as those caused by traffic accidents, self-harm, and interpersonal violence, 21,0 % to digestive disorders, 19,0 % to cardiovascular diseases, and the remaining 32,0 % to infections, cancers, mental disorders, and other conditions.[7]

In Mexico, the 2017 National Survey on Drug, Alcohol, and Tobacco Use shows that alcohol consumption is high, particularly excessive consumption, not only among adults but also among a large portion of minors, with the highest proportional increase occurring among adolescent women, reaching prevalence rates similar to those of men.[8] On the other hand, a study conducted in Veracruz[9] specifies that when university students have levels of anxiety and depression, alcohol consumption increases, or those who did not drink before seek to solve the problem with such behavior. Furthermore, in stressful situations, it is common for patterns to change, exposing health to further complications. For these reasons, this research aims to determine the relationship between anxiety, depression, and alcohol consumption in high school students.

METHOD

This was a non-experimental, quantitative, descriptive, correlational, and cross-sectional study conducted between August and October 2024 to determine the relationship between anxiety, depression, and alcohol consumption in high school students.[10,11,12,13]

The study population consisted of 513 high school students from a municipality in Veracruz, Mexico. The final sample consisted of 251 students, representing 48,9 % of the total population, obtained using the Qualtrics tool (XM)[14] with 95,0 % statistical significance (Z=1,96) and a margin of error of 5,0 %. The sample was obtained using a simple random sampling method.

To evaluate the variables, the anxiety inventory instrument was applied,[15] consisting of 21 items that assess the presence of anxiety symptoms (0-21 very low anxiety, 22-35 moderate anxiety, more than 36 severe anxiety). The depression variable was measured using the Beck[16] inventory, which consists of 21 items. The measurement is divided into levels, with scores ranging from 0-13 for minimal depression, 12-19 for mild depression, 20-28 for moderate depression, and 29-63 for severe depression. Alcohol consumption was measured using the AUDIT[17,18] questionnaire, with a score of 0 indicating abstinence from alcohol, 1 to 3 occasional consumption, 4 to 15 at risk, 16 to 19 harmful consumption, and 20 or more indicating alcohol dependence.

The research adhered to the following selection criteria: inclusion: adolescents enrolled in the August-January 2024 period, at the time of data collection, with valid enrollment, willingness to participate, signature of informed consent, and acceptance of the research project explanation. People with diagnosed mental disorders (depression, anxiety), language and psychomotor problems were excluded, and the instruments of people who decided to abandon the research, omitted answering a question or did so twice, as well as those cases where notes different from those requested on the sheets were identified, were eliminated.

The information was analyzed using the Statistical Package for the Social Sciences (SPSS) demo version 25 for Windows[19] with descriptive statistics, measures of central tendency, dispersion, and function extremes,[20,21] Kolmogorov-Smirnov normality test,[22] and Spearman's Rho correlation.[23] The research adhered to ethical principles, respecting the individuality of the person, confidentiality, anonymity, and informed consent.[24,25]

RESULTS

Table 1. Sociodemographic data of the population

Variable	Male n=116		Female n=135		Total	
	f	%	f	%	f	%
Age group						
15 to 16 years	61	24,3	96	3	15	62,5
17 to 18 years	53	21,1	39	15,5	92	36,7
19 years or older	2	0,8	0	0	2	0,8
Marital status						
Single	105	41,8	124	49,4	229	91,2
Married	1	0,4	2	0,8	4	1,2
Other	10	4,0	9	3.	19	7,6
Semester						
First	26	10,4	37	14,7	63	25,1
Third	37	14,7	53	21,1	90	35,9
Fifth	53	21,1	45	17,9	98	39,0

Type of family						
Nuclear	67	26,7	105	41,8	172	68,5
Extensive	27	10,8	23	9,2	50	19,9
Composite	22	8,8	7	2,8	29	11,6
Family life						
Good	81	32.	95	37	176	70,1
Average	33	13,1	38	15,1	71	28,3
Poor	2	0,8	2	0,8	4	1,6

Note: source: data identification form, F: frequency, %: percentage, n=251.

Table 1 analyzes the age group, with the 15-16 age range standing out at 62,5 % (24,3 % men and 38,2 % women), followed by the 17-18 age range at 36,7 % (21,1 % men and 15,5 % women). In terms of marital status, 91,2 % are single (41,8 % male and 49,4 % female), 1,2 % are married (0,4 % male and 0,8 % female). In terms of the semester they are currently enrolled in, 25,1 % are in their first semester (10,4 % men and 14,7 % women), 35,9 % are in their third semester (14,7 % men and 21,1 % women), and 39,0 % are in their fifth semester (21,1 % men and 17,9 % women).

In terms of family type, 68,5 % are nuclear families (26,7 % male and 41,8 % female), 19,9 % are extended families (10,8 % male and 9,2 % female), and 11,6 % are blended families (8,8 % male and 2,8 % female). Within family life, the highest scores are 70,1 % considered good (32,3 % men and 37,8 % women) and 28,3 % fair (13,1 % men and 15,1 % women).

Table 2. Classification of anxiety, depression, and alcohol consumption

Classification	Male n=116			Female n=135			Total n=251	
	f	%[1]	%[2]	f	%[1]	%[2]	f	%
Anxiety								
0 to 21 very low	90	77,6	35	78	57.	31,1	168	66,9
22 to 35 moderate	17	14,6	6,8	43	31,9	17,1	60	23,9
>36 severe	9	7,8	3,6	14	10,3	5,6	23	9,2
Depression								
0 to 13 minimum	57	49,1	22,7	41	30,3	16,3	98	39,0
14 to 19 mild	27	23,2	10,8	24	17,7	9,6	51	20,3
20 to 28 moderate	19	16,4	7,6	37	27,5	14,7	56	22,3
29 to 63 severe	13	11,3	5,2	33	24,5	13,1	46	18,3
Alcohol consumption								
0 abstinence	61	52,5	24,3	66	48,8	26,3	127	50,6
1 to 3 occasional	29	25,0	11,6	45	33,3	17,9	74	29,5
4 to 15 at risk	21	18,1	8,4	22	16,2	8,8	43	17,1
16 to 19 harmful	4	3,5	1,6	0	0	0	4	1,6
20 or more, alcohol dependence	1	0,9	0,4	2	1,7	0,8	3	1,2
Total	116	100,0	46,2	135	100,0	53,8	251	100

Note: source: Anxiety Inventory,[15] Beck Depression Inventory,[16] Alcohol Use Disorders Identification Test (AUDIT),[17] F: frequency, %: percentage, %1 : percentage calculated from the total population of men and women, %2 : percentage calculated from the total population, n=251.

The classification of the anxiety variable shows that 66,9 % are at a very low level, with men having the highest distribution at 77,6 % (taking the populations separately). Twenty-three point nine percent have moderate anxiety, and 9,2 % have severe anxiety.

About the depression variable, 39,0 % have a minimal level (with a higher presence in men at 49,1 %), 22,3 % moderate (with a greater impact on women at 27,5 %), 20,3 % mild, 18,3 % severe, 22,3 % moderate, and 9,2 % severe (women suffer the most at 10,37 %).

About alcohol consumption levels, 50,6 % abstain, with men being the least likely to drink (52,5 %), while women account for 48,8 % of the total population. 29,5 % drink occasionally, 17,1 % drink at risky levels, 1,6 % drink harmfully, and 1,2 % are dependent (table 2).

Table 3. Alcohol consumption and anxiety

Alcohol consumption	0 abstinence n=127		1 to 3 occasional n=74		4 to 15 at risk n=43		16 to 19 harmful n=4		20 or more alcohol dependence n=3		Total	
Anxiety	**F**	**%**	**F**	**%**	**F**	**%**	**F**	**%**	**F**	**%**	**F**	**%**
0 to 21 low	89	35,5	51	20,3	25	10,0	2	0,8	1	0,4	168	66,9
22 to 35 moderate	28	11,2	17	6,8	13	5,2	1	0,4	1	0,4	60	23,9
36 severe	10	4,0	6	2,4	5	2,0	1	0,4	1	0,4	23	9,2

Source: BAI: Anxiety Inventory,(15) AUDIT: Alcohol Use Disorders Identification Test,(17) F: frequency, %: percentage, n=251.

Table 3 analyzes two variables: of the 35,5 % who classified themselves as having low anxiety, 20,3 % are abstinent from alcohol, 10 % use it occasionally, and 10 % are at risk. Of those with low anxiety, 0,8 % have harmful consumption, and 0,4 % are already dependent on the substance. If these scores are not monitored, they may increase and cause a greater risk to the individual. Of the 23,9 % who were classified as having moderate anxiety, 11,2 % have no desire to consume alcohol, unlike 6,8 % who use it occasionally, 5,2 % at risk, 0,4 % harmful, and 0,4 % dependent on the substance. In other words, there is no normal distribution of the level and pattern of consumption, although there are people who are at greater risk. Of the 9,2 % of participants with severe anxiety, 4,0 % are abstinent, while 2,4 % are occasional users, 2,0 % are at risk, 0,4 % are harmful users, and 0,4 % are dependent.

Table 4. Alcohol consumption and depression

Alcohol consumption	0 abstinence n=127		1 to 3 occasional n=74		4 to 15 at risk n=43		16 to 19 harmful n=4		20 or more alcohol dependence n=3		Total	
Depression	**F**	**%**	**F**	**%**	**F**	**%**	**F**	**%**	**F**	**%**	**F**	**%**
0 to 13 minimum	56	22,3	31	12,4	10	4,0	0	0	1	0,4	98	39,0
14 to 19 mild	24	9,6	14	5,6	12	4,8	1	0,4	0	0	51	20,3
20 to 28 moderate	24	9,6	16	6,4	13	5,2	2	0,8	1	0,4	56	22,3
29 to 63 severe	23	9,2	13	5	8	3,2	1	0,4	1	0,4	46	18,3

Source: Beck Depression Inventory,(16) AUDIT: Alcohol Use Disorders Identification Test,(17) F: frequency, %: percentage, n=251.

Of the 39,0 % who scored as having minimal depression, 22,3 % do not consume alcohol, 12,4 % consume occasionally, 4,0 % are at risk, and 0,4 % are dependent, meaning that 16,7 % have positive behavior toward the substance and, if not intervened promptly, may increase to other levels.

Of the 20,3 % with mild depression, 9,6 % do not consume alcohol. In comparison, 5,6 % consume it occasionally, 4,8 % are at risk, and 0,4 % are harmful, this level being the lowest about addiction, although there are people who do enjoy drinking.

About moderate depression (22,3 %), 9,2 % are abstinent, and 9,2 % are distributed among occasional, harmful, and dependent, indicating that their levels have changed compared to the previous ones, indicating the need for attention to avoid complications. As for severe depression (18,3 %), 9,2 % do not consume alcohol, and the same percentage (9,2 %) do, in different classifications (table 4).

Based on the results obtained in the study variables with the Kolmogorov Smirnov statistical test,(26) where a score lower than (Sig. <0,05) without normality, it was determined to use the Spearman's rho test,(27) where it was determined that the anxiety variable (VAA) has a statistically significant influence on the level of depression (VAD), (rs=0,647, p=<0,01). Another positive relationship was that the anxiety variable (VAA) influences alcohol consumption (VCA) (rs=0,178, p<0,01).

In addition to the above, it is concerning that anxiety levels (VAA) (rs=0,194, p=<0,01) and depression (VAD) (rs=0,155, p=<0,01) are more developed in people who tried alcohol at an early age (EPA) (rs=0,219, p=<0,01).

Alcohol consumption (VCA) was determined by age in years (EDE) (rs=0,164, p<0,01).

Based on the above, there is a statistically significant positive relationship between anxiety and depression and alcohol consumption in high school students, given the level of statistical significance (p<0,01).

Table 5. Correlation of variables, Spearman's rho test

Variable/subscale	1	2	3	4	5
VAA[1]	1,000 . 251				
VAD[2]	0,647** 0,001 251	1,000 . 251			
VCA[3]	0,178** 0,005 251	0,155* 0,011 251	1,000 . 251		
EDE[4]	-0,038 0,548 251	-0,062 330 251	0,164** 0,009 251	1,000 . 251	
EPA[5]	0,194* 0,019 147	0,219** 0,008 147	0,021 0,800 147	0,342** <0,001 147	1,000 . 147

Source: BAI: Anxiety Inventory,[15] BDI-2: Beck Depression Inventory,[16] AUDIT: Alcohol Use Disorders Identification Test (AUDIT),[17] VAA: Variable anxiety, VAD: Depression variable, VCA: Alcohol consumption variable, EDE: Student age, EPA: Age when first tried alcohol, CC: Correlation coefficient, N: Number of cases *: Correlation is significant at the 0,01 level (bilateral), **: Correlation is significant at the 0,05 level (bilateral), n=251.

DISCUSSION

To discuss the results, an analysis of the most critical aspects identified in the research is carried out, comparing them with related studies that support the project. About sociodemographic data, the results are consistent with studies,[28,29,30] where the study population was adolescents aged 15 to 19 years, but not with another[31,32] where the participants exceeded this criterion; This reflects the importance of continuing to analyze behaviors related to mental health and legal substance use at an early age to establish nursing programs or actions and ensure healthy habits that will remain in the following stages of development (youth and adulthood).

There is greater participation by women, accounting for more than half of the sample, as reported by other authors,[9,28] unlike other studies,[31] where men accounted for the majority of participants. Another critical aspect of the discussion was the sample size used in the studies, which varied significantly. In some cases,[32] the study was applied to more than 250 participants, whereas others[28,30] had smaller sample sizes, and in some cases,[29,31] the population exceeded the sample size. Regarding the semesters in which students are enrolled, those in the first semester are similar to one study,[28] where the majority were at this level, unlike another,[32] where second-semester students stood out.

As for the students, it was found that most of them focus on their studies and a smaller proportion engage in other activities such as work, similar to other studies,[9,31] where participants were involved in some form of paid work.

Most students reside in semi-urban areas, followed by rural areas, which contrasts with another study[28] where the majority of the population resides in rural areas.

About anxiety levels in the population, it is noteworthy that most participants have low levels of anxiety, as well as moderate and severe levels, similar to studies[28,31] where students have identical levels.

In terms of the degree of depression among students, it was found that the majority had minimal depression, which is consistent with studies[29,30,31,32] where the population had similar presentations. However, higher proportions were observed in students who used illicit drugs, who predominantly presented this disorder.

The results of alcohol consumption levels among students showed that half of the population abstains from alcohol, and, in some cases, consumption is occasional, as found in some studies,[9,29] where it was found that more than half of the participants had never consumed alcohol. Other authors,[31] found that their population had consumed alcohol at some point. However, other studies,[32,33,34,35] found that most did not show dependence on the substance (alcohol), but some had consumed it in critical situations. They also pointed out that adolescents develop symptoms related to anxiety and depression.

When determining the relationship between anxiety, depression, and alcohol consumption in high school

students, it was found that anxiety does influence depression (rs=0,647, p=<0,01), which coincides with authors[31] who, in their study, identified a relationship between anxiety, impulsivity, depression, suicidal ideation, and suicide attempts with illicit drug use, as these significantly affect mental health in students. Symptoms of depression were also observed in higher proportions in students who used illegal drugs, as reported by other authors. It was observed that the proportion of women with moderate and severe depression was higher than that of men.

The current results contrast with a study[28] in which there was no significant relationship with the anxiety variable. Still, it was found that adolescents have a mild level of anxiety because they come from moderately functional homes. Only a small percentage have severe anxiety, which indicates a lack of attention and commitment on the part of their parents.

Given the above, it is worrying that levels of anxiety (rs=0,194, p<0,01) and depression (rs=0,155, p<0,01) are more developed in people who tried alcohol at an early age (rs=0,219, p<0,01), in line with other authors.[32,36] It was observed that there is indeed a relationship between the responses on consumption and risk factors explored in the questionnaire, in which it was possible to analyze that young people at an early age had already consumed alcohol or some illicit substance but did not have any dependence, similar to studies [9,29] which determined that the incidence of consumption begins at age 13, with a rate of alcohol consumption between the ages of 13 and 18, with this percentage increasing as adolescents approach the age of majority.

CONCLUSIONS

To conclude the research, participants aged 15 to 16 stood out, although the age range of 17 and above corresponds to the grade they are currently attending in high school. One strength of the project was that it was easy to access the institution, and the teachers remained with their classes at all times, receiving training on the subject. Care strategies for the participants were also proposed.

In terms of gender, there was greater participation by women (more than half) and less by men. Regarding the semesters in which students are enrolled, it is notable that most are in the fifth semester, followed by the third, and finally the first. The majority are Catholic, and more than half of the participants are dedicated to their studies, while some work.

It was observed that the most significant number of students presented very low anxiety (with a higher incidence in men), moderate anxiety, and severe anxiety (with a higher incidence in women). About the degree of depression in students, it was identified that the most significant number of students have a minimal classification (more developed in men), followed by moderate, mild, and severe. However, it is more present in women, a situation that persists in this population and may be related to individual characteristics and conditioning factors that they experience daily. It is therefore necessary to address these issues comprehensively to identify other aspects not considered in the project.

About alcohol consumption, although the majority of students are abstinent or occasional drinkers, women stand out in this behavior, confirming that they are the ones who repeat consumption patterns the most.

At the harmful level, men are the most affected, with only two women having an alcohol dependency. It is necessary to consider this information to establish actions and propose interventions for the population. For women, actions focused on mental health should be implemented. At the same time, for men, factors influencing the use and abuse of addictive substances should be addressed and, if necessary, all participants should be monitored and evaluated at the end of each school year to assess their behavior during the semester.

It was confirmed that there is a statistically significant positive relationship between anxiety, depression, and alcohol consumption in high school students with a p-value of <0,05.

In summary, anxiety, depression, and alcohol consumption are real problems that are present among high school students at different levels and in other populations. Women are more exposed to mental health problems, while men are more exposed to addiction to legal substances or substances that carry a risk of becoming illegal. This is why prevention, education, and support are crucial in providing students with a healthy and safe school experience without exposing their school situation.

For this reason, high school students should be aware of the risks associated with excessive alcohol consumption, take steps to reduce their alcohol intake, practice healthy habits instead, and break the idea that this behavior helps reduce anxiety and depression levels.

Regarding the theoretical discussion with the Health Promotion Model, it states that the theory identifies cognitive-perceptual factors in the individual, resulting in participation in health-promoting behaviors when there is a pattern for action. In this study, it was determined that of the total population, there is an intention to participate in the care of drug users; however, basic tools are needed to do so.

It is necessary to regain the importance of promoting optimal health by prioritizing preventive actions. As cited by a study this is of utmost importance, given that the factors that influence decision-making and the actions taken to prevent disease have been identified.

Therefore, it is confirmed that the Health Promotion Model is an imminent basis and foundation for nursing

professionals, given that the determinants of health promotion and lifestyles are divided into cognitive-perceptual factors, and, based on these, it was possible to induce the population to adopt behaviors and attitudes through health-promoting decisions to modify these factors.

The MPS will enable the population to reflect on and adopt responsible behavior in the acquisition of knowledge. The use and application of the Pender Health Promotion Model in this project was a fundamental basis as an integrative framework for assessing anxiety, depression, and alcohol consumption in high school students. Therefore, it is essential to determine the continued use and application of the MPS, as this helps nursing professionals prepare with tools to take action at any time, specifically in reducing drug use and demand.

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CONFLICT OF INTEREST

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