

Self-esteem and alcohol consumption in high school adolescents of Ciudad del Carmen, Campeche

Telumbre-Terrero, Juan Yovani^{1*}; Lopez-Cisneros, Manuel Antonio²; Noh-Moo, Pedro Moisés³; Villanueva Echavarría, José Rafael⁴; Torres-Obregón, Reyna⁵

SUMMARY

Introduction: Adolescents go through a stage of biological, psychological, and social changes that may be conditioning factors in the development of harmful behaviors such as the use and/or abuse of alcohol. **Objective:** Establish the association between self-esteem and the consumption of alcohol by adolescents. **Methodology:** Correlational descriptive research was conducted on 191 high school adolescents of Ciudad del Carmen, Campeche, Mexico. The Alcohol Use Disorders Identification Test (AUDIT) and the Rosenberg Self-Esteem Scale were used. **Results:** The type of consumption of the dependent (35.4%) followed by the sensible (34.1%) prevails; by gender, a dependent consumption prevails in males (39.4%), while a sensible consumption prevails in women (38.8%). According to the AUDIT score ($r = -0.425$, $p = 0.042$), a negative relationship was established between self-esteem and alcohol consumption. **Conclusion:** The intake of alcoholic beverages represents a growing health concern that may cause a variety of adverse health conditions in adolescents, in addition to being associated with psychological variables such as self-esteem, which plays a key role in the acquisition or modification of healthy or unhealthy habits, and therefore constitutes a protective variable against alcohol consumption.

Key words: Adolescent, consumption of alcoholic beverages, self-esteem (DeCS; BIREME).

¹Master's Degree in Nursing Sciences. Universidad Autónoma del Carmen. E-mail: jtelumbre@pampano.unacar.mx

²Doctorate degree in Nursing Sciences. Universidad Autónoma del Carmen.

³ Degree in Nursing. Universidad Autónoma del Carmen.

⁴ Master's Degree in Health Sciences. Universidad Autónoma del Carmen.

⁵ Doctorate Degree in Nursing Sciences. Universidad Autónoma de Coahuila.

*Corresponding author

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INTRODUCTION

Alcohol is a widely used substance, the excessive consumption of which may cause negative effects in those who consume it and contributes to family, labor, and social problems, all with cost implications within different sectors of society. These effects will be determined by three fundamental aspects: volume of alcohol consumed, frequency of consumption and, in rare cases, the quality of alcohol⁽¹⁾.

Every year, more than 3 million deaths occur worldwide due to alcohol consumption, as well as being an etiological factor of multiple psychological, social, and physical problems, such as liver cirrhosis, cancer, cardiovascular disease, suicide, depression, violence, and traffic accidents among others⁽²⁾.

In Mexico, it has been identified that 25 out of 100 adolescents reported having ingested an alcoholic beverage during the last year, 11 out of 100 male adolescents consumed more than five standard drinks on any one occasion; 1% of adolescents abuse alcohol daily, 2.3% weekly, 5.8% monthly, and 7.2% occasionally⁽³⁾. Moreover, various factors that condition adolescent behavior have been identified. This vulnerability results from the characteristic changes of this stage at neurological, cognitive, and social levels. Changes at social levels assume that adolescents build their personal identity based on influences from family, school, and friends, also considering the acquisition of healthy or unhealthy behaviors, which include the consumption of drugs⁽⁴⁾.

Self-esteem is a protective and conditioning factor against consumption of drugs. It is defined by Rosenberg⁽⁵⁾ as the value that each individual has of himself, taking experiences, feelings, and emotions experienced during all stages of life. This valuation that the individual makes of himself is essential for the adaptive process with others and society⁽⁶⁾. It is necessary to consider that adolescence represents a crucial stage where adolescents present greater social demands, such as the definition of identity, autonomy, and greater interaction with other people including those of the opposite sex as well as others that might affect levels of self-esteem. Therefore, self-esteem could determine the reaction to life events as well as coping skills thus contributing to better decision-making processes in the face of problems that the individual might have at this stage of vulnerability⁽⁷⁾.

Self-esteem provides adolescents with the necessary skills so that they can resist peer pressure when faced with drug use, and thus be able to make healthy decisions⁽⁸⁾. Self-esteem in adolescence is a regulatory psychological variable during the acquisition of behaviors either healthy or unhealthy, and will depend on the degree of self-esteem that adolescents and young people have at any given time for the adoption or modification of lifestyles⁽⁹⁾.

Therefore, the objective of this research was to establish the relationship between self-esteem and alcohol

consumption in adolescents. Initially, this will open the way for delving deeper into our knowledge of self-esteem as a mediating variable of healthy or unhealthy behaviors of adolescents. Secondly, it provides theoretical support for health professionals, specifically in the field of nursing in relation to health promotion and education via specific actions to strengthen protection factors. Of importance as well is timely identification and the channeling of adolescents who require support to reduce or eliminate the consumption of alcohol or other substances.

METHODOLOGY

Correlational descriptive type research⁽¹⁰⁾ conducted in November 2017 in a public high school of Ciudad del Carmen, Campeche, Mexico, with a general enrollment of 658 students of both sexes. Stratified random sampling was carried out per semester⁽¹¹⁾ and the sample was estimated using the statistical software n`Query Advisor Version 4.0⁽¹²⁾, under the following parameters: power 90%, significance 0.05, and alternate correlation coefficient 0.18; leaving a final sample of 191 participants.

The Ethics and Research Committee of the Research and Postgraduate Department of the Universidad Autonoma del Carmen with registry FCS/2016/07 and the institution in which the research was conducted approved this research. Afterwards, the list of duly enrolled students in the 2017 school year was requested, and the participants were selected at random. Once the participants were selected, informed consent was given to tutors and approved consent to minors. Once the authorization was obtained from both parties, the measuring instrument was delivered and the filling instructions were communicated. At all times the integrity of the participants was respected as well as the stipulations included in the Regulations of the General Health Act on Health Research⁽¹³⁾. When the questionnaires were complete, they were placed in a ballot box situated at the entrance of a classroom designated by the school. For the collection of the information, a Personal Data and Alcohol Consumption History card was used, which queried identification, sociodemographic data, and characteristics of the alcohol intake. The Alcohol Use Disorders Identification Test (AUDIT) was also used. This instrument consists of 10 multiple-choice questions that allowed the identification of individuals with alcohol use and abuse problems⁽¹⁴⁾. Scores range on a scale of 0 to 40 indicating the higher the score, the greater the risk of alcohol dependence problems. To improve the interpretation, scores of 1-3 indicate a sensible consumption, 4-7 dependent consumption, and 8-40 points are considered harmful consumption. This scale has been adapted and validated across the Mexican population and reports acceptable sensitivity and specificity⁽¹⁵⁾. Although other studies^(16, 17) report a reliability of 0.74-0.87, this research obtained a reliability of $\alpha = 0.77$.

The Rosenberg Self-esteem Scale, comprised by 10

statements, with a response scale that ranges from 1 to 4 points; for its interpretation, scores ranging between 30 to 40 points indicate high self-esteem, from 26 to 29 normal self-esteem, and scores of 25 or less indicate low self-esteem⁽¹⁸⁾. This scale has reported an acceptable reliability in the adolescent population of Querétaro⁽¹⁹⁾ and Nuevo León⁽⁷⁾; a reliability of $\alpha = 0.89$ was obtained for this research.

The analysis and interpretation of the information was made using the statistical program called Statistical Package for the Social Sciences (SPSS), version 23.0 for Windows, using descriptive statistics (frequencies, proportions, measures of central tendency, and dispersion) and parametric inference, given the results of the normality test for continuous variables.

RESULTS

50.8% of the adolescents were males, with an average age of 13.4 years (SD = 2.1), regarding school grade 44% are enrolled in the first year and 41.9% in the third year, in addition 78% of adolescents live with both parents, 12.6% with their mother only and 2.6% with their father only. When inquiring about the intake of alcoholic beverages of any member of the family, 60.7% answered affirmatively, with the father being the primary consumer (24.6%), followed by both parents (13.1%), and siblings (10.5%), consuming up to 17.1 (SD = 8.3) drinks on a typical day. With regard to adolescents, it was identified that 65.4% had ingested alcoholic beverages at some point in their lives and 8.4% within the last week (Table 1).

Regarding the items that evaluate the characteristics of self-esteem, 56.6% of adolescents feel they are a failure and 54.6% were inclined to think they are useless; 42.9% feel they are occasionally useless and (32.5%) do not feel they have something to be proud of. Additionally, 51.3% totally agree that they are a person of worth, have a positive attitude, and are satisfied with themselves (Table 2).

It was identified that in 80.8% of adolescents the level of low self-esteem predominates, being higher in women (81.4%) in relation to men (79.8%). With regard to the AUDIT cohort points, the type of dependent consumption predominates (35.4%) followed by the sensible (34.1%); now, by gender, a dependent consumption predominates in males

(39.4%) and a sensible consumption (38.8%) predominates in women. (Table 3).

Regarding the global prevalence of alcohol consumption by level of self-esteem, it was possible to identify that low self-esteem (33.8%) and average self-esteem (7.9%) predominates in those adolescents who have ingested alcohol at some point in their lives (Table 4).

In relation to the objective of the research, according to the AUDIT score ($r = -0.425$, $p = 0.042$) a negative and significant relationship was determined between the level of self-esteem and alcohol consumption and the number of alcoholic beverages consumed in a typical day ($r = -0.367$, $p = 0.039$).

DISCUSSION

The findings show that a quarter of the population declared having consumed alcohol in the last month, which is consistent with research conducted in the Southern States^(20, 21, 22) of Mexico. It is worth stressing the characteristics of the intake (quantity and frequency) of alcohol, which are two fundamental aspects that must be evaluated and that are critical to identify alcohol dependence^(23,24). In addition to considering the interaction of factors of a personal, psychological, family, and social nature as conditioning factors in the acquisition of the behavior of alcohol consumption^(25, 26).

Low self-esteem was identified, being higher in women than in men, which is similar to that reported by a group of researchers from Spain⁽⁶⁾. This could be related to two critical aspects; first, labor issues where the incorporation of women into the work force has brought about equality in working conditions, and second, gender issues, where there is little acceptance of men before the incorporation of women in socially active activities, which could explain the decrease in female self-esteem^(27, 28). It should also be noted that during adolescence, biological issues play a fundamental role since they are much more pronounced in female adolescents and, of course, cultural issues where identity as a man or woman is constructed^(29, 30).

In addition, dependent and sensible consumption prevailed globally, that is, dependent consumption in males

Table 1. Prevalence of alcohol consumption

Prevalence	Yes		No	
	f	%	f	%
Global	125	65.4	66	34.6
Periodic (Lapsic)	82	42.9	109	57.1
Current	49	25.7	142	74.3
Instantaneous	16	8.4	175	91.6

Source: Own development

n = 191

and sensible consumption in women, which differs from the findings reported in high school adolescents of Querétaro, México⁽¹⁹⁾, where sensible consumption predominates, which could be connected to the incorporation of women in paid activities with access to managerial positions and higher salaries, as well as access to educational services, affording them academic training with bachelor's, master's, and doctoral degrees⁽³¹⁾.

In line with the objective of this research, a significant yet negative relationship of self-esteem and alcohol consumption was identified, thus indicating that the higher the self-esteem, the lower the consumption, a result that is consistent with national investigations^(7, 9), all indicating that self-esteem represents a factor of protection against the consumption of licit and illicit drugs. Thus, low self-esteem leads to an inadequate adaptation of adolescents with their family and social environment, which prevents them from overcoming the challenges of daily life in the best possible way. On the contrary, adolescents with high self-esteem tend to exhibit elevated self-confidence and therefore are competent in both their personal and professional life⁽³²⁾.

CONCLUSION

The results reinforced the view that alcohol consumption in vulnerable groups such as adolescents is increasing, which is a noteworthy health concern that may contribute to biological, psychological, and social damage in the short and mid-term and is also closely associated with psychological variables such as self-esteem, which plays a major role in the acquisition or modification of healthy or unhealthy habits; in this case being a protective factor against alcohol consumption. Adolescence is a period in the life cycle of human beings where conduct, behavior, and habits are acquired for adulthood. In this stage a series of factors that delay or limit said behaviors are combined and, because self-esteem is a psychological variable mediating adolescent behavior, should be strengthened with specific actions in the family and social environments. It is necessary to consider that the biological, psychological, and social development of adolescents could be affected by the number of alcoholic beverages consumed as well as the frequency of consumption; therefore, it is of vital importance to identify

Table 2. Frequencies of the items of the Rosenberg Self-esteem Scale

Item	Totally disagree	In disagreement	Agree	Totally agree
	%	%	%	%
1. I feel that I am a person of worth	51.3	34.0	9.4	5.2
2. All in all, I am inclined to feel that I am a failure.	5.2	8.9	29.3	56.5
3. I feel that I have a number of good qualities	39.3	44.0	10.5	6.3
4. I am able to do things as well as most other people	40.3	34.0	16.2	9.4
5. I feel I do not have much to be proud of	15.2	31.9	20.4	32.5
6. I take a positive attitude toward myself	50.3	35.1	8.4	6.3
7. On the whole, I am satisfied with myself	44.5	39.3	9.9	6.3
8. I wish I could have more respect for myself	42.4	37.2	11.0	9.4
9. I certainly feel useless at times	7.9	21.5	27.7	42.9
10. At times I think I am no good at all	7.9	16.8	20.9	54.5

Source: Own development

n = 191

Table 3. Self-esteem level and type of consumption by gender

Gender	Self-esteem level *			Type of Alcohol Consumption **		
	Low	Medium	High	Sensible	Dependent	Harmful
	%	%	%	%	%	%
Male	79.8	16.0	4.2	27.3	39.4	33.3
Female	81.4	11.3	7.3	38.8	32.7	28.5
Total	80.8	13.6	5.5	34.1	35.4	30.5

Source: Own development

n = 191*, n = 82**

Table 4. Overall prevalence of alcohol consumption by level of self-esteem

Alcohol consumption		Self-esteem level							
		Low		Medium		High		Total	
		f	%	f	%	f	%	f	%
Sometime in life	No	52	27.2	11	5.8	3	1.6	66	34.6
	Yes	102	33.8	15	7.9	8	4.2	125	65.4

Source: Own development

n = 191

the mediating variables that promote the necessary social skills to resist peer pressure in relation to the consumption of alcohol, tobacco, and other drugs.

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