Original Article

Consumption of alcoholic beverages and tobacco in students of the "Calixto García" Faculty of Medical Sciences

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ABSTRACT

Introduction: the consumption of addictive substances in young people is increasing nowadays and Cuba is not an exception to this problem health. Objective: to characterized the consumption of alcoholic beverages and tobacco in first-year medical students of the "Calixto García" Faculty of Medical Sciences. Method: an observational, descriptive, cross-sectional study was carried out in the period from October to November 2020. The universe consisted on 50 first-year medical students. The entire universe was studied.The analyzed variables were age, sex, smokers, degree of nicotine dependence, amount of tobacco daily consumed, frequency and consumption of alcoholic beverages, and problems associated with their consumption. Descriptive statistics were used. Results: the average age was 18,6 years old and female sex predominated in 60%. Ten percent of the students smoked with mild nicotine dependence. Sixty-six percent consumed alcoholic beverages, 78,7% with low-risk dependence and 21,2% at risk. The frequency of alcohol intake in 48,4% of the students was once per month. No students were reported with significant problems associated with alcoholic consumption. Conclusions: some of the first-year medical students of "Calixto García" Faculty of Medical Sciences presented mild nicotine dependence. Consumers of alcoholic beverages at risk and with low-risk were detected.

Keywords: Alcohol consumption; Medicine students; Tobacco.

Tobacco addiction is currently one of the main public health problems. The World Health Organization (WHO) states that smoking is the leading preventable cause of disease, disability and premature death, and it is responsible for 9% of all deaths worldwide[1].

It has been estimated that around 14000 people die every day from one of the many diseases associated with smoking, both active and passive smokers.It Is estimated that by 2030, deaths associated to smoking will increase to 8 million per year, which would represent 10% of all deaths[1]. According to WHO statistics, approximately one third of the world's population over 15 years of age smokes[2].

In Cuba, smoking prevalence is considered high. Overall initiation in the 20-24 years age group was 22,2% and the prevalence in adolescents who have ever smoked cigarettes was 25%. Based on these figures, among 78 WHO member countries Cuba ranks 28th [3].

There are references that support that young smokers are at a greater risk of consuming and acquiring addictions to alcohol, marijuana, amphetamines, cocaine and other drugs[4,5].

Chronic alcohol consumption is currently a social phenomenon that affects all sectors of the population indistinctly and it is an important risk factor in the picture of morbidity and mortality in Cuba[5].

The Pan American Health Organization (PAHO) states that alcohol abuse is responsible for 2,5 million deaths per year in the world, occurring in a higher percentage in men (6,2%) than in women (1,1 %), and includes worldwide young people between 15 and 29 years old (320 thousand), who die annually from this cause; which represents 9% of all deaths in this population[6].

In Cuba, drug abuse is an emerging behavior, especially since the 1990s, which concerns and occupies the government. University students are at a vulnerable stage, characterized by a high consump-

Conflict of interests
The authors declare no conflict of interests.

tion of tobacco and alcohol, which worsens in higher grades[7,8].

Actions aimed at reducing the consumption of these substances are being developed in the country. An example of this, is the implementation of the National Program for the Prevention of drug abuse in Higher Education Centers.

This research represents a starting point for the design of an educational program, through the discipline of Biological Bases of Medicine for the prevention of addictive behavior. The present study aims to characterize the consumption of alcohol and tobacco in first-year medical students of the "Calixto García" Faculty of Medical Sciences in the period from October to November 2020.

METHOD

Type of study: An observational, descriptive, cross-sectional study was conducted among first-year medical students of the "Calixto García" Faculty of Medical Sciences, in the period of October to November 2020.

Universe and sample: the universe corresponded to 50 first-year medical students, belonging to the "Calixto García" Faculty of Medical Sciences, of the "Betancourth Neninger" University Polyclinic, East Havana. Those who did not complete the applied questionnaires were excluded. The entire universe was studied.

Variables and data collection: lthe studied variables were: age, sex, smokers, degree of nicotine dependence according to the Fagerström test[9](low degree, high degree), associated problems with tobacco consumption, amount of tobacco consumed daily, consumption of alcoholic beverages according to the AUDIT[9](low, medium, high risk, probable addiction), frequency of alcoholic beverages consumption (1 or fewer times per month, 2 to 4 times per month, 2 to 3 times per week) and problems associated with the consumption of alcoholic beverages (feelings of guilt, memory gaps, injuries, concern about consumption). The data were obtained from two applied questionnaires, Fagerström and AUDIT[9] (Available at Complementary Files to the article).

Statistical processing: Microsoft Excel 2010 was used for the recording, processing and descriptive analysis of the information,which allowed the calculation of absolute frequencies, relative percentage and arithmetic mean.

Ethical standards: the research was approved by the Medical Ethics Committee and the Scientific Council of the "Calixto García" Faculty of Medical Sciences. The principles of respect to people, beneficence, non-maleficence and justice were complied with,as established in the II Declaration of Helsinki, and the students' informed consent was obtained.

RESULTS

The average age of the students was 18,6 years old and 60 % were women. It was observed that five of the students were smokers (10%). According to the scale established for nicotine dependence,100% of the cases were classified as low dependence. The frequency of consumption was up to 10 cigarettes per day in all smokers. No problems associated with consumption were detected.

Alcoholic beverages were consumed by 66% of the students. Twenty-six low-risk and seven high-risk consumers were detected. There were no cases of harmful consumption. During the year of the study, 16 students (48,4%) consumed once or less than once a month, with a predominance of the female sex(36,3%). With a frequency of two to four times per month, 13 (39,4%) consumed it, with a predominance of the male sex (33,3 %) (Table 1).

Table 1. Distribution of students according to sex and frequency of consumption of alcoholic beverages. "Calixto García" Faculty of Medical Sciences October-November 2020

Frequency of consumption	Female	Male	Total*
	No. (%)	No. (%)	No. (%)
1 or fewer times/month	12 (36,3)	4 (12,1)	16 (48,4)
2 to 4 times/month	2 (6)	11 (33,3)	13 (39,4)
2 to 3 times/week	3 (9,1)	1 (3)	4 (12,1)
Source:appliedquestionnaire *n = 33			

It was observed that 81,8% of the students did not present feelings of guilt after alcoholic consumption, nor memory gaps in 87,8% of the cases (Table 2).

DISCUSSION

The present study revealed that in these students' tobacco use was 10% with low nicotine dependence. In a study carried out by Martin et al.[10] at the University of Salamanca with students from the Faculty of Pharmacy, it was found that 14,4% of the sample were smokers, with low nicotine dependence.

Another study that showed coincidences was the one carried out by Chinlle et al.[11] with students from the Faculty of Nursing of the Catholic University of

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Table 2. Distribution of students according to sex and problems associated with alcohol consumption				
Indicators	Answer options	Female	Male	Total
		No. (%)	No. (%)	No. (%)
Feelings of guilt	Never	15 (45,4)	12 (36,4)	27 (81,8)
	Less than once/month	2 (6)	3 (9,1)	5 (15,1)
	Monthly	0 (0)	1 (3)	1 (3)
Memory gaps	Never	15 (45,4)	14 (42,4)	29 (87,8)
	Less than once/month	1 (3)	2 (6)	3 (9)
	Weekly	1 (3)	0 (0)	1 (3)
Injuries	No	16 (48,5)	16 (48,5)	32 (96,9)
	Yes, but not this year	1 (3)	0 (0)	1 (3)
Concern about consumption	No	16 (48,4)	15 (45,4)	31 (93,9)
	Yes, but not this year	1 (3)	0 (0)	1 (3)
	Yes, in this year	0 (0)	1 (3)	1 (3)

Ecuador, where 100% of the respondents showed low nicotine dependence.

Similar results to those of the present study, were obtained by Martin et al.[10] and Correa et al.[12] with students from five universities in Lima regarding the frequency of consumption of less than 11 cigarettes per day.

National research by López et al.[7] and Fernández et al.[13] found that 35,6% and 20,4%, respectively, smoked and that male sex depended more on nicotine. In the present study, it was not possible to establish differences related to the dependence and sex variables, due to the low presence of smokers in the sample, and lower figures of mild dependents were reported than those of the national reference.

The main cause of the low smoking percentages is due to the fact that the studied sample is relatively young to present high habitual consumption values. Some research shows that consumption figures become more acute in higher grades of education[7,8,13]. This behavior could also be related to the development of preventive actions at the University of Medical Sciences of Havana (UCMH).

Regarding alcoholic consumption, 66% of the students were found to be alcohol consumers. The 78,7%

and 21,2% were identified with low-risk and risk consumption, respectively. In the research carried out by Zurita et al.8 with students from schools of the province Granada, 70,3% of students were identified with low-risk dependency.

Another study conducted by Betancourth et al.[14] with students from various Colombian universities showed that 97,5% of them consumed alcohol with low-risk dependence. The results of this research coincide with the aforementioned references in terms of the type of dependence that predominates, but the numbers of consumers are lower. This may be due to the fact that, in the sample, students with ages at the beginning of consumption predominated, so it is not usual to find high values.

Some studies have shown that the probability of increased consumption increases as age does[7,8,13]. This could also be explained by what Wong et al.[5] stated in a study carried out with students from an Ecuadorian university, that the results obtained by applying the AUDIT test in university student populations are very diverse and influenced by social and cultural factors.

In investigations carried out by López et al.[7] in the province of Cienfuegos and Fernández et al.[13] in Vi-

lla Clara with young people from several universities, 65.5% and 94,2% were respectively identified as low-risk consumers;8,2% in Cienfuegos and 5,1% in Villa Clara had a risk consumption. Harmful consumption was found in 1,7% and 0,7% of young people in Cienfuegos and Villa Clara, respectively.

The results of this study show intermediate values in terms of low-risk consumption. However, higher figures were reached regarding risk consumers. On the other hand, unlike the aforementioned investigations, there were no students with harmful consumption. This may be due to the fact that, as the sample is relatively young, it is more common to consume alcoholic beverages sporadically, on weekends orholidays[7,8].

Regarding the frequency of consumption, 48,4% consumed alcoholic beverages once or less per month during the year of the study and 39,4% consumed two to four times. Betancourth et al.[14] found that 25,8 % of the students in several Colombian universitiesconsumed once, and 18,8%, two to four times per month.

Another study carried out by Pilco et al.[16] at a university in Ecuador showed that 52,5% consumed one or less per month, while 22,1%, two to four times. In addition, it was suggested that the sex variable was not statistically significant with respect to alcohol consumption. The differences with regard to the present study could be due to the fact that, despite that university populations were studied with the same instrument, social and cultural factors have an impact on alcohol consumption.

In the research by López et al.[7],the frequency of consumption of one or fewer times per month was found to be predominant in female sex with 31,6% compared to 19,3% in male sex. However, in the consumption of two to four times per month male sex predominated with 11,9%. There was evidence of similarity with respect to the consumption pattern and sex, between the aforementioned research and the present study. The differences in the figures could be due to the number of the used sample.

No students with significant problems associated with alcohol consumption were reported. In a study carried out by Zurita et al.[8] with students from schools in the province of Granada, 65,3% of the consumers reported no problems associated with consumption. National studies[7,12] showed similarities with the results of this research.

Higher education should encourage the comprehensive training of students, promoting attitudes, skills and healthy life styles from the first years of study, to prevent the consumption of psychoactive substances from increasing progressively in higher grades. In addition, to complying the National Program for the Prevention of Drug Abuse, it is necessary to develop educational programs for the prevention of addictions within the university curriculum.

CONCLUSIONS

Some of the first-year medical students of the "Calixto García" Faculty of Medical Sciences presented mild nicotine dependence. Consumers of alcoholic beverages at risk and with low-risk were detected.

AUTHORSHIP

YChC: conceptualization, data curation, methodology, project management, visualization, writing−original draft, writing−review and editing.
EAFT: conceptualization, methodology, writing−review and editing.
AGR: research, formal analysis, writing−original draft, validation.
NSC: research, methodology, writing-review and editing.

FINANCING

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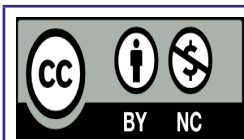
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Consumo de bebidas alcohólicas y tabaco en estudiantes de la Facultad de Ciencias Médicas "General Calixto García"

RESUMEN

Introducción: el consumo de sustancias adictivas en los jóvenes experimenta tendencia al incremento y Cuba no representa la excepción en esta problemática. Objetivo: caracterizar el consumo de bebidas alcohólicas y tabaco en estudiantes de primer año de la carrera de Medicina de la Facultad de Ciencias Médicas "General Calixto García". Método: se realizó un estudio observacional, descriptivo de corte transversal en el periodo de octubre a noviembre del año 2020. El universo estuvo constituido por 50 estudiantes de primer año de la carrera de Medicina. Se trabajó con todo el universo. Las variables analizadas fueron edad, sexo, fumadores, grado de dependencia nicotínica, cantidad de tabaco consumido diariamente, frecuencia y consumo de bebidas alcohólicas, y problemas asociados a su consumo. Se empleó estadística descriptiva. Resultados: la edad promedio fue de 18,6 años y predominó el sexo femenino en un 60 %. El 10 % de los estudiantes fumaba con dependencia leve a la nicotina. El 66 % consumía bebidas alcohólicas, el 78,7 % con dependencia de bajo riesgo y el 21,2 % de riesgo. La frecuencia de ingestión alcohólica en el 48,4 % de los estudiantes fue de una vez por mes. No se reportaron estudiantes con problemas significativos asociados al consumo alcohólico. Conclusiones: algunos de los estudiantes de primer año de la carrera de Medicina de la Facultad de Ciencias Médicas "General Calixto García" presentaron dependencia leve a la nicotina. Se detectaron consumidores de bebidas alcohólicas de riesgo y bajo riesgo.

Palabras clave: Consumo de bebidas alcohólicas; Estudiantes de Medicina; Tabaco.