# ALCOHOL CONSUMPTION AS A FACTOR ASSOCIATED WITH DEPRESSION IN MALE STUDENTS OF HUMAN MEDICINE AT THE RICARDO PALMA UNIVERSITY IN 2018

CONSUMO DE ALCOHOL COMO FACTOR ASOCIADO A LA DEPRESIÓN EN ESTUDIANTES VARONES DE MEDICINA HUMANA DE LA UNIVERSIDAD RICARDO PALMA DEL AÑO 2018

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# ABSTRACT

**Objective:** To determine whether alcohol consumption is a factor associated with depression in male medicine students at the Ricardo Palma University of Cycle II-2018. **Methods:** Non-experimental, analytical, transversal, descriptive, correlational in the Faculty of Human Medicine of the Ricardo Palma University, during the academic year 2018. A survey and a validated test carried out 200 male students after their informed consent: The validated test of self-evaluation of depressive features of Zung. which consists of 20 questions that help us determine the depressive state according to the diagnostic criteria ICD-10 and DSM IV. **Results:** 200 male students were surveyed. 67.5% of students are between 18 and 22 years old. 70% of students rarely consume alcohol, and 9% of students consume alcohol 2 to 6 times a week, 48.5% of students have mild depression and 3% of students have severe depression, in the group of students who have severe depression, 50% consume alcohol twice a week, in the Chi-square test the p-value (p = 0.009), which allows establishing that there is a significant relationship between alcohol consumption and depression in students Finally, it was found that the Odd Ratio (OR = 9.4) for Alcohol Consumption establishes that male students who consume alcohol 1 time a the week or less. **Conclusion:** Alcohol consumption is a risk factor associated with depression in male students of the Faculty of Medicine of the Ricardo Palma University.

Key words: Alcohol Consumption, Depression, Students, University. (source: MeSH NLM)

# RESUMEN

Objetivo: Determinar si el consumo de alcohol es un factor asociado a la depresión en estudiantes de medicina varones de la Universidad Ricardo Palma del Ciclo II-2018. Métodos: Estudio de tipo no experimental, analítico, transversal, descriptivo, correlacional en la Facultad de Medicina Humana de la Universidad Ricardo Palma, durante el año académico 2018. Una encuesta y un Test validado realizado a 200 estudiantes varones luego de su consentimiento informado: El Test validado de auto-evaluación de rasgos depresivos de Zung, que consta de 20 preguntas que nos ayudan a determinar el estado depresivo según los criterios diagnósticos CIE-10 y DSM IV. Resultados: Se encuestaron a 200 estudiantes varones. El 67.5% de los estudiantes tienen entre 18 a 22 años. El 70% de los estudiantes rara vez consume alcohol, y el 9% de los estudiantes consume alcohol 2 a 6 veces por semana, el 48.5% de los estudiantes presenta depresión leve y el 3% de los estudiantes presenta depresión grave, en el grupo de estudiantes que tienen depresión grave el 50% consume alcohol 2 veces a la semana, en la prueba de Chi Cuadrado el valor p (p= 0.009), que permiten establecer que existe relación significativa entre el consumo de alcohol y la depresión en los estudiantes varones, Finalmente se encontró que el Odd Ratio (OR=9.4) para el Consumo de Alcohol establece que los estudiantes varones que consumen más de 1 vez por semana alcohol tienen 9.444 mayor riesgo de presentar Depresión que los estudiantes varones que consumen alcohol 1 vez a la semana o menos. Conclusión: El consumo de alcohol es un factor de riesgo asociado a la depresión en los estudiantes varones de la Facultad de Medicina de la Universidad Ricardo Palma. Palabras clave: Consumo de Alcohol, Depresión, Estudiantes, Universitario. (fuente: DeCS BIREME)

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### **INTRODUCTION**

Psychiatric diseases are considered the cause of losing years of healthy life, due to disability or premature death in the world, which makes this group of diseases a new public health problem. According to 2014 World Health Organization (WHO, for its initials) report, it is estimated that every 40 seconds<sup>(1)</sup>, a person commits suicide in the world, and depression is one of the main causes of this statistic. WHO estimated that this disease affects 350 million people around the world<sup>(2)</sup>. In Peru, care for depression problems in the specialty of mental health has doubled in number between 1997 and 2000<sup>(3)</sup>. The prevalence of depression has varied over time. In Lima and Callao<sup>(4)</sup>, a quarter of the adult population has had a mental disorder at some time, the most frequent being depressive disorder. A depressive disorder is not the same as a passing state of sadness, it does not indicate personal weakness, nor is it a condition from which everyone can free oneself at will. On the contrary, depression is a disease, a pathological alteration of the mood, which becomes a serious health problem. It has the characteristic of being mild, moderate to severe intensity, producing great suffering, altering activities of daily life. It even leads those who suffer it to suicide. Therefore, early detection and management by psychiatrists constitutes a step for the timely control and management of this disease.

Depressive symptomatology is one the five main factors which limit academic development among the students, with rates that can be above  $50\%^{(8-10)}$ . Likewise, it has been associated with risky behaviors which contribute to the presence of unintentional injuries, violence, use of tobacco, alcohol and other types of drugs<sup>(11)</sup>. This, in relation to male sex, we are talking about a masked depression, expressing emotional and psychological distress in the form of "depressive equivalents"<sup>(5)</sup>, because sadness and vulnerability in this gender, is seen as socially unacceptable in the macho society that still prevails. The above mentioned point increases the relevance of the study of this pathology in men, since the mere presence of the disease can be complicated by male ideals of: stoicism, resistance to asking for help and risky self-management measures (alcohol and drug consumption) that in a significant percentage of cases end up generating an addictive pathology and ignoring these behaviors can complicate the diagnosis of depression. Three different archetypes are presented: the risk-dependent man, the madman and the lonely man, of which the most frequent is the first one, since they are those who frequently consult for substance use, predominantly for alcohol; and accidents. There are no studies at the local level that relate the consumption variables of alcoholic beverages and depression, drug use or social violence. The situation raised leads us to ask ourselves: Is alcohol consumption a factor associated with depression in male medical students of the Ricardo Palma University of second cycle (August-December) of the year 2018?

### **METHODS**

LThe present study is a non experimental, transversal and analytical, performed at Faculty of Human Medicine of Ricardo Palma University.

Population is made up of male human medicine students, between 18 and 28 years old, who consume alcohol associated or not associated with depression, who are studying in the 2018 second cycle of Ricardo Palma University, department of Lima. The sample size was 200 male students. The unit of analysis was made up of each male human medicine student between the ages of 18 and 28 who consume alcohol associated or not associated with depression, who are studying in the 2018 second cycle period of Ricardo Palma University. The data collection sheet (the "Survey") was used and simple random sampling was used as a sampling method. The inclusion criteria to form part of the research were male students of the Faculty of Human Medicine of Ricardo Palma University and who are consumers of alcoholic beverages. As exclusion criteria, students from other colleges or universities, students with depression due to medical diseases or other causes not related to the consumption of alcoholic beverages, under 18 and over 28 years old and female students.

The Survey is carried out as part of a research project, with the purpose of analyzing the reality of the male student of Human Medicine of Ricardo Palma University in the face of risk factors, such as alcohol consumption, which can lead to depression, putting in risk their professional future. In it, the respondent is asked: What cycle is he in, age, how often does he consume alcohol per week, and if there is a history of depression with or without medical treatment in the last six months. Zung's validated depressive traits self-evaluation test is applied, which has a Cronbach's alpha index between 0.79 and 0.92, this text consists of 20 questions that help us to determine the depressive state 33.

Techniques for information processing: Methods and data analysis models according to type of variables,

inferential statistical analysis was used for each variable (odds ratio tables). The results are presented in tables and graphs, expressing the data obtained in nominal and percentage terms. For data analysis, inferential statistics were used; Odds Ratio, Frequency Tables, Percentages represented in tables and graphs and Programs to be used for data analysis. The data will be recorded in Office Word, Excel and SPPS Statistics Base. Ethical aspects: In this work, the data collection was done thanks to the permission granted by the Institute of Research in Biomedical Sciences of Ricardo Palma University. The confidentiality of the data collected was respected at all times and that the results obtained from this research are used for purely academic purposes.

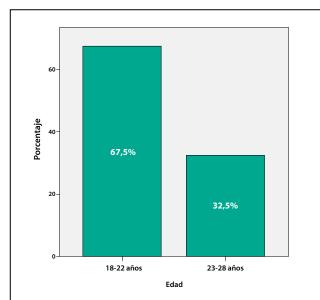
# RESULTS

### **DESCRIPTIVE ANALYSIS**

 Table 1. Distribution of students according to age.

AGE	FREQUENCY	PERCENTAGE
18 - 22 years	135	67.5%
23 - 28 years	65	32.5%
Total	200	100.0%

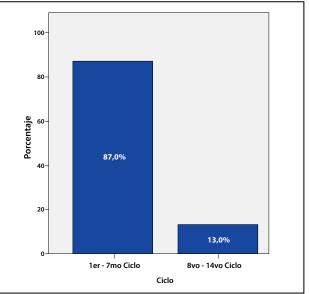
Source: INICIB / Own elaboration.



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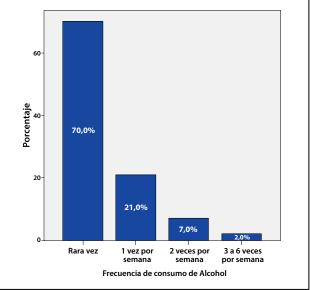
Graphic 1. Age of students.

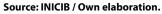
From Table 1 and Figure 1, we can see that 67.5% of the students are between 18 and 22 years old and 32.5% of the students are between 23 and 28 years old, in the Faculty of Human Medicine of Ricardo Palma Private University (August-December) of year 2018.



#### Source: INICIB / Own elaboration.

**Graphic 2.** Distribution according to the students' cycle. From table 2 and figure 2, we can see that 87% of the students are studying between the 1st to 7th cycle and 13% of the students are studying between the 8th to 14th cycle, in the Faculty of Medicine Huamna of the University Private Ricardo Palma (August-December) of the year 2018.





**Graphic 3.** Frequency of alcohol consumption by students.

From Figure 3, we can see that 70% of the students rarely consume alcohol, 21% of the students consume alcohol once a week, 7% of the students consume alcohol twice a week and 2% of the students consume alcohol 3 to 6 times a week in the Faculty of Human Medicine of Ricardo Palma University (August-December) in 2018.

Table 4. Degree of Depression of the students.

DEGREE OF DEPRESSION	FREQUENCY	PERCENTAGE
Absence of Depression	65	32.5%
Mild depression	97	48.5%
Moderate depression	32	16.0%
Severe depression	6	3.0%
Total	200	100.0%

Source: INICIB / Own elaboration.

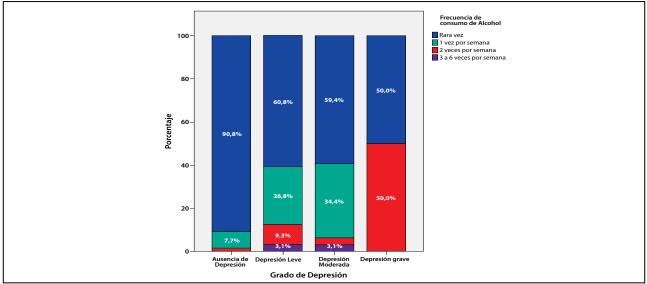
From table 4 and figure 4, we can see that 32.5% of the students do not present depression, 48.5% of the students present mild depression, 16% of the students present moderate depression and 3% of the students

present severe depression , at the Faculty of Medicine of the Ricardo Palma Private University (August-December) in 2018.

 Table 5. Distribution of the frequency of alcohol consumption by students according to their degree of depression.

DEGREE OF DEPRESSION								
FREQUENCY OF ALCOHOL CONSUMPTION		NCE OF		IILD ESSION		DERATE ESSION		
	N°	%	N°	%	N°	%	N°	%
Rarely	59	90.8%	59	60.8%	19	59.4%	-	-
1 once a week	5	7.7%	26	26.8%	11	34.4%	-	-
2 times per week	1	1.5%	9	9.3%	1	3.1%	3	50.0%
3 to 6 times per week	0	0.0%	3	3.1%	1	3.1%	0	0.0%
	65	100.0%	97	100.0%	32	100.0%	6	100.0%

Source: INICIB / Own elaboration.



Source: INICIB / Own elaboration.

Graphic 3. Frequency of alcohol consumption by students according to their degree of depression.

From table 5 and figure 5, we can see that in the group of students who do not have depression, 90.8% rarely consume alcohol; in the group of students who have mild depression, 60.8% rarely consume alcohol; In the

group of students who have moderate depression, 59.4% rarely consume alcohol and in the group of students who have severe depression, 50% consume alcohol 2 times a week.

Table 6. Chi Square Test for the General Hypothesis.

FREQUENCY		DEPR	ESSION	
OF ALCOHOL CONSUMPTION	Y	ES	Ν	ю
	N°	%	N°	%
Rarely	80	59.7%	60	90.9%
1 once a week	37	27.6%	5	7.6%
2 times per week	13	9.7%	1	1.5%
3 to 6 times per week	4	3.0%	0	0.0%
Total	134	100.0%	66	100.0%
Chi squared= 20.809		g.l.= 3	p value	= 0.000

#### Fuente: INICIB/Elaboración propia.

The results of the Chi Square test (p <0.05), allow to establish that there is a significant relationship between alcohol consumption and depression in

students of the Ricardo Palma Private University School of Medicine (August-December) in 2018.

Table 7. Odd Ratio Test for Alcohol Consumption.

FACTOR	OR	CONFIDENCE INTERVAL (95%)	
		LI	LS
> 1 once a week	9.444	1.229	72.594

Source: self made.

We can establish that Alcohol Consumption is a risk factor associated with Depression, since it has an OR greater than 1 and the lower limit of the confidence interval is greater than 1. Where it is established that students who consume more than 1 Alcohol once a week have a 9,444 higher risk of depression than students who consume alcohol 1 time a week or less.

Table 8. Relative Risk Test for Alcohol Consumption for students from 18 to 22 years old.
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FACTOR	RR	CONFIDENCE INTERVAL (95%)	
		LI	LS
> 1 once a week	1.459	1.295	1.644

Source: INICIB / Own elaboration.

We can establish that Alcohol Consumption is a risk factor associated with Depression in students aged 18 to 22, since there is a RR greater than 1 and the lower limit of the confidence interval is greater than 1. Where

it is established that students who consume alcohol more than 1 time per week are 9,444 more likely to develop Depression.

 Table 9. Relative risk test for alcohol consumption for students aged 23 to 28 years.

FACTOR	RR	CONFIDENCE INTERVAL (95%)	
		u	LS
> 1 once a week	4.875	0.551	43.097

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Source: INICIB / Own elaboration.

We can establish that Alcohol Consumption is not a risk factor associated with Depression in students aged

23 to 28 years, since the lower limit of the confidence interval is less than 1.

 Table 10. Relative Risk Test for Alcohol Consumption for students from 1st to 7th Cycle.

FACTOR	RR	CONFIDENCE INTERVAL (95%)	
		LI	LS
> 1 once a week	1.590	1.411	1.792

Source: self made.

We can establish that Alcohol Consumption is a risk factor associated with Depression in students from 1st to 7th Cycle, since there is a RR greater than 1 and the lower limit of the confidence interval is greater than 1. Where it is established that students who consume alcohol more than once a week have a 1,590 greater relative risk of developing Depression.

 Table 11. Relative Risk Test for Alcohol Consumption for students from 8th to 14th Cycle.

FACTOR	RR	CONFIDENCE INTERVAL (95%)	
		u	LS
> 1 once a week	0.706	0.054	9.265

#### Source: self made.

We can establish that Alcohol Consumption is not a risk factor associated with Depression in students from

### DISCUSSION

According to some studies, men are more likely than women to develop alcohol and drug abuse or dependence in the course of their lives. This is where the concern and debate among researchers and mental health professionals arises regarding whether the use of toxic substances such as alcohol or drugs is a symptom of underlying depression in men or, on 8th to 14th Cycle, since OR and the lower limit of the confidence interval are less than 1.

the contrary, is a disorder that occurs at the same time. due to or as a consequence of the consumption of these substances. The situation raised leads us to ask ourselves: Is alcohol consumption a factor associated with depression in male medical students of the Ricardo Palma Private University of Cycle II (August-December) of the year 2018?

In our population of male medical students from the

Ricardo Palma Private University, 67.5% of the students are between 18 and 22 years old, it was established that Alcohol Consumption is a risk factor associated with Depression in students in these ranges of ages, where students who consume alcohol more than 1 time per week have a 9,444 greater relative risk of presenting Depression, It was also demonstrated that Alcohol Consumption is a risk factor associated with Depression in students from 1st to 7th Cycle, where It is established that students who consume alcohol more than once a week have a 1,590 greater relative risk of presenting Depression, these results are in accordance with studies carried out by Valle R. et al. Those who studied depressive symptoms and problems related to alcohol consumption during the academic training of medical students, obtaining as results that the frequency of depressive symptoms and problems related to alcohol consumption is higher in students of the first years of studies and that The prevalence of symptoms is higher in students who are in the first years of study, it is explained by the adaptation of students to the different stressors typical of the university, which also adds to their own individual problems, this would explain the manifestation of depressive symptoms.

In our population of male medical students from the Ricardo Palma Private University, in the Chi-square test the p-value obtained (p = 0.000), which allows us to establish that there is a significant relationship between alcohol consumption and depression in male students, Finally, it was found that the Odd Ratio (OR = 9.4) for Alcohol Consumption, which establishes that male students who consume alcohol more than 1 time per week have a 9,444 greater risk of presenting Depression than male students who consume alcohol once a week. the week or less. Which agrees with studies such as that of Ato B. that was carried out in a similar population of university students in order to investigate the association of alcoholic beverage consumption and depression, which obtained as a result that it is higher in men (52.96%) than in women (47.04%) and that the level of risk that prevails in this study according to the Odds Ratio is 3,968, which means that these young people are 4 times more exposed than others, and concluded that there is a relationship between the consumption of alcoholic beverages and depression, with a greater tendency for males regarding alcohol consumption.

### CONCLUSION

From the analysis of the research on alcohol consumption as a factor associated with depression in male human medicine students at the Ricardo Palma University (August-December) in 2018, the following conclusions have been established:

It can be established that 70% of the students rarely consume alcohol and 21% of the students consume alcohol 1 time per week. With which we can conclude that there is a low level of alcohol consumption among male students of the Faculty of Medicine of the Ricardo Palma University.

It can be established that there is a prevalence of 48.5% of mild depression and 16% of moderate depression in male students of the Ricardo Palma University School of Medicine.

It was possible to conclude that 67.5% of the students are between 18 and 22 years old, it was established that Alcohol Consumption is a risk factor associated with Depression in students in these age ranges, where students who consume more than 1 time per alcohol have a 9,444 higher relative risk of presenting Depression.

It was also shown that Alcohol Consumption is a risk factor associated with Depression in students from 1st to 7th Cycle, where it is established that students who consume alcohol more than 1 time per week have a 1,590 greater relative risk of presenting Depression.

It was possible to conclude that alcohol consumption is a risk factor associated with depression in male students of the Ricardo Palma University School of Medicine. Where you have that students who consume alcohol more than once a week have a 9,444 greater risk of presenting depression.

#### RECOMMENDATIONS

It is recommended to continue with this type of study that evaluates the consumption of alcoholic beverages and depression in university students in our environment.

The possibility of a follow-up of first-cycle students from their admission is proposed to see the continuity of presenting adherence to alcohol consumption on a regular basis and if it is correlated with the presence of depressive symptoms.

Future studies with a larger sample size, greater

statistical power, and with students from multiple faculties, representative of the Universities of Peru, must be carried out.

Data on the consumption of alcoholic beverages, depression and prevalence in university students should be confirmed and institutional programs should be developed for the early identification of adherence to alcoholic beverages and depression, and evaluate how these affect the academic performance and social life of students. University students.

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