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The use of alcohol as a social mediator among university students

Review Article

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Introduction: alcohol consumption is higher among college students and generates negative

consequences. The habits adopted during this period of life are decisive because, for the most

part, they will be maintained throughout life. Objective: to evaluate the scientific production

about the use of alcohol as social mediator among college students. Method: integrative review

made in the Latin American and Caribbean Health Sciences Literature LILACS), PUBMED and

Scientific Eletronic Library Online (SciELO). Two combinations of the five descriptors were used,

namely: Alcohol consumption; AND Students; AND Higher Education; AND Socialization; AND

Alcohol. Results: a total of 665 articles were found in the initial search; after careful analysis

and application of the selection criteria, 21 articles were used. As for the design, there were 14

qualitative studies, 5 randomized controlled trials, 1 non-randomized trial and 1 cohort study,

prevailed. Conclusion: alcoholism among college students is a problem in education and health

and requires effective action to control its short- and long-term consequences.

Descriptors: Students; Socialization; Alcohol.

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A utilização do álcool como mediador social entre universitários

Introdução: o consumo de álcool entre adolescentes é maior entre os universitários e gera consequências acadêmicas negativas. Os hábitos de consumo adotados nesse período da vida são decisivos, já que, em sua maioria, são mantidos na vida adulta. Objetivo: avaliar a produção científica acerca da utilização do álcool como mediador social entre universitários. Método: revisão integrativa realizada nas bases de dados Literatura Latino-Americana e do Caribe em Ciências da Saúde (LILACS), PUBMED e *Scientific Eletronic Library Online* (SciELO), com duas combinações dos cinco descritores: Consumo de bebidas alcoólicas; AND Estudantes; AND Educação Superior; AND Socialização; AND Álcool. Resultados: na busca inicial, encontraram-se 665 artigos; após análise criteriosa e aplicação dos critérios de seleção, 21 foram utilizados. Como delineamento, prevaleceram 14 estudos qualitativos, 5 ensaios controlados randomizados, 1 não randomizado e 1 coorte. Conclusão: o alcoolismo entre universitários constitui um problema no âmbito da educação e saúde e que precisa de ações efetivas a fim de controlar suas consequências em curto e longo prazo.

Descritores: Estudantes; Socialização; Álcool.

El uso de alcohol como mediador social entre universitarios

Introducción: el consumo de alcohol entre adolescentes es mayor entre los universitarios y genera consecuencias académicas negativas. Los hábitos de consumo adoptados en ese período de la vida son decisivos, ya que, en su mayoría, se mantienen en la vida adulta. Objetivo: evaluar la producción científica sobre el uso del alcohol como mediador social entre universitarios. Método: Revisión integrativa realizada en las bases de datos Literatura Latino-Americana y de Caribe en Ciencias de la Salud (LILACS), PUBMED y *Scientific Eletronic Library Online* (SciELO). Con dos combinaciones de los cinco descriptores Consumo de bebidas alcohólicas; AND Estudiantes; AND Educación Superior; AND Socialización; AND Alcohol. Resultados: en la búsqueda inicial se encontraron 665 artículos; después de un análisis riguroso y de la aplicación de los criterios de selección, 21 se utilizaron. Como delineamiento, prevalecieron 14 estudios cualitativos, 5 ensayos controlados aleatorizados, 1 no randomizado y 1 cohorte. Conclusión: el alcoholismo entre universitarios constituye un problema en el ámbito de la educación y la salud y que necesita acciones efectivas para controlar sus consecuencias a corto y largo plazo.

Descriptors: Estudiantes; Socialización; Alcohol.

Introduction

Alcohol consumption among adolescents is negatively related to academic performance, physical integrity and sexual behaviors⁽¹⁾. Recent studies indicate that the use of alcohol is greater in this age group than

in adults, and that among adolescents, rates are higher in college students⁽²⁾.

Another risk factor among adolescents is shyness, which is characterized by problems of internalization, anxiety, depression and low self-perception. Although consumption is less frequent among these individuals,

shy people are more likely to drink at social events⁽³⁾ with positive hopes for sociability and sexuality⁽⁴⁾.

As a co-adjuvant of the consequences of alcohol abuse among adolescents, current technology increases the susceptibility to engaging in regrettable social behaviors when intoxicated. For example text messages, links or posts of drunkenness that expose the students to inconvenient situations. In this context, encouraging the young persons to recall embarrassing situations experienced when intoxicated may be a more effective way of achieving the goal to make them avoid such behavior than warning of more serious consequences, since most common events may have a greater influence on the modulation of the actions of adolescents in awareness campaigns⁽⁴⁾.

The best predictor for alcohol consumption among college students seems to be consumption before academic life, along with the variable "problems in transition phases": impulsiveness, search for sensations, mood instability and anxiety. Added to these are alcoholic games that encourage drinking with noise, competition, social integration and emotion⁽⁵⁾ and social networks⁽⁶⁾.

Consequently, morbidity and mortality has increased among university students who drink and the predisposition keep such consumption in adult life is high⁽⁷⁾. On this aspect, we can correlate this to the Theory of Social Representations of Serge Moscovici (1978) entitled: Psychoanalysis, its image and its public. In this perspective, social representations are recognized as psychosocial phenomena, historically and culturally conditioned, that can define alcoholic beverage as a complex agent that, at the same time as it favors the moments of interactions, it also determines prejudices against those who abuse drinking and, and it is culturally linked to masculinity; this explains the higher alcoholrelated mortality in this gender⁽⁸⁾. In addition, heredity has shown to have an influence on the abuse of this substance(9).

The purpose of this study was to evaluate the scientific production about the use of alcohol as a social mediator among college students, since the use of this substance among the public cited represent an object of concern.

Methods

An integrative review of the literature was carried out by means of research and careful evaluation of studies published on the hypothesis proposed. The evaluation of the results enables the execution of the evidences approached in practice. The guiding question defined for the investigation was "Use of Alcohol as a Social Mediator among College Students".

To reach the methodological accuracy of the study, the six steps proposed were followed, namely: (1) establishment of a research hypothesis or question; (2) sampling or search in the literature; (3) categorization of studies; (4) analysis of studies included in the review; (5) interpretation of results; and (6) synthesis of the knowledge or presentation of the review.

In this context, the virtual databases were used: Latin American and Caribbean Health Sciences Literature (LILACS), PUBMED and Scientific Electronic Library Online (SciELO).

The search for works in this literature review was guided by the combination of 05 (five) descriptors, applying Boolean modulators, indexed in the DeHS (Descriptors in Health Sciences), using a single language in the indexing of articles in scientific journals, books, annals of congresses, technical reports, and other types of materials, as well as in research and retrieval of topics in the scientific literature. We used 2 search keys in total, searched in English, Spanish and Portuguese. In order to perform the screening, the descriptors were used as shown in Figure 1.

PORTUGUESE DESCRIPTORS	ENGLISH DESCRIPTORS	SPANISH DESCRIPTORS
Consumo de bebidas alcoólicas AND Estudantes AND Educação Superior	Alcohol consumption AND Students AND Higher Education	Consumo de bebidas alcohólicas AND Estudiantes AND Educación Superior
Socialização AND Álcool AND Estudantes	Socialization AND Alcohol AND Students	Socialización AND Alcohol AND Estudiantes

Figure 1 – Descriptors used in the search

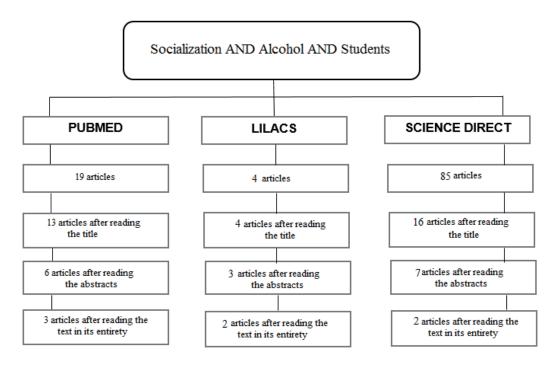


Figure 2 – Flowchart synthesizing the search strategies used with the combination "Socialization AND Alcohol AND Students", which resulted in the final data sample.

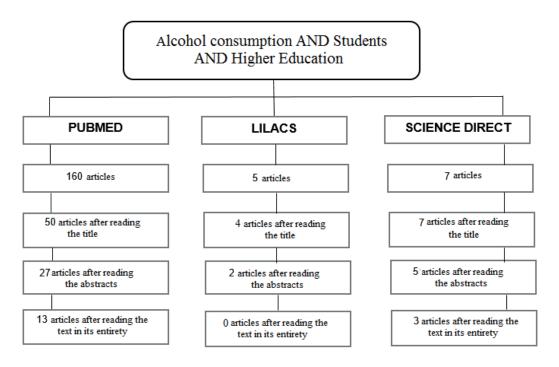


Figure 3 – Flowchart synthesizing the search strategies used with the combination "Alcohol consumption AND Students AND Higher Education" that resulted in the final data sample.

Data analysis followed inclusion criteria based on the opposite theme by the present research, namely (1) studies carried out between the years 2012 and 2017; (2) full text available online; and (3) texts published in English, Portuguese or Spanish. Systematic reviews of the literature, repeated articles and works with a trivial consideration of the theme were excluded. After analyzing the studies and applying the inclusion and exclusion criteria, 665 articles were selected. The first stage of the screening selected a total of 95 articles based on the reading of the titles. Then, the abstracts of the articles were read, after what 50 papers were kept. At the end of the process, 23 articles were analyzed, and after the exclusion of repeated works, the final sample consisted of 21 articles.

The qualitative analysis of the articles of the final sample was based on the levels of evidence proposed by Stillwell⁽¹⁰⁾: I - Systematic review or meta-analysis; II - Randomized controlled clinical trial; III - Nonrandomized controlled clinical trial; IV - Case control or cohort study; V - Systematic review of qualitative or descriptive nature; VI - Qualitative or descriptive study; VII - Article of opinion or consensus of governmental institutions or committees of medical experts. The data obtained after reading the articles were presented through a descriptive summarization in tables including information on the level of evidence and year of the study (Figures 2 and 3).

Characterization of the studies

The research with the descriptors in the databases resulted in a total of 665 articles whose theme was related to alcohol use among university students, its causes and consequences. Of these articles, 26.91% (n = 179) were found in the PUBMED, 1.36% (n = 9) were found in the LILACS/SciELO and 71.73% (n = 477) in the Science Direct. For the selection of articles, the titles were first read, after the abstracts and then the body of the text in its entirety, excluding articles that were repeated and did not addressed the theme. The selection process generated a final sample of 3.15% (n = 21) of the total articles found, of which 69.57%

(n = 16) were retrieved from PUBMED, 8.69% (n = 2) from LILACS/SciEIO and 21.74% (n = 5) from Science Direct. Thus, the articles found in the databases were in total 23; after the elimination of 2 articles that were repeated, the final sample was composed of 21 articles.

Regarding the year of publication of the articles in the final sample, shown in Table 1, the publications were well distributed in the period studied, with publications in all the years.

Table 1 – Distribution of articles according to year of publication

Year	n	%
2012	2	9.53
2013	6	28.57
2014	4	19.04
2015	6	28.57
2016	2	9.53
2017	1	4.76
Total	21	100

Regarding the design adopted in the articles of the final sample, Table 2 presents the categorization of studies according to the levels of evidence proposed by Stillwell⁽¹⁰⁾.

Table 2 – Design of the studies according to level of evidence

Design	Level of evidence	n	%
Systematic review	I	0	0
Randomized controlled trial	II	5	23.8
Non-randomized controlled trial	III	1	4.75
Case Control or Cohort Study	IV	1	4.75
Systematic review of qualitative or descriptive nature	V	0	0
Qualitative or descriptive study	VI	14	66.7
Article of opinion or consensus of governmental institutions or committees of medical experts	VII	0	0
Total		21	100

Thematic categorization

Reading the articles allowed their categorization according to the main themes addressed by the different articles of the final sample. These categories reflect the

high prevalence of college students who use alcohol, the consequences of this use, and alcohol use as a socializing agent. The articles were divided into four main areas, shown in Figure 4, and re-signified here by the authors of the study as:

Category A - High prevalence of university students using alcohol

This theme is present in 72.72% (n = 16) of the articles. The studies evidenced the high prevalence of university students who use alcohol. Some studies show that the prevalence of alcohol consumption is higher among university students than non-students of the same age.

Category B - Negative consequences of alcohol use

This theme is present in 90.9% (n = 20) of the articles. The studies demonstrate the negative consequences of alcohol use among university students. The main consequences were increased mortality for external causes such as homicides and motor vehicle accidents,

risky sexual behaviors, abandonment of studies and risk of future dependence.

Category C - Alcohol as a socializing agent

This was the most debated theme, present in 95.45% (n = 21) of the articles. The studies show that one of the main causes of exacerbated alcohol use among college students is its use as a socializing agent.

Category D - Motivational models of drinking

This theme is present in 31.81% (n = 7) of the articles. These papers expose motivational models of drinking that claim that individuals drink to increase the positive effect and decrease the negative effect. These reasons include social motives (Figure 4).

	Article	Level of evidence	Category
1	Natividade JC et al. Personality factors as predictors of alcohol consumption by college students. Cad Saúde Pública 2012. 28 (6): 1091-1100 (11).	VI	A B C
2	Voogt CV, et al. The Effectiveness of the 'What Do You Drink' Web-based Brief Alcohol Intervention in Reducing Heavy Drinking among Students: A Two-arm Parallel Group Randomized Controlled Trial. Alcohol and Alcoholism 2013. 48(3): 312:321(13).	II	A B C
3	Rosa LFA, et al. Social representations of alcoholic beverage for male college students. Arq. Bras. Psicol. 2015, 67(1): 3-19 ⁽⁸⁾ .	VI	A B C
4	Dumbili et al. Drinking game participation, gender performance and normalization of intoxication among Nigerian university students Addictive Behaviors Reports 2017; 5:1-8	VI	A B C
5	Biolcati R, et al. "I cannot stand the boredom." Binge drinking expectancies in adolescence. Addictive Behaviors Reports 2017. 3:70-76 ⁽¹²⁾ .	VI	B C
6	Helmer SM, et al. Development and evaluation of the efficacy of a web-based "social norms"-intervention for the prevention and reduction of substance use in a cluster-controlled trial conducted at eight German universities. BMC Public Healt. 2016. 16:252 ⁽²⁾ .	III	A B C
7	Cadigan JM, et al. A latent profile analysis of drinking motives among heavy drinking college students. Addictive behaviors. 2015. 51:100-105 ⁽¹⁾ .	VI	A B C D
8	Dunne EM, Katz EC. Alcohol Outcome Expectancies and Regrettable Drinking-Related Social Behaviors. Alcohol and Alcoholism (Oxford, Oxfordshire) 2015. 50(4):393-398 ⁽⁴⁾ .	VI	A B C

Figure 4 continues on next page...

	Article	Level of evidence	Category
9	Young CM, et al. A Longitudinal Examination of the Associations between Shyness, Drinking Motives, Alcohol Use, and Alcohol-related Problems. Alcoholism, clinical and experimental research. 2015. 39(9):1749-1755 ⁽³⁾ .	VI	A B C D
10	Howard AL, et al. College Student Affect and Heavy Drinking: Variable Associations Across Days, Semesters, and People. Psychology of addictive behaviors: journal of the Society of Psychologists in Addictive Behaviors 2015. 29(2):430-443 ⁽¹⁵⁾ .	VI	A C D
11	Moser K, Pearson MR, Hustad JTP, Borsari B. Drinking games, tailgating, and pre-gaming: Precollege predictors of risky college drinking. The American journal of drug and alcohol abuse. 2014. 40(5):367-373 ⁽⁵⁾ .	II	A B C
12	Reid AE, et al. Social Network Influences on Initiation and Maintenance of Reduced Drinking Among College Students. Journal of consulting and clinical psychology. 2015. 83(1):36-44 ⁽⁶⁾ .	II	A B C
13	O'Hara RE, et al. Drinking-to-Cope Motivation and Negative Mood–Drinking Contingencies in a Daily Diary Study of College Students. Journal of Studies on Alcohol and Drugs. 2014;75(4):606-614 ⁽¹⁶⁾ .	VI	C D
14	Merrill JE, et al. Drinking Reductions following Alcohol-related Sanctions are associated with Social Norms among College Students. Psychology of addictive behaviors: journal of the Society of Psychologists in Addictive Behaviors 2014. 28(2):553-558.	II	B C
15	Rinker DV, et al. Social influence on temptation: perceived descriptive norms, temptation and restraint, and problem drinking among college students. Addictive behaviors 2013. 38(12):2918-2923	VI	A B C
16	Lorant V, Nicaise P, Soto VE, d' Hoore W. Alcohol drinking among college students: college responsibility for personal troubles. BMC Public Health 2013. 13:615 ⁽⁷⁾ .	VI	A B C D
17	Foster DW, et al. Self-consciousness as a moderator of the effect of social drinking motives on alcohol use. Addictive behaviors 2013. 38(4):1996-2002 ⁽¹⁷⁾ .	VI	A B C D
18	Terlecki MA, et al. Brief Motivational Intervention for College Drinking: The Synergistic Impact of Social Anxiety and Perceived Drinking Norms. Psychology of addictive behaviors: journal of the Society of Psychologists in Addictive Behaviors 2012. 26(4):917-923 ⁽¹⁸⁾ .	II	A B C
19	Chen Y, et al. Residential environments, alcohol advertising, and initiation and continuation of alcohol consumption among adolescents in urban Taiwan: A prospective multilevel study. SSM - Population Health 2016. 2:249-258	VI	A B C
20	Nadkarni A, et al. The explanatory models and coping strategies for alcohol use disorders: An exploratory qualitative study from India. Asian Journal of Psychiatry2013. 6(6):521-227 ⁽¹⁴⁾ .	VI	В
21	Slavinskienė J, et al. Importance of alcohol-related expectations and emotional expressivity for prediction of motivation to refuse alcohol in alcohol-dependent patients. Medicina2014. 50(3):169-174	VI	B C D
22	Pedersen W, et al. Socialization to binge drinking: A population-based, longitudinal study with emphasis on parental influences. Drug and Alcohol Dependence 2013. 133(2):587-592 ⁽⁹⁾ .	IV	B C

Figure 4 – Compilation of articles included in the final sample

Discussion

Alcohol is the most common drug used by the young Brazilian population, especially by men. This is due to the fact that the experimentation starts early and alcohol is easily accessible to individuals of this age group⁽⁸⁾. A survey carried out in Brazil showed that 53% of Brazilians have already used alcohol; 24% of them use it frequently, and this frequency of consumption is even greater when the sample is composed of university students(11). Research has shown that students tend to consume more alcohol than young adults in the same age group that are not studying. As university students are more subject to this excessive consumption of alcohol, they are also at particular risk for the negative consequences of such use⁽²⁾. It is estimated that 1 out of 4 university students will drop out or experience other negative consequences due to excessive alcohol use and 1800 deaths of students each year may be related to injuries related to the use of alcohol (4).

Among the negative consequences are family, professional and health problems, risky sexual behaviors and suicide⁽⁷⁻⁹⁾. Moreover, alcohol abuse is considered a major external cause of death and is related to increased homicide and motor vehicle fatalities⁽⁸⁻⁹⁾. Also, use at early ages increases the risk of future dependence⁽¹²⁾. In view of this, appropriate interventions are sorely needed⁽¹³⁾.

The causes of alcohol use by college students are related to external and internal factors. Alcoholic beverages have increasingly been used as a way to overcome shyness, relieve tension, and bring people together, and are then used as an important socializing agent⁽⁸⁾. The higher alcohol consumption among university students compared to non-university students of the same age is due to the fact that the transition between high school and university brings changes in the adjustment of adolescents to their social environment(7). There is also the influence of the culturally disseminated idea that the academic period is a moment of independence, reduced parental control and alcohol use(5). At university, alcohol is used in specific social environments characterized by this independent life⁽⁷⁾. Contact with alcoholic beverages in university has become every day more frequent and valued in the different forms of relationships established in the university environment(8).

The use of alcohol is common during university events⁽¹¹⁾, mainly among colleagues, and under the influenced of these contacts. Personal use of alcohol is strongly associated with peer alcohol use. Individuals usually join colleagues who have similar levels of alcohol

consumption. This indicates that personal use of alcohol is shaped by the behavior of friends. Another evidence is that students who want to reduce alcohol consumption and persevere in this decision for a long period of time will probably have to change their network of friends⁽⁶⁾. A study showed that peer pressure is reported as one of the main reasons for sustained alcohol use⁽¹⁴⁾.

Motivational models of drinking claim that individuals engage in alcohol use to achieve a positive outcome motivated by needs, i.e. people drink for specific reasons in various contexts, especially to socialize with other people. A widely used model identifies that the main reasons for consumption is to increase the positive effect and decrease the negative effect^(1,15-16). Within these motives are improvement motives (to create or maintain a positive effect), social motives (for positive social outcomes), compliance motives (to avoid social rejection), and coping motives (to reduce negative effects)⁽¹⁷⁾.

Social anxiety may be characterized by fear of social rejection and/or fear of social interactions. It is also related to increased alcohol use among university students. Students with social anxiety are more vulnerable to alcohol consumption and alcohol-related problems. Individuals in these conditions use alcohol to avoid peer social rejection and/or because they believe that drinking is a common strategy to reduce anxiety in these situations⁽¹⁸⁾.

Another factor that shows the relationship between social relations and alcohol use among university students is that people with low socialization scores tend to consume more alcohol and do this more frequently. Socialization refers to the interpersonal relationship with others. People with high socialization scores tend to be affectionate, kind, cooperative, altruistic and agreeable. People with low socialization scores tend to be more closed, reserved and manipulative⁽¹¹⁾.

Conclusion

The results confirm that alcohol acts as a social mediator among university students and is most consumed among young people who have greater difficulty in personal interactions, who already had the habit to drink while in high school, men and individuals with heredity for alcoholism.

All this context of alcohol abuse among university students finds support in the advertisements exposed in the media, encouragement of family and friends and in alcohol games that are frequent in university celebrations.

Unfortunately, excessive alcohol consumption among university students is a problem of the health and education areas because of increased morbidity and school dropout, respectively. Young alcoholics are more exposed to traffic accidents and behavioral inconveniences of high risk to life. In addition, alcohol acts as one of the significant factors of low school performance or temporary or permanent dropout of the academic life.

In view of the consequences of alcoholism in universities, it is essential to increase studies in this field, as well as interventions to raise awareness among young people, legal strategies to limit inconsequential attitudes when using alcohol, and actions on the part of university allied to psychological protection and supervision, within its physical limits, of practices and activities that encourage alcoholism.

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Received: Sep 6th 2017 Accepted: Jul 31st 2018